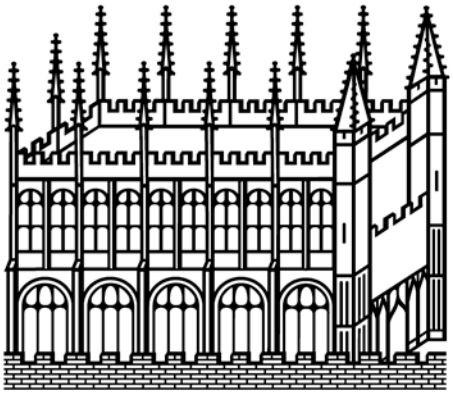

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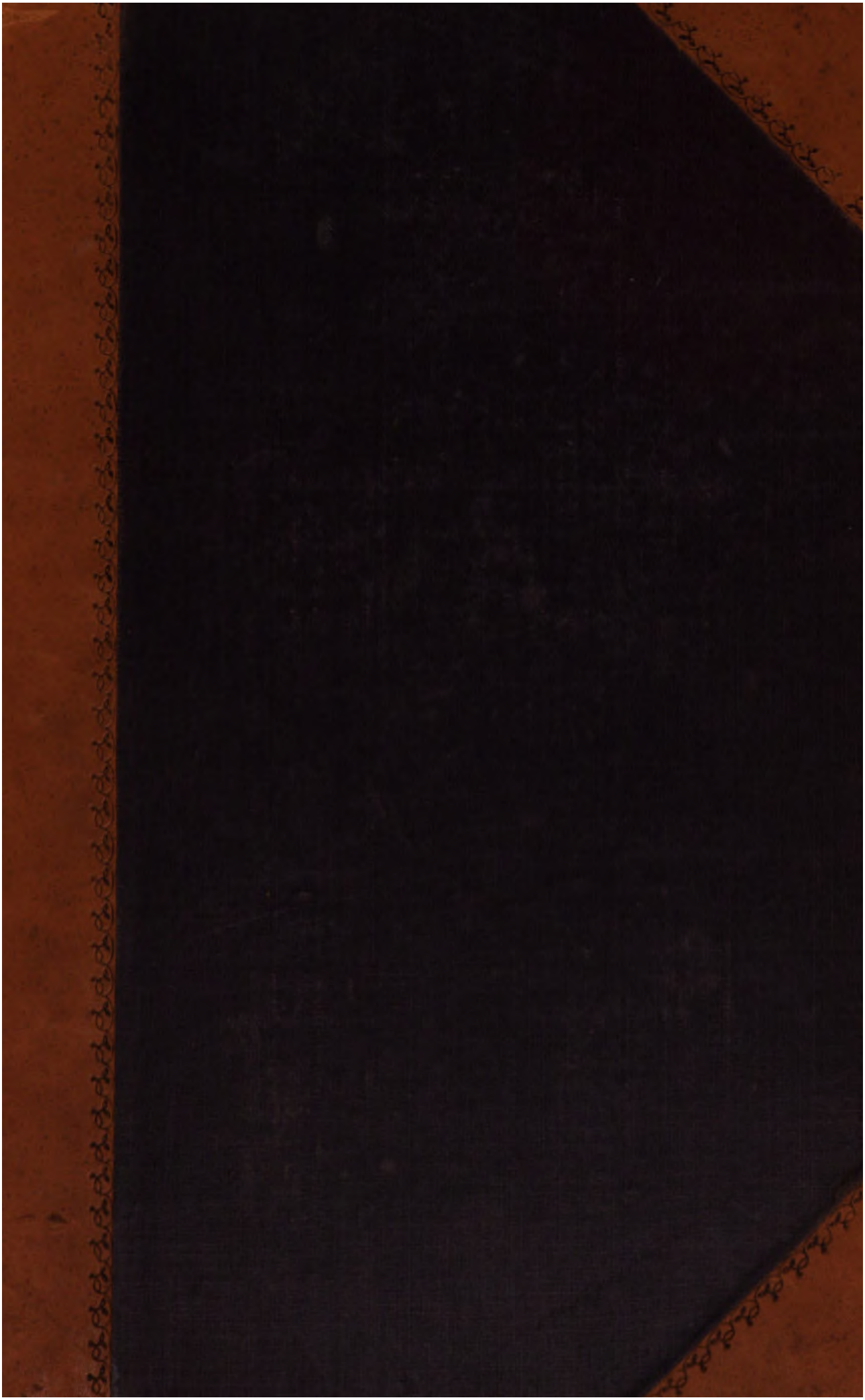

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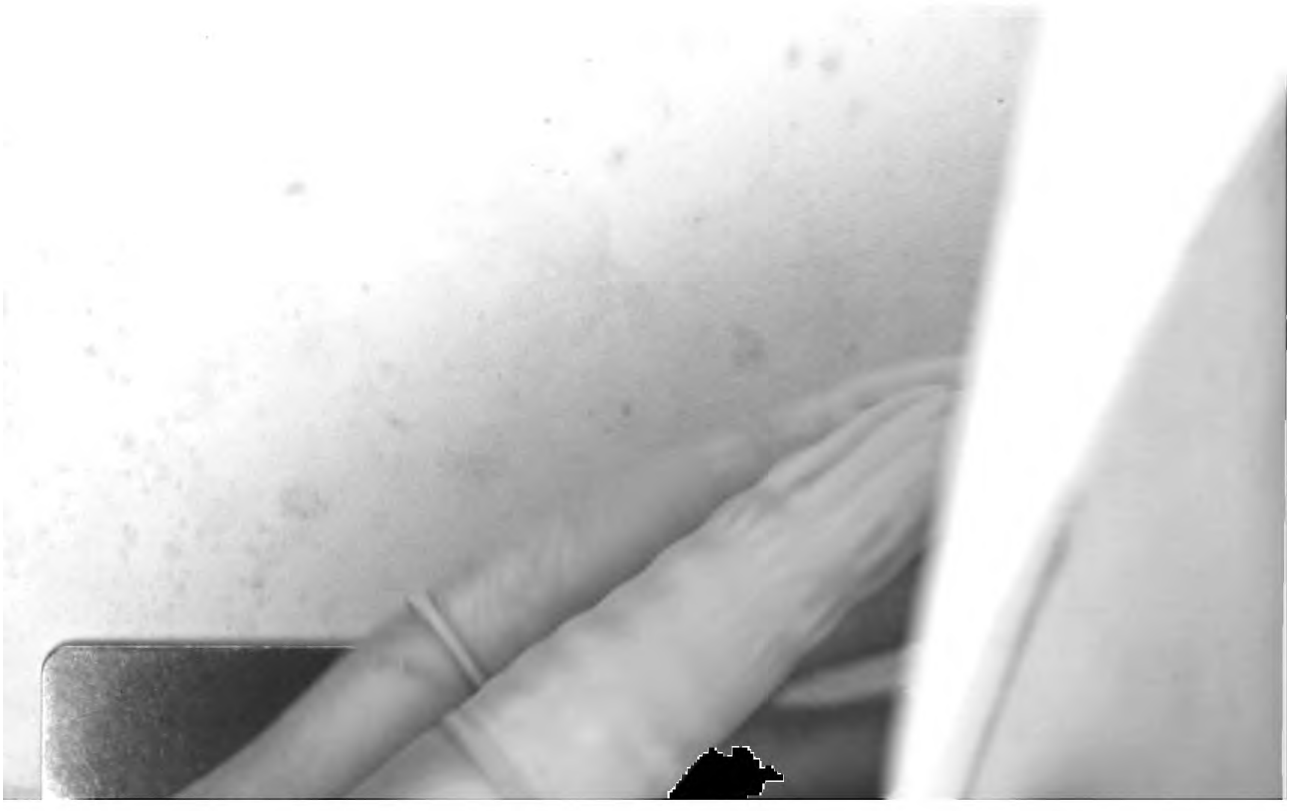

THE

LONDON ENCYCLOPÆDIA.

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HA'LO, *n. s.* A red circle round the sun or moon.

If the hail be a little flatted, the light transmitted may grow so strong, at a little less distance than that of twenty-six degrees, as to form a *halo* about the sun or moon; which *halo*, as often as the hail-stones are duly figured, may be coloured. *Newton.*

I saw by reflection, in a vessel of stagnated water, three *halos*, crowns or rings of colours about the sun, like three little rainbows, concentrick to his body. *Id.*

Halo, or Corona, in optics, is a luminous circle surrounding the sun, moon, planets, or fixed stars. Sometimes these circles are white, and sometimes colored like the rainbow. Sometimes one only is visible, and sometimes several concentric halos appear at the same time. Those which have been seen about Sirius and Jupiter were never more than 3°, 4°, or 5° in diameter; those which surround the moon are, also, sometimes no more than 3° or 5°; but these, as well as those which surround the sun, are of very different magnitudes, viz. of 12° 0′, 22° 35′, 30° 0′, 38° 0′, 41° 2′, 45° 0′, 46° 24′, 47° 0′, and 90°, or even larger than this. Their diameters also sometimes vary during the time of observation, and the breadths both of the colored and white circles are very different, viz of 2°, 4°, or 7°. Their colors are more diluted than those of the rainbow; and they are in a different order, according to their size. Mr. Huygens observed red next the sun, and a pale blue outwards. Sometimes they are red on the inside and white on the outside. M. Weidler observed one that was yellow on the inside and white on the outside. In France one was observed, in 1683, the middle of which was white; after which followed a border of red, next to it was blue, then green, and the outermost circle was a bright red. In 1728 one was seen of a pale red outwardly, then followed yellow, and then green, terminated by a white. In Holland, M. Muschenbroeck says, fifty may be seen in the day-time, almost every year; but they are difficult to be observed, except the eye be so situated, that not the body of the sun, but only the neighbouring parts of the heavens, can be seen. Mr. Middleton says, that this phenomenon is very frequent in North America; for that there is generally one or two about the sun every week, and as many about the moon every month. Halos round the sun are very frequent in Russia. M. Æpinus says, that from the 23d of April, 1758, to the 20th of September, he himself had observed no fewer than twenty-six, and that he has sometimes seen twice as many in the same space of time.

Similar, in some respects, to the halo, was the remarkable appearance which M. Bouguer describes, as observed on the top of Mount Pichinca, in the Cordilleras. When the sun was just rising behind them, so as to appear white, each of them saw his own shadow projected upon it, and no other. The distance was such that all the parts of the shadow were easily distinguishable, as the arms, the leg, and the head; but what surprised them most was, that the head was adorned with a kind of glory, consisting of three or four small concentric crowns, of a very lively color, each exhibiting all the varieties of the primary rainbow, and having the circle of red on the outside. The intervals between these circles continued equal, though the diameters of them all were constantly changing. The last of them was very faint; and at a considerable distance was another great white circle, which surrounded the whole. As near as M. Bouguer could compute, the diameter of the first of these circles was about $5\frac{2}{3}$°, that of the second 11°, that of the third 17°, and so on; but the diameter of the white circle was about 76°. This phenomenon never appeared but in a cloud consisting of frozen particles, and never in drops of rain like the rainbow. When the sun was not in the horizon, only part of the white circle was visible, as M. Bouguer frequently observed afterwards. Similar to this curious appearance was one seen by Dr. M'Fait in Scotland; who observed a rainbow round his shadow in the mist, when he was upon an eminence above it. In this situation the whole country round seemed buried under a vast deluge, and nothing but the tops of distant hills appeared here and there above the flood. In those upper regions, the air, he says, is at that time very pure and agreeable. At another time he observed a double range of colors round his shadow. The colors of the outermost range were broad and very distinct, and every where about two feet distant from the shadow. Then there was a darkish interval, and after that another narrower range of colors, closely surrounding the shadow, which was very much contracted. He thinks that these ranges of colors are caused by the inflection of the rays of light, the same that occasioned the ring of light which surrounds the shadow of all bodies, observed by M. Maraldi, and this author.

Halos may be produced by placing a lighted candle in the midst of steam in cold weather. If glass windows be breathed upon, and the flame of a candle be placed some feet from it, while the spectator is also at the distance of some feet from another part of a window, the flame will be surrounded with a colored halo. And if a candle be placed behind a glass receiver, when air is admitted into the vacuum within it, at a certain degree of density, the vapor with which it is loaded will make a colored halo round the flame. This was observed by Otto Guericke. In December 1756 M. Muschenbroeck observed, that, when the glass windows of his room were covered with a thin plate of ice on the inside, the moon appearing through it was surrounded with

270. c. 10 399. d. 174.

a large and variously colored halo; and, opening the window, he found that it arose entirely from that thin plate of ice, for none was seen except through it. Dr. Kotelnihow, having, like Dr. Halley, made very accurate observations to determine the number of possible rainbows, considers the colored halo, which appears about a candle, as the same thing with one of those bows which is formed near the body of the sun, but which is not visible on account of his excessive splendor.

Descartes observes, that the halo never appears when it rains; from which he concludes that this phenomenon is occasioned by the refraction of light in the round particles of ice, which are then floating in the atmosphere; and, though these particles are flat when they fall to the ground, he thought they must be protuberant in the middle before their descent; and according to this protuberancy he imagined that the diameter of the halo would vary.—In treating of meteors, Gassendi supposed, that a halo is of the same nature with the rainbow, the rays of light being in both cases twice refracted and once reflected within each drop of rain or vapor, and that all the difference there is between them arises from their different situation with respect to the observer. For whereas, when the sun is behind the spectator, and consequently the rainbow before him, his eye is in the centre of the circle; when he views the halo, with his face towards the sun, his eye is in the circumference of the circle; so that, according to the known principles of geometry, the angle under which the object appears, in this case, must be just half of what it is in the other.

M. Dechales endeavours to show that the generation of the halo is similar to that of the rainbow. If, says he, a sphere of glass or crystal, full of water, be placed in the beams of the sun, there will not only be two circles of colored light on the side next the sun, and which constitute the two rainbows; but there will also be another on the part opposite to the sun, the rays belonging to which afterwards diverge, and form a colored circle, such as will be visible, if the light that is transmitted through the globe be received on a piece of white paper. The reason why the colors of the halo are more dilute than those of the rainbow, he says, is owing principally to their being formed not in large drops of rain, but in very small vapor; for, if the drops of water were large, the cloud would be so thick, that the rays of the sun could not be regularly transmitted through them; and, on the other hand, he observed, that when the rainbow is formed by very thin vapors, the colors hardly appear. As for those circles of colors which are sometimes seen round candles, it was his opinion that they are owing to nothing but moisture on the eye of the observer; for that he could never produce this appearance by means of vapor only, if he wiped his eyes carefully; and he had observed that such circles are visible to some persons and not to others, and to the same persons at one time and not another.

The most considerable and generally received theory, respecting halos, is that of Huygens, published in the English Philosophical Transactions. See Lowthorp's Abridgment, Vol. II., p. 189. Sir Isaac Newton mentions it with respect. This article contains the heads of a discourse which he afterwards composed, but never quite finished; and which has been translated, with some additions, by Dr. Smith, from whom the following account is chiefly extracted. Mr. Huygens was first led to think particularly upon this subject, by the appearance of five suns at Warsaw, in 1658; after which, he says, he hit upon the true cause of halos and mock suns. If we can conceive any kind of bodies in the atmosphere, which, according to the known laws of optics, will, either by reflection or refraction, produce the appearance in question, when nothing else can be found that will do it, we must acquiesce in the hypothesis, and suppose such bodies to exist, even though we cannot give a satisfactory account of their generation. Two such bodies are assumed by M. Huygens; one of them a round ball, opaque in the centre, but covered with a transparent shell; and the other is a cylinder, of a similar composition. By the help of the former he endeavours to account for halos, and by the latter for those appearances which are called mock suns. Those bodies which M. Huygens requires, in order to explain these phenomena, are not, however, a mere assumption; for some such, though of a larger size than his purpose requires, have been actually found, consisting of snow within and ice without. They are particularly mentioned by Descartes. The balls with the opaque kernel, which he supposed to have been the cause of them, he imagines not to exceed the size of a turnip-seed.

M. Marriotte accounts for the formation of the small coronas by the transmission of light through aqueous vapors, where it suffers two refractions without any intermediate reflection. He shows that light which comes to the eye, after being refracted in this manner, will be chiefly that which falls upon the drop nearly perpendicular; because more rays falling upon any given quantity of surface in that situation, fewer of them are reflected with small degrees of obliquity, and they are not so much scattered after refraction. The red will always be outermost in these halos, as consisting of rays which suffer the least refraction. And whereas he had seen, when the clouds were driven briskly by the wind, halos round the moon, varying frequently in their diameter, being sometimes of 2°, sometimes of 3°, and sometimes of 4°; sometimes also colored, sometimes only white, and sometimes disappearing entirely; he concluded that all these variations arose from the different thickness of the clouds, through which sometimes more and sometimes less light was transmitted. He supposed, also, that the light which formed them might sometimes be reflected, and at other times refracted. As to those coronas which consist of two orders of colors, he imagined that they were produced by small pieces of snow, which, when they begin to dissolve, form figures which are a little convex towards their extremities. Sometimes, also, the snow will be melted in different shapes; and, in this case, the colors of several halos will be intermixed and confused; and such, he says, he had sometimes observed round the sun. M. Marriotte then

proceeds to explain the larger halos, viz. those that are about 45° in diameter, and for this purpose he has recourse to equiangular prisms of ice, in a certain position with respect to the sun; and he takes pains to trace the progress of the rays of light for this purpose; but this hypothesis is very improbable. In some cases he thought that these large coronas were caused by hail-stones, of a pyramidal figure; because, after two or three of them had been seen about the sun, there fell the same day several such pyramidal hail-stones. M. Marriotte explains parhelia by the help of the same suppositions. See PARHELION.

M. Muschenbroeck concludes his account of coronas with observing, that some density of vapor, or some thickness of the plates of ice, divides the light in its transmission through the small globules of water, or their interstices, into its separate colors: but what that density was, or what was the size of the particles which composed the vapor, he could not determine.

Sir Isaac Newton considered the larger and less variable appearances of this kind as produced according to the common laws of refraction, but that the less and more variable appearances depend upon the same cause with the colors of thin plates. He concludes his explication of the rainbow with the following observation on halos and parhelia:—'The light which comes through drops of rain by two refractions, without any reflexion, ought to appear the strongest at the distance of about 26° from the sun, and to decay gradually both ways as the distance from him increases. And the same is to be understood of light transmitted through spherical hailstones: and if the hail be a little flatted, as it often is, the transmitted light may be so strong, at a little less distance than that of 26°, as to form a halo about the sun or moon; which halo, as often as the hail-stones are duly figured, may be colored, and then it must be red within by the least refrangible rays, and blue without by the most refrangible ones; especially if the hail-stones have opaque globules of snow in their centres to intercept the light within the halo, as Mr. Huygens has observed, and made the inside of it more distinctly defined than it would otherwise be. For such hail-stones, though spherical, by terminating the light by the snow, may make a halo red within, and colorless without, and darker within the red than without, as halos use to be. For, of those rays which pass close by the snow, the red-making ones will be the least refracted, and so come to the eye in the straightest lines.' Some farther thoughts of Sir Isaac Newton's on halos are subjoined to the account of his experiments on the colors of thick plates of glass which he conceived to be similar to those which are exhibited by thin ones:—'As light reflected by a lens quicksilvered on the back side makes the rings of the colors above described, so it ought to make the like rings in passing through a drop of water. At the first reflexion of the rays within the drop, some colors ought to be transmitted, as in the case of a lens, and others to be reflected back to the eye. For instance, if the diameter of a small drop or globule of water be about the $\frac{1}{500}$th part of an inch, so that a red-making ray, in passing through the middle of this globule, has 250 fits of easy transmission within the globule, and all the red-making rays, which are at a certain distance from this middle ray round about it, have 249 fits within the globules, and all the like rays at a certain farther distance round about it have 248 fits, and all those at a certain farther distance 247 fits, and so on, these concentric circles of rays, after their transmission, falling on a white paper, will make concentric rings of red upon the paper; supposing the light which passes through one single globule strong enough to be sensible, and in like manner the rays of other colors will make rings of other colors. Suppose now that in a fair day the sun should shine through a thin cloud of such globules of water or hail, and that the globules are all of the same size, the sun seen through this cloud ought to appear surrounded with the like concentric rings of colors, and the diameter of the first ring of red should be 7° 15′, that of the second 10° 15′, that of the third 12° 33′, and, according as the globules of water are bigger or less, the ring should be less or bigger.' This curious theory our author informs us was confirmed by an observation which he made in 1692. He saw by reflexion, in a vessel of stagnating water, three halos, crowns, or rings of colors about the sun, like three little rainbows concentric to his body. The colors of the first or innermost, were blue next the sun, red without, and white in the middle, between the blue and red; those of the second crown were purple and blue within, pale red without, and green in the middle; and those of the third were pale blue within, and pale red without. These crowns enclosed one another immediately, so that their colors proceeded in this continual order from the sun outward; blue, white, red; purple, blue, green, pale yellow, and red; pale blue, pale red. The diameter of the second crown, measured from the middle of the yellow and red on one side of the sun to the middle of the same color on the other side, was 9° 33′, or thereabouts. The diameters of the first and third he had not time to measure; but that of the first seemed to be about 5° or 6°, and that of the third about 12°. The like crowns appear sometimes about the moon: for in the beginning of the year 1664, on February 19th, at night, he saw two such crowns about her. The diameter of the first, or innermost, was about 3°, and that of the second about 5° 30′. Next about the moon was a circle of white; and next about that the inner crown, which was of a bluish green within, next the white, and of a yellow and red without; and next about these colors were blue and green on the inside of the outer crown, and red on the outside of it. At the same time there appeared a halo at the distance of about 22° 35′ from the centre of the moon. It was elliptical; and its long diameter was perpendicular to the horizon, verging below farthest from the moon. He was told that the moon has sometimes three or more concentric crowns or colors encompassing one another next about her body. The more equal the globules of water or ice are to one another, the more crowns of colors will appear, and the

colors will be the more lively. The halo, at the distance of 22° 30′ from the moon, is of another sort. By its being oval, and more remote from the moon below than above, he concludes that it was made by refraction in some kind of hail or snow floating in the air in an horizontal posture, the refracting angle being about 50° or 60°. Dr. Smith, however, makes it sufficiently evident, that the reason why this halo appeared oval, and more remote from the moon towards the horizon, is a deception of sight, and the same with that which makes the moon appear larger in the horizon.

HALORAGUS, in botany, a genus of the tetragynia order and octandria class of plants: CAL. quadrifid above; there are four petals; a dry plum, and a quadrilocular nut.

HALS'ENING, *adj.* } Germ. *hals*; Scotch,
HALSE, *n. s.* } *hass*, the neck. Sound-
HAL'SER, *n. s.* } ing harshly; inharmonious in the throat or tongue. Not in use. Halser, from Sax. þalſ neck, and ꝛeel a rope. It is now in marine pronunciation corrupted to hawser. A rope less than a cable.

The crueltee of thee, Quene Medea!
Thy litel children hanging by the *hals*,
For thy Jason that wos of love so fals.
Chaucer. Prologue to the Man of Lawe's Tale.

A beechen mast then in the hollow base
They hoisted, and with well-wreathed *halsers* hoise
Their white sails. *Chapman.*

This *halsening* horny name hath, as Cornuto in Italy, opened a gap to the scoffs of many. *Carew.*

No *halsers* need to bind these vessels here,
Nor bearded anchors; for no storms they fear.
Dryden.

HALSTEAD, a market town of Essex, seated on a rising ground, on the Coln, forty-seven miles north-east of London. It has an old church, the steeple of which was once burnt down by lightning, but rebuilt at the expense of Robert Fiske, esq. The town consists of about 800 houses. The inhabitants manufacture says, bays, calimancoes, &c. There is a free school for forty boys, and a very antique Bridewell. Its market on Friday is noted for corn.

HALT, *v. n., adj.* & *n. s.* } Sax. þealt, lame;
HALTER, *n. s.* } þealtan, to limp. To limp, or falter in walking; one who is disabled; a cripple; to stop suddenly as soldiers in a march; to doubt or hesitate; to be undecided; to fail or falter; in a religious sense, to backslide from former steadfastness.

How long *halt* ye between two opinions?
1 *Kings.*

All my familiars watched for my *halting*, saying, Peradventure he will be enticed, and we shall prevail against him. *Jeremiah.*

Bring in hither the poor, the maimed, the *halt*, and the blind. *Luke.*

For false Fortune hath played a game
At chesse with me, alas the while!
The trayteresse, false and full of gyle—
That al behoteth and nothing *halte*,
She goth upright and yet she *halte*.
Chaucer. The Boke of the Duchesse.

Here's a paper written in his hand;
A *halting* sonnet of his own pure brain,
Fashioned to Beatrice. *Shakspeare.*

And will she yet debase her eyes
On me, that *halt* and am mis-shapen thus? *Id.*

Without any *halt* they marched between the two armies. *Clarendon.*

He might have made a *halt* 'till his foot and artillery came up to him. *Id.*

The heavenly bands
Down from a sky of jasper lighted now
In Paradise, and on a hill made *halt*. *Milton.*

Scouts each coast light armed scour
Each quarter to descry the distant foe,
Where lodged, or whither fled, or if for fight
In Motion, or in *halt*. *Milton.*

Thus inborn broils the factions would engage,
Or wars of exiled heirs, or foreign rage,
'Till *halting* vengeance overtook our age. *Dryden.*

I was forced to *halt* in this perpendicular march.
Addison.

Spenser himself affects the obsolete,
And Sidney's verse *halts* ill on Roman feet.
Pope

The man who pauses on the paths of treason
Halts on a quicksand, the first step ingulphs him.
Hill's Henry V.

HALTER, *n. s.* & *v. a.* Sax. þealſtꝛne, from þalſ, the neck. A rope to hang malefactors; to bind with a cord; to catch in a noose.

Whom neither *halter* binds nor burthens charge.
Sandys.

He's fled, my lord, and all his powers do yield;
And humbly thus, with *halters* on their necks,
Expect your highness' doom of life or death.
Shakspeare.

They were to die by the sword if they stood upon defence, and by the *halter* if they yielded; wherefore they made choice to die rather as soldiers than as dogs. *Hayward.*

Were I a drowsy judge, whose dismal note
Disgorgeth *halter*, as a juggler's throat
Doth ribbands. *Cleaveland.*

He gets renown, who, to the *halter* near,
But narrowly escapes and buys it dear. *Dryden.*

He might have employed his time in the frivolous delights of catching moles and *haltering* frogs.
Atterbury.

HALTER-CAST is an excoriation of the pastern, occasioned by the halter's being entangled about a horse's foot, upon his endeavouring to rub his neck with his hinder feet. For the cure, anoint the place, morning and evening, with equal quantities of linseed oil and brandy, well mixed.

HALTERISTÆ, in antiquity, a kind of players at discus. Some take the discus to have been a leaden weight or ball, which the vaulters bore in their hands, to secure and keep themselves the more steady in their leaping. Others say the halter was a lump of lead or stone, with a hole or handle fixed to it, by which it might be carried. Hier. Mercurialis, in his treatise De Arte Gymnastica, l. ii. c. 12, distinguishes two kinds of halteristæ; for, though there was but one halter, there were two ways of applying it. The one was to throw or pitch it; the other only to hold it out at arm's end, and in this posture to give themselves divers motions, swinging the hand backwards and forwards, according to the engraven figures thereof given us by Mercurialis. The halter was of a cylindrical figure, smaller in the middle, where it was held by one diameter, than at the two ends. It was above a foot long, and there was one for each hand: it was either of iron, stone, or lead. Galen, De Tuend. Vale-

tud. lib. i. v. and vi., speaks of this exercise, and shows of what use it is in purging the body of peccant humors, making it equivalent both to purgation and phlebotomy.

HALVE, *v. a.* } Dan. *halv*. See HALF.
HALVES, *interj.* } To divide equally: halves is an expression by which any one lays claim to an equal share. See HALF.

Have you not seen how the divided dam
Runs to the summons of her hungry lamb?
But, when the twin cries *halves*, she quits the first.
Cleaveland.

HALYMOTE properly signifies a holy or ecclesiastical court. There is a halymote held in London, before the lord mayor and sheriffs, for regulating the bakers. It was anciently held on Sunday before St. Thomas's day, and hence called the haly mote, or holy court.

HALYS, in ancient geography, the noblest river of the Hither Asia, through which it has a long course, was the boundary of Crœsus's kingdom on the east. Running down from the foot of Mount Taurus, through Cataonia and Cappadocia, it divided almost the whole of the Lower Asia, from the sea of Cyprus down to the Euxine, according to Herodotus; who seems to extend its course too far. According to Strabo, who was a Cappadocian, it had its springs in Great Cappadocia. It separated Paphlagonia from Cappadocia, and received its name, *απο του αλος*, from salt, because its waters were of a salt taste, from the soil over which they flowed. It is famous for the defeat of Crœsus, king of Lydia, who was misled by this ambiguous response of the oracle: *Χροισος Αλυν διαβας μεγαλην αρχην διαλυσει*; i. e. If Crœsus passes over the Halys he shall destroy a great empire. That empire proved to be his own. See CRŒSUS.

HAM, *n. s.*
HAM'BLE, *v. n.*
HAM'ATED, *adj.*
HAM'STRUNG, *n. s.* or
HAM'STRING, *v. a.*
} Saxon, ham; Dutch, *hamme*; Lat. *hamus*. The hip, or hinder part of the thigh; the thigh of a hog salted: any thing hooked; set with hooks. Hamble, formerly hamebe, and hamstring to cut the sinews of the back part of the thigh; the tendon of the lam.

And, thereto hath she laid her faith to borrow;
Algote o foote is *hameled*, of thy sorowe.
Chaucer. Troilus and Creseide.

A player, whose conceit
Lies in his *hamstring*, doth think it rich
To hear the wooden dialogue, and sound
Twixt his stretched footing and the scaffoldage.
Shakspeare.

Hamstringed behind, unhappy Gyges died;
Then Phalaris is added to his side. *Dryden.*

Who has not learned, fresh sturgeon and *ham* eye
Are no rewards for want and infamy? *Pope.*

On the hinder side it is guarded with the two *hamstrings*. *Wiseman.*

The *ham* was much relaxed; but there was some contraction remaining. *Id.*

Along this hall, and up and down, some squatted
Upon their *hams* were occupied at chess;
Others in monosyllable talk chatted,
And some seemed much in love with their own dress. *Byron. Don Juan.*

HAM, in commerce, &c. Westphalia hams are prepared by salting them with salt-petre, pressing them in a press eight or ten days, then steeping them in juniper water, and drying them by the smoke of juniper wood. A ham may be salted in imitation of those of Westphalia, by sprinkling a ham of young pork with salt for one day, to fetch out the blood; then wiping it dry, and rubbing it with a mixture of 1 lb. of brown sugar, ¼ lb. of saltpetre, ½ pint of bay salt, and 3 pints of common salt, well stirred in an iron pan over the fire, till moderately hot; let it lie three weeks in this salting, turn it often, then dry it, and hang it up. 'Smoked hams,' says Dr. Willich, are a very strong food, which is not easily digested. If eaten in proper time, and in small quantities, they may be a cordial to some vigorous stomachs, especially in the morning, as a substitute for the pernicious hot and buttered rolls; but boiling renders their digestion still more difficult. See SMOKING.

HAM, Heb. חם, i. e. crafty. The youngest son of Noah, and father of Cush, Mizraim, Phut, and Canaan; each of whom possessed the countries peopled by them. Ham, it is believed, had all Africa for his inheritance, and peopled it with his posterity. He himself, it is thought, dwelt in Egypt; but M. Basnage is of opinion, that neither Ham nor Mizraim ever were in Egypt, but that their posterity settled in this country, and called it by the name of their ancestor. He also doubts of his having been worshipped as a god, by the name of Jupiter Hammon. Be that as it may, Africa is called the Land of Ham in Psalm lxxviii. 51, cv. 23, cvi. 22. In Plutarch Egypt is called Chemia; and there are traces of the name of Ham or Cham in Psochemmis, and Psitta-chemmis, which are cantons of Egypt. See EGYPT.

HAMADAN, or AMADAN, a city of Irak, Persia, standing on or near the site of the ancient Ecbatana. It was taken and destroyed by Timur, and ever since has been only a secondary place. It contains, however, still 10,000 meanly built houses, and about 40,000 inhabitants. The wall which surrounded it was not long since destroyed. Hamadan is famous for its manufacture of leather, and is a considerable mart of commerce between Ispahan and Bagdad, and between the latter place and Tehraun.

HAMADRYADES, from *αμα*, together, and *δρυς*, an oak, a kind of inferior deities revered among the ancient heathens, and believed to preside over woods and forests, and to be enclosed under the bark of oaks. They were supposed to live and die with the trees they were attached to, as is observed by Servius on Virgil, Eclog. x. v. 62, after Mnesimachus, the scholiast of Apollonius, &c., who mentions other traditions relating to them. The poets often confound the Hamadryads with the Naiads, Napææ, and rural nymphs in general. Festus calls them Querquetulanæ, as being sprung from oaks. Pherenicius, in Athenæus, lib. iii. calls the vine, fig-tree, and other fruit trees, hamadryades. This idea among the ancients, of intellectual beings annexed to trees, accounts for their worship of trees. Livy speaks of an ambassador addressing himself to an old oak, as to an intelligent person and a divinity.—Lib. iii. § 25.

HAMAH, a town of Asiatic Turkey, in Syria,

situated on the river Orontes, By some travellers it is corruptly called Amarl and Amant. Some mistake it for the ancient Apamea, now called Afamiyah, but that town is a day's journey from Hamah; and Dr. Pococke supposes Hamah to be the ancient Epiphania; whilst Theodoret, and other good geographers, maintain it to be Emesset in Syria. Hamah is seated among hills, and has a castle on one of them. It has always been a considerable place, and in the thirteenth and fourteenth centuries had princes of its own. Among these Ismael Abulfeda, prince of Hamah, from the year 1342, to 1345, was famous for his skill in geography. It is very large, and, being seated on the ascent of a hill, makes a fine appearance; but, like other towns under the Turkish government, is going to decay. Many of the houses are half ruined; but those which are still standing, as well as the mosques and castle, have their walls built of black and white stones, disposed so as to form various figures. The river Assi, the ancient Orontes, runs by the castle, and fills the ditches round it, which are cut very deep into the rock; it passes through the town from south to north, and, in its course, turns eighteen great wheels, called saki, which raise great quantities of water to a considerable height, and throw it into canals supported by arches, which run into the gardens. There are some pretty good market-places in Hamah. Linen is manufactured there, and sent to Tripoli to be exported into Europe. The sheiks of the town enjoy a high consideration. They inhabit a splendid palace, and have the title of emir. It is at present the only market for the Arabs, who roam over the extensive desert which intervenes between it and Tadmor, and who are under a sort of tacit agreement not to plunder the caravans coming to the city. Sixty-two miles S. S. W. of Aleppo. Long. 36° 15′ E., lat. 35° 15′ N.

HAMAMELIS, witch hazel, a genus of the digynia order, and tetrandria class of plants. The involucrum is triphyllous, the proper calyx tetraphyllous; there are four petals; the nut horned and bilocular. There is but one species, a native of Virginia. It has a shrubby or woody stem, branching three or four feet high; oval, indented, alternate leaves, resembling those of common hazel; and flowers growing in clusters from the joints of the young branches, but not succeeded by seeds in this country. It is hardy, and is admitted as a variety in our gardens. Its flowers are remarkable for appearing in November and December, when the leaves are fallen. It may be propagated either by seeds or layers.

HAMAMET, a considerable sea-port on the east coast of Tunis, in a bay or gulf of the Mediterranean of this name. Dr. Shaw derives its name from Haman, wild pigeons, with which the country abounds. It contains some antiquities from the neighbouring ruins of the Civitas Siagitana, and is thirty miles south of Tunis.

HAMATH, in ancient geography, a kingdom of Syria. Toi, one of its monarchs, cultivated the friendship of David. 2 Sam. viii. 9.

HAMATH, the capital of the above kingdom, was seated on the Orontes. 'The entering into Hamath,' spoken of Josh. xiii. 5., Judges iii. 3, 2 Kings xiv. 25, and 2 Chron. vii. 8, is the narrow pass leading from the land of Canaan through the valley between Libanus and Antilibanus. This entrance is set down as the north boundary of Canaan, in opposition to its southern limits, the Nile. Joshua (xix. 35) assigned Hamath to the tribe of Naphtali. It was taken by the kings of Judah, and retaken from the Syrians by Jeroboam II. 2 Kings xiv. 28. The kings of Assyria at last took it, and transplanted the inhabitants into Samaria. 2 Kings xvii. 24, and xviii. 34, &c. It is the same with HAMAH. See that article.

HAMAXOBIANS, HAMAXOBII, or HAMAXOBITÆ. From *αμαξα*, a chariot, and *βιος*, life. A people who had no houses, but lived in carriages. They were an ancient people of Sarmatia Europæa, inhabiting the southern part of Muscovy, and instead of houses had a sort of tents made of leather, fixed on carriages to be ready for travelling. Some say they inhabited the countries now called Bessarabia, Moldavia, Wallachia, and part of Transylvania.

HAMBURGH, one of the most important commercial cities in Europe, is situated at the confluence of the little rivers, Alster and Bille, with the Elbe, and about eighteen leagues from the sea. It is built in the Gothic style; the streets narrow and crooked; and it has many canals, crossed by eighty-one bridges. It is surrounded by a wall, on the top of which two carriages can drive abreast, and has six gates. The French, while in possession of it, constructed many other works: its population is about 120,000, and the territory about 15,000 more.

In the new town many of the houses are neatly built, and some streets elegant, particularly on the Alster, where the Jungfernsteig, planted with trees, is a fashionable promenade. Hamburgh has several suburbs: on its east side, between the Elbe and Alster, stands that of St. George, surrounded by a regular wall, and forming a separate parish. On the west is the Hamburger Berg, separated from Altona only by a wall. Here, adjacent to the Elbe, are the large oil works belonging to the Greenland fisheries, and at some distance two hospitals and a workhouse. On the north side of Hamburgh, along the Alster, is a new suburb, containing a number of elegant buildings.

Outside of the town the Alster forms a large basin; and within the town another of less extent, called the Binnen Alster, which serves as a harbour. An arm of the Elbe also forms two ports, one on the east for boats, and another on the west, called the Niederbaum, for ships. The depth of this harbour is twenty feet; but on account of a sand-bank opposite to the village of Blankenese, nine miles below Hamburgh, vessels that draw more than fourteen feet of water must discharge part of their cargo, except at spring tides, when the depth on the bank is eighteen feet. The hour of high water at new and full moon is six o'clock. Besides the Alster, a small river, called the Bill, flows by the east side of the city.

There are in Hamburgh five large and eleven small churches; that of St. Michael, a modern edifice, and that of St. Peter, are remarkable for

their elegant spires; St. Nicholas for its fine chimes. The exchange hall is a new building, fitted up with great elegance, and containing a hall for the display of works of art, and a reading-room on a large scale. The other public buildings are not constructed in very good taste. The principal are the old exchange, the hospitals, and an obelisk in honor of professor Busch.

In former times brewing was a chief employment here; but it has long given place to other occupations. In the beginning of this century the refining of sugar employed more than 300 houses, and is still a considerable pursuit. The printing of cotton, linen, and handkerchiefs, is next in importance; then, perhaps, the dye-works, and machinery for twisting tobacco. Other manufactures, on a comparatively small scale, are those of jewellery, whalebone, soap, wax, whale-oil, silk stuffs, gold and silver lace, needles, cards, sailcloth, and particularly stockings. For many years Hamburgh has been gradually exchanging its manufacturing for a mercantile character. Its transactions partly consist in agency, but more in the purchase and sale for account of its merchants. They buy the commodities of Great Britain, France, Spain, Portugal, the Netherlands, the West Indies, the United States of America; and supply all the countries lying along the Elbe, different districts on the Rhine and the Lower Maine, and a part of the Prussian and Austrian dominions. They also buy up the products of these countries, linen, thread, &c. The trade in timber is also of great importance, especially during a maritime war. The other articles of trade comprise flax, hemp, potash, tar, tobacco, dye-stuffs, wax, honey, hides, wool, woollen yarn, smoked and salt meat, mineral products, iron wares; in short, all the products of the north-east of Germany.

The following list of vessels which arrived at Hamburgh, in 1817, will show the prominence of our trade with this city:—

From Britain	589
the Baltic . . .	239
the Netherlands . .	178
Denmark	112
Portugal	92
the Mediterranean . .	85
France	73
Sweden	47
the United States . .	37
the West Indies . .	30
Archangel	22
Greenland	13
the East Indies . .	6
the Weser, East Friesland, and all other ports . .	117
Total .	1640

Its commerce has since considerably increasd. The coasting trade with Bremen, Embden, and Amsterdam, is carried on by flat-bottomed vessels; a class of shipping of great convenience in time of war, as, from their keeping in the shallow water between the line of sandy islands and the continent, armed vessels can with difficulty approach them. They belong chiefly to the inhabitants of East Friesland, Ditmarsch, and Heligoland. The transit trade, or conveyance of goods by the Elbe, for account of foreign merchants, has hitherto been inconsiderable, but has been increased since 1816 by the heavy duties imposed by the Dutch government on merchandise forwarded into Germany by the Rhine; and by the regulations which have freed the Upper Elbe from a number of vexatious tolls.

The bank here was founded in 1619, to afford a permanent and uniform currency; it has never issued notes, and very seldom makes a cash payment; a merchant, depositing cash or bullion, receives credit for the amount in the books; this he makes use of, not by withdrawing the money, but by transferring it by draft or cheque to others, who again make similar transfers. Bank money having a permanent value, while coin was liable to degradation, the former soon rose in relative price, and often bears an agio, or premium of 25 per cent. The denominations of money in Hamburgh are not simple. Accounts are kept in marks, schillings, and pfennings lubs, thus:—

12 pfennings = 1 schilling.
16 schillings = 1 mark.
3 marks = 1 dollar.

A mark is somewhat more than eighteen pence sterling; but the exchange with London is computed in Flemish money, of which £13 6*s*. 8*d*. are equal to 100 marks; the computation is thirty-two shs. Flemish, and upwards, for a pound sterling. With Amsterdam and Paris the computation of exchange is by marks, schillings, and pfennings; and the bill transactions are reckoned more important than those of any other place in Germany.

The established religion is the Lutheran, but complete toleration is granted: Catholics and Calvinists go to the chapels of the envoys from Catholic or Calvinist countries. The manners of the citizens much resemble those of Holland. The favorite taste, in respect to amusement, is music; and, before 1807, the higher class of merchants lived not only with hospitality, but luxury. This city has been at different times the residence of literary characters of the first eminence; and its charitable institutions are numerous. The revenue of the orphan-house is estimated at £6000 sterling; there is an hospital for receiving poor travellers that fall sick; and, in the well known lombard, or place of deposit for pawned articles, the town lends money at an interest of 6 per cent. on every kind of goods or merchandise. If the goods are not reclaimed, within a certain time, they are sold for their full value, and the excess over the money lent is returned to the owners. At the town library, containing, it is said, 100,000 volumes, is published the Hamburger Correspondenten, a newspaper of great circulation.

The constitution of the government is an aristocracy, checked by the citizens at large. The aristocratic part comprises the senate, to the number of twenty-eight voting members, who receive an annual salary, and constitute the executive; they have no hereditary right or distinction, but they have the privilege of electing

their own members. Such elections, however, are almost always in concurrence with the popular wish. The burgesses, or citizens, act by delegation in various ways; by a commission of fifteen, called the council of elders; by the council of sixty; and by an assembly of 180. These bodies are each entitled to confer with the senate on questions of importance. The senate alone can propose a law; its adoption or rejection rests with the representatives of the citizens. To be a citizen, in a legislative sense, it is requisite to be of the Lutheran faith, and to possess permanent property within the walls to the value of 1000 rixdollars (£240), or 2000 without the walls; but, within the territory, the right of citizenship, for mercantile purposes, is of easy acquisition, particularly to our countrymen. The whole of this constitution was framed by a commission appointed by the emperor of Germany in 1712, previous to which the government of Hamburgh had been a source of frequent strife between the senate and citizens.

The city revenue exceeds £150,000, arising chiefly from customs and assessed taxes. These defray the public salaries, and the pay of the military, who are in number 2000. An annual expense of £15,000 is incurred on account of the river, in buoys, light-houses, and in keeping it clear of mud; and is raised by a toll on the shipping. The territory of Hamburgh hardly exceeds 133 square miles. It consists of a small district lying around the city, of the town and bailiwic of Cuxhaven, at the mouth of the Elbe, and some villages in the duchy of Holstein. Hamburgh is connected with Frankfort, Lubeck, and Bremen, in some commercial regulations; and they all retain the old name of Hanse Towns.

In 833 Louis the Pious erected Hamburgh into a bishopric, and afterwards into an archbishopric. Adolphus III. duke of Saxony, among other privileges, granted it the right of fishing in the Elbe, eight miles above and below the city. It was declared a free imperial city in 1618. The kings of Denmark, when they succeeded to the counts of Holstein, claimed the sovereignty of this place, and often compelled the citizens to pay large sums to purchase the confirmation of their liberties. The year 1768 was remarkable for a renunciation of this claim, and for a full confirmation of Hamburgh in her rights as an independent city. Her trade and population now continued to increase: the French revolution for some time augmented them; and when, after 1796, Germany felt the shock of invasion, Hamburgh was secure under the protection of Prussia. It thus preserved its independence amid all the partitions of territory until, at the end of 1806, a large French garrison was stationed here, and Buonaparte seized a part of the public funds. In 1810 it was incorporated into the French empire, as the capital of the department of the Mouths of the Elbe. The decrees of Buonaparte, prohibitory of commerce, continued with immense loss to this city from 1808 until the spring of 1813, when the hope of support from the troops of the allies led to a memorable, but premature effort (18th of March) against the French. Hamburgh was re-occupied by the latter on the 30th of May, when a contribution of nearly £2,000,000 sterling was imposed on it, and orders given to defend it at whatever sacrifice against the allies. This led to great distress, to the destruction of the houses on the ramparts, the seizure of a great deal of merchandise, and finally of the bank funds. At last it was evacuated, May 1814, and part of the bank funds have been restored by the Bourbons. The congress of Vienna accorded to Hamburgh a vote in the Germanic diet, in conjunction with Frankfort, Lubeck, and Bremen. It is thirty-nine miles S. S.W. of Lubeck, eighty-four north of Hanover, and 448 north-east of London.

HAME, *n. s.* Sax. þama. The collar by which a horse draws in a waggon.

HAMEL. See Hamlet.

Hamel (John Baptiste Du), a learned French philosopher of the seventeenth century. At eighteen he wrote a treatise, in which he explained in a very simple manner Theodosius's three books of Spherics; to which he added a tract upon trigonometry, designed as an introduction to astronomy. He next published his Astronomia Physica. In 1666 M. Colbert proposed to Louis XIV. a scheme for establishing a royal academy of sciences; and appointed Du Hamel secretary. He was also regius professor of philosophy, and published a great number of books. He died at Paris in 1706, aged eighty-three. He wrote Latin with purity and elegance.

HAMELN, a town and fortress of Hanover, situated at the conflux of the Weser and Hamel. Here is a large sluice on the Weser, erected in 1734, by George II. It contains 5000 inhabitants, and carries on an active trade in tobacco, hats, and woollens. The churches and other public buildings are large for so small a place. On the other side of the river is a very strong fortification, called Fort George, considered of great importance for the possession of Hanover. It was garrisoned by the Prussians in 1806. Twenty-two miles south-east of Minden, and twenty-five south-west of Hanover.

HAMELIA, in botany, a genus of the monogynia order, and pentandria class of plants. The corolla is quinquefid; the berry quinquelocular, inferior, polyspermous.

HAMESECKEN, or Hamesoken. Burglary, or nocturnal house-breaking, was, by the ancient English law, called Hamesecken, as it still is in Scotland.

HAMILCAR, the father of Hannibal. See Amilcar and Carthage.

HAMILTON (George), earl of Orkney, a brave warrior, was the fifth son of William earl of Selkirk. Being made colonel in 1689—90, he distinguished himself by his bravery at the battle of the Boyne; and soon after at those of Ahrim, Steinkirk, and Landen, and at the sieges of Athlone, Limerick, and Namur. His eminent services in Ireland and Flanders, recommended him so highly to king William III. that, in 1696, he created him earl of Orkney; and his lady, the sister of Edward viscount Villiers, afterwards earl of Jersey, had a grant made to her, under the great seal of Ireland, of almost all the private estates of the late king James. Upon the accession of queen Anne, he was promoted to the rank of major-general in 1702, and in 1703

to that of lieutenant-general, and was likewise made K. T. He afterwards served under the duke of Marlborough, and contributed by his bravery and conduct to the glorious victories of Blenheim and Malplaquet. In 1710 he was sworn of the privy-council, and made general of the foot in Flanders. In 1712 he was made colonel of the royal regiment of Fusiliers, and served in Flanders under the duke of Ormond. In 1714 he was appointed gentleman extraordinary of the bed-chamber to king George I., and afterwards governor of Virginia. At length he was appointed governor of Edinburgh castle, lord-lieutenant of Clydesdale, and field-marshal. He died at his house in Albemarle Street, in 1737.

Hamilton (John), the twenty-fourth bishop of St. Andrew's, to which he was translated from Dunkeld, was the natural son of James, the first earl of Arran; and one of queen Mary's privy council, and a steady adherent to her interest. He baptised her son; and was made lord privy seal, and lord treasurer. By the regent earl of Murray, he was declared a traitor, and obliged to seek shelter among his friends. Being in the castle of Dumbarton, when it was taken, he was carried to Stirling, where on April 1st, 1570, he was hanged on a tree. The following sarcastic lines were written upon it:—

Vive diu, felix arbor, semperque vireto
Frondibus, ut nobis talia poma feras.

Hamilton (William), of Bangour, a celebrated Scots poet, the friend and poetical correspondent of Allan Ramsay, was born at Bangour, in Linlithgowshire, in the beginning of the eighteenth century, and was for some time a lieutenant in the royal navy. Lieutenant Hamilton lived many years at Gilbertfield in Lanarkshire, and afterwards at Latrick, where he died 24th of May, 1751. His works were printed at Edinburgh, in 12mo., in 1760.

Hamilton (William Gerard), an orator of the last century, who, on account of the extraordinary impression produced by the first and almost the only speech he ever delivered in the house of commons, obtained the name of Single-speech Hamilton. His father was a barrister of Lincoln's Inn, where he was born in 1729. He was sent to Winchester, whence he removed to Oriel College, Oxford; and then studied at Lincoln's Inn, but never was called to the bar. In 1754 he obtained a seat in parliament, and subsequently was made one of the lords of trade. On the appointment of lord Halifax to the viceroyalty of Ireland, Hamilton went thither as his secretary, and was accompanied by the celebrated Edmund Burke. In the Irish parliament he supported the reputation he had previously gained; and for many years held the office of Irish chancellor of the exchequer. He relinquished that post in 1784, and spent the latter part of his life in retirement. His death took place in 1796. A posthumous publication of his works, including a tract, entitled, Parliamentary Logic; Speeches, &c., appeared in 1808. The letters of Junius have been attributed to him.

Hamilton (Elizabeth), a modern literary lady, and a native of Ireland, was born at Belfast 25th of July, 1758. She was brought up under the care of her uncle, who resided near Stirling in Scotland, and produced Cottages of Glenburnie; Letters of a Hindoo Rajah, 2 vols. 8vo.; The Life of Agrippina, 3 vols. 8vo.; and Memoirs of Modern Philosophers; works which, under the form of novels, are replete with good sense and information. Her other writings are, Hints for Public Schools; Popular Essays, 2 vols. 8vo.; Rules of the Annuity Fund, &c.; Exercises in Religious Knowledge, 12mo.; Letters on the Formation of the Religious and Moral Principle, 2 vols.; and, On the Elementary Principles of Education. Miss Benger, after her decease, printed a selection from Miss Hamilton's correspondence, with an account of her life and habits. Her death took place at Harrowgate, in Yorkshire, 23d of July, 1816.

Hamilton, a town in a parish of the same name, seated on the Clyde, in the middle of a very agreeable plain, on the east side of a large park nearly seven miles in circumference, enclosed with a high wall, full of deer and other game, belonging to the duke of Hamilton. The original name of this place was Cadzow, or Cadyow, a barony granted to an ancestor of the noble owner, on the following occasion:—In the time of Edward II. lived Sir Gilbert de Hamilton, or Hampton, an Englishman of rank; who happening at court to speak in praise of Robert Bruce, received an insult from John de Spenser, chamberlain to the king, whom he fought and slew. Dreading the resentment of that potent family, he fled to the Scottish monarch; who established him at the place possessed by the duke of Hamilton. In after times the name changed from Cadzow to Hamilton; and in 1445 the lands were erected into a lordship, and the then owner Sir James sat in parliament as lord Hamilton. He founded a collegiate church at Hamilton in 1451; and the town was made a burgh of barony in 1456. Weaving is the chief manufacture. Hamilton-palace is at the end of the town; a large pile, with two deep wings at right angles with the centre: the gallery is of great extent, and furnished with most excellent paintings. Hamilton is eleven miles south-east of Glasgow, and thirteen N. N. W. of Lanark.

Hamilton, a county in the south-west corner of the state of Ohio, United States, bounded south by the Ohio River, east by Clermont county, north by Butler county, and west by Indiana. It is thirty miles long, by twenty broad. It is watered by the Ohio, Whitewater, and Great and Little Miami. Its surface is hilly and uneven near the large streams; in other parts it is level, or undulating. The valleys are well cultivated. The chief town is Cincinnati. Population, in 1815, 18,700.

Hamilton, a district of Tennessee, United States, containing the counties of Knox, Jefferson, Blount, Sevier, and Grainger.

Hamilton, a town of the county of Butler, state of Ohio, United States. It is pleasantly situated on the east bank of the Miami, and contains a post-office, and a printing-office, from which issues a weekly newspaper.

Hamilton, a township and village of the

United States, in Maddison county, New York. The township was erected in 1801, and in 1810 its inhabitants amounted to 2220. The village is situated on the main branch of the Chenango.

HAMLET, *n. s.* From Saxon, ham, a village; with the diminutive termination.

Within the self-same lordship, parish, or *hamlet*, lands have divers degrees of value. *Bacon.*

Sometimes with secure delight
The upland *hamlets* will invite. *Milton.*

He pitched upon the plain
His mighty camp, and, when the day returned,
The country wasted and the *hamlets* burned. *Dryden.*

HAMLET, a prince of Denmark whose history has been rendered interesting, by being the subject of one of the noblest tragedies of Shakspeare. Adjoining to a royal palace, which stands about half a mile from Cronburg in Elsineur, is a garden, which, Mr. Coxe informs us, is called Hamlet's Garden, and is said to be the spot where his father was murdered. The house is of modern date, and is situated at the foot of a sandy ridge near the sea. The garden occupies the side of the hill, and is laid out in terraces rising above each other. The original history, from which the poet derived the principal incidents of his play, is founded upon facts, but so deeply buried in remote antiquity that it is difficult to discriminate truth from fable. Saxo Grammaticus, who flourished in the twelfth century, is the earliest historian of Denmark who relates the adventures of Hamlet. His account is much altered by Belleforest, a French author, a translation of whose romance was published under the title of The Hystorye of Hamblet, from which Shakspeare is supposed to have formed the ground-work of his play.

HAM'MER, *n. s.* & *v. n.* } Saxon, þamen;
HAM'MERER, *n. s.* } Danish, *hammer.*
HAM'MERHARD, *n. s.* } The instrument, consisting of a long handle and heavy head, with which any thing is forged or driven. Figuratively any thing destructive or powerful: to beat; to forge; to contrive by dint of intellectual labor; to work; or to be busy; in these senses generally spoken contemptuously: sometimes to be greatly agitated.

——————Lamekes sone Tubal,
That found out firste the arte of song;
For as his brother's *hamers* ronge
Upon his anvelt up and downe,
Therof, he toke the firste sowne.
Chaucer. Boke of the Duchesse.

The armureres also
With file and *hammer* pricking to and fro.
Id. The Knightes Tale.

His bones the *hammered* steel in strength surpass.
Sandys.

Nor needest thou much importune me to that,
Whereon this month I have been *hammering*.
Shakspeare.

I have been studying how to compare
This prison where I live unto the world;
And, for because the world is populous,
And here is not a creature but myself,
I cannot do it; yet I'll *hammer* on't. *Id.*

Vengeance is in my heart, death in my hand;
Blood and revenge are *hammering* in my head. *Id.*

The armourers,
With busy *hammers* closing rivets up,
Give dreadful note of preparation. *Id.*

Wilt thou still be *hammering* treachery,
To humble down thy husband and thyself? *Id.*

He was nobody that could not *hammer* out of his name an invention by this witchcraft, and picture it accordingly. *Camden.*

Some spirits, by whom they were stirred and guided in the name of the people, *hammered* up the articles. *Hayward.*

That renowned pillar of truth and *hammer* of heresies, St. Augustine. *Hakewill on Providence.*

—————— the *hammered* cuirass,
Chalybean tempered steel, and frock of mail
Adamantean proof. *Milton. Samson Agonistes.*

It is broken not without many blows, and will break the best *hammers* of iron. *Browne.*

The smith prepares his *hammer* for the stroke.
Dryden's Juvenal.

Some *hammer* helmets for the fighting field.
Dryden.

Drudged like a smith, and on the anvil beat,
'Till he had *hammered* out a vast estate. *Id.*

I must pay with *hammered* money instead of milled. *Id.*

Hammerhard is when you harden iron or steel with much hammering on it. *Moxon.*

Every morning he rises fresh to his *hammer* and his anvil. *South.*

There beings deathless as their haughty lord
Are *hammered* to the galling oar for life,
And plow the winter's wave and reap despair.
Young's Night Thoughts.

The first an *hammer* called, whose out-grown sides
Lie on the drum. *Fletcher's Purple Island.*

A HAMMER has an iron head, fixed crosswise upon a handle of wood. There are several sorts of hammers used by blacksmiths; as, 1. The hand-hammer, which is of such weight that it may be wielded with one hand at the anvil. 2. The up-hand sledge hammer, used with both hands, and seldom lifted above the head. 3. The about-sledge hammer, which is the biggest of all, and held by both hands at the farthest end of the handle; and being swung at arm's length over the head, is made to fall upon the work with as heavy a blow as possible. The smallest hammer used by smiths is called a rivetting hammer, but is seldom used at the forge unless upon small work. These and a great variety of other hammers of different sizes are used by goldsmiths and jewellers. Watchmakers, saddlers, carpenters, and joiners, have likewise hammers accommodated to their several purposes.

HAMMERMEN, in the royal boroughs of Scotland, the name of an incorporation, which comprehends most of those artizans who make use of hammers; such as goldsmiths, jewellers, watch-makers, coppersmiths, braziers, blacksmiths, tin-plate-workers, cutlers, gun-smiths, founders, saddlers, &c. In Edinburgh, however, the goldsmiths, by the set of the burgh, form a distinct incorporation, which ranks second in order, next to the surgeons; while the other artizans above mentioned form the fifth incorporation, under the title of hammermen.

HAMMOCK, *n. s.* Sax. þamaca. A swinging bed.

Prince Maurice of Nassau, who had been accustomed to *hammocks*, used them all his life. *Temple.*

HAMMOCKS, or HAMACS, are suspended between two trees, posts, hooks, or the like, and are much used throughout the West Indies, as well as on board of ships. The Indians hang their hammocks to trees, to secure themselves from wild beasts and insects. It consists of a large strong coverlet or sheet of coarse cotton, about six feet square; on two opposite sides are loops of the same stuff, through which a string is run, and thereof other loops are formed, all of which are tied together with a cord; and thus the whole is fastened to two neighbouring trees in the field, or two hooks in houses. This kind of couch serves at the same time for bed, quilts, sheets, pillow, &c. The hammock used on board of ships is made of a piece of canvas, six feet long, and three wide, drawn together at the ends. There are usually from fourteen to twenty inches in breadth allowed between decks for every hammock in a ship of war; but this space must in some measure depend on the number of the crew, &c. In time of battle the hammocks and bedding are firmly corded and fixed in the nettings on the quarter deck, to preserve the men from the fire of the enemy.

HAMMOND (Henry), D. D., one of the most learned English divines in the seventeenth century, was born in 1605. He studied at Oxford, and in 1629 entered into holy orders. In 1633 he was made rector of Penshurst in Kent; in 1643 archdeacon of Chichester; and in 1645 a canon of Christ Church, Oxford, and chaplain to king Charles I. He was also chosen public orator of the university. In 1647 he attended the king in his confinement at Wooburn, Caversham, Hampton-Court, and the Isle of Wight. On his return to Oxford he was chosen sub-dean; and continued there till the parliament visitors ejected and imprisoned him. During this confinement he began his Annotations on the New Testament. On the 4th of April 1660 he was seized by a fit of the stone, of which he died on the 25th of that month, aged fifty-five. He wrote many other works, which have been published together in 4 vols. folio.

HAMMOND (Anthony), esq., an ingenious English poet, descended from a good family of Somersham-Place in Huntingdonshire, was born in 1668. After a liberal education at St. John's College, Cambridge, he was chosen M.P. for Truro, and soon distinguished himself as a speaker. He became a commissioner of the royal navy, which place he quitted in 1712. He published a Miscellany of Poems by the most eminent hands; in which he himself had a considerable share. He wrote the life of his friend Walter Moyle, esq., prefixed to his works; and died about 1726.

HAMOAZE, a creek in the British Channel, which forms a harbour for the royal navy, capable of containing 100 vessels, in three tiers, at from thirteen to fifteen fathoms water. It is the west branch of the Tamar, which falls into Plymouth Sounds.

HAMPDEN (John) esq., of Hampden, a celebrated patriot, descended of an ancient family in Buckinghamshire, was born at London in 1594. He was cousin german to Oliver Cromwell, and in 1609 was sent to Magdalen College, Oxford, whence he went to the inns of court, where he made a considerable progress in the law. He was elected a member of the parliament which sat at Westminster, February 5th, 1626; and served in all the succeeding parliaments in the reign of Charles I. In 1636 he became universally known, by his refusal to pay ship-money, as being an illegal tax; upon which he was prosecuted; and his conduct throughout this transaction gained him great celebrity. On January the 3rd, 1644, the king ordered articles of high treason and other misdemeanors to be prepared against lord Kimbolton, Mr. Hampden, and four other members of the House of Commons, and went to that house to seize them: but they had retired. Mr. Hampden afterwards made a speech to the house to clear himself of the charge laid against him. In the beginning of the civil war he commanded a regiment of foot, and was of great service to the parliament at the battle of Edge-hill. He received a mortal wound in the shoulder in an engagement with prince Rupert, on the 18th of June 1643, at Chalgravefield in Oxfordshire; and died on the 24th. Of this celebrated patriot Clarendon says, he was an enemy not to be wished where he might have been made a friend, and as much to be apprehended where he was so, as any man could deserve to be. And, therefore, his death was no less pleasing to the one party, than it was condoled by the other. In a word, what was said of Cinna might well be applied to him;—'He had a head to contrive, and a tongue to persuade, and a hand to execute any mischief!'

HA'MPER, *n. s.* Contracted, according to Minsheu, from hand pannier; but hanaperium appears to have been a word long in use, whence hanapar, hampar. Johnson. A large basket for carriage.

What powder'd wigs! what flames and darts!
What *hampers* full of bleeding hearts! *Swift.*

HAMPER, *v. a.* The original of this word, in its present meaning, is uncertain: Junius observes that *hamplyns* in Teutonic is a quarrel: others imagine that hamper or hanapar, being the treasury to which fines are paid, to hamper, which is commonly applied to the law, means originally to fine. To shackle, entangle, ensnare, or inveigle, as with chains or nets; figuratively to perplex, complicate, or embarrass by troubles, or to catch with allurements.

And if the priest wol him refuse,
I am full redy him to accuse,
And him punish and *hamper* so
That he his churche shal forgo.
Chaucer. Romaunt of the Rose.

She'll *hamper* thee, and dandle thee like a baby.
Shakspeare.

O loose this frame, this knot of man untie!
That my free soul may use her wing,
Which now is pinioned with mortality,
As an entangled, *hampered* thing. *Herbert.*

We shall find such engines to assail,
And *hamper* thee, as thou shalt come of force. *Milton.*

And when they are *hampered* by the laws,
Release the lab'rers for the cause. *Hudibras.*

Wear under vizard-masks their talents,
And mother wits before their gallants;
Until they're *hampered* in the noose,
Too fast to dream of breaking loose. *Id.*

You want to lead
My reason blindfold like a *hampered* lion,
Checked of his noble vigour. *Otway.*

They *hamper* and entangle our souls, and hinder their flight upwards. *Tillotson.*

What was it but a lion *hampered* in a net!
L'Estrange.

Engendering heats, these one by one unbind,
Stretched their small tubes, and *hampered* nerves unwind. *Blackmore.*

HAMPSHIRE, a maritime and most picturesque county of England, situate on the southern extremity of the coast of the kingdom. It is bounded on the north by Berkshire; on the east by Sussex and Surrey; on the south by the English Channel and the Sound, which separate it from that part of the county comprised within the Isle of Wight; and on the west by Dorsetshire and Wiltshire. It extends in length, from north to south, about fifty-five miles; in breadth, from east to west, about forty: its circumference is about 150 miles. Its superficial contents are calculated, from Faden's large map of the county, at 94,000 acres. Exclusive of the Isle of Wight, of which an account will be found under its own name, Hampshire contained, in 1811, 38,887 inhabited houses, and 220,960 inhabitants. It is divided into thirty-nine hundreds and liberties, containing, according to Mr. Driver's Agricultural Survey, 253 parishes; and, according to Mr. Vancouver's Agricultural Survey, 356 parishes, precincts, hamlets, &c. This latter author says, the hundreds are fifty-two. There is one city, Winchester, twenty market-towns, and about 1000 villages. The whole county, including the isles of Wight, Jersey, Guernsey, Sark, and Alderney, is comprehended within the diocese of Winchester, and is included in the western circuit. The town of Southampton is a county of itself, and is the county town, though the quarter sessions are held at the city of Winchester.

Before the Roman invasion this county belonged to the Regni, a tribe of ancient Britons, and the Belgæ, who emigrated from Germany and settled here. They are said to have been the first of the inhabitants who submitted to the Roman yoke. Prior to these Belgic invaders, who drove out the aborigines, little or nothing is known of its history. The Segontiaci inhabited the northern extremity of the county, and the adjoining parts of Berkshire, bordering on the river Kennet. The Romans included this district in the province named Britannia Prima. Under the Saxon domination, it formed the central portion of the kingdom of the West Saxons. The original name of the county was Gwent, or Y Went, a term descriptive of its open downs. The Saxons changed its name to Hantunscyre, whence comes its present name of Hants or Hampshire.

Fuller, in his quaint manner, says, 'most pure and piercing [is] the air of this shire;' and Speed remarks that the 'air is temperate, though somewhat thicke, by reason of the seas and the many rivers that thorow the shire doe fall.' The air is certainly, for the most part, pure and healthy, especially on the downs, which cross the county from east to west; and it has been observed, that even the vapors in the low ground nearest the sea are not so pernicious as in other counties.—The surface of the county is beautifully varied with gently rising hills and fruitful valleys, adorned with numerous seats and villages, and interspersed with extensive woodlands. The soils are extremely numerous, but by far the greatest portion tending to chalk. According to Mr. Vancouver's map of the soil and substrata of this county, it appears that the district embracing the woodlands and the wastes of Bagshot, on the Berkshire and Surrey borders, consists of clay, sand, gravel, and peat. The district occupying the entire centre of the county, and extending east and west from the borders of Sussex and Surrey into Wiltshire, is a strong flinty loam and hazel-colored mould on chalk, occasionally veined with gravel, with more or less peat in the valleys. There is, however, a small third district on the eastern border, next the counties of Sussex and Surrey, including Woolmer and Alice Holt Forests, consisting of marl, sand, gravelly loam, clay, and peat; the latter being found chiefly upon the wastes. Light sand and gravelly loams, intermixed with clay and brick-earth on substrata of argillaceous and calcareous marl, are found in the district of the New Forest, in which, as also in the forest of Bere and Waltham Chase, there is much peat and turf moor on the heath and low grounds. This district has been very ably described by Percival Lewis, esq., F.A.S., in his Historical Enquiries concerning Forests and Forest Laws, with Topographical Remarks upon the Ancient and Modern State of the New Forest, which Mr. Lewis says contains about 92,365 acres, giving as his authority the Fifth Report of the Commissioners of the Land Revenue, founded on the actual survey which took place under their sanction in 1780. The quantity of forest lands in 1809 amounted to 63,845 acres and 2 perches, of which 1192 acres 3 roods and 33 perches were enclosed. The fifth district consists of the chalk of Portsdown and the islands of Portsea and Haling; a strong, flinty, and a tender hazel-colored loam prevailing in the islands and low grounds.

The principal rivers are the Avon, the Teste, and the Itchin. The Avon rises in Wiltshire, and enters this county near Fordingbridge, whence it passes through Ringwood, after which it unites with the river Stone in the harbour of Christchurch. The Teste rises in the north part of the county, and, running southward, forms several islands at Stockbridge; thence it passes through Romsey, and enters the Southampton inlet at Redbridge. The Itchin, also called the Abra, has its source at Chilton Candover, near Alresford, whence it pursues a southwardly course through the city of Winchester; thence again southwardly, to its junction with the Southampton Water. This river was made navigable from Southampton to Winchester as early as the reign of William the Conqueror. The bathing and other places of general resort on the shores of this county, during the summer season, are Christchurch, Muddiford, Lymington, and Southampton; with Yarmouth, Cowes, Hithe, Brading, and Shanklin, in the Isle of Wight.—The principal canals are the Basingstoke, the

Redbridge, the Andover, the Winchester, and the Southampton.—Corn and hops are among the chief of the agricultural produce of this county. Fuller reckoned in his time honey, wax, and hogs, among its produce. Its sheep and hogs have attained considerable repute: for the latter it is proverbially famous; and this breed is of the largest kind, the farmers encouraging it as the most profitable.

New Forest was at one time exceedingly well stocked with red deer, and there are several still bred in it. The number which this forest was capable of supplying, in the year 1789, was seventy-nine brace and a half; a return which is said to have exceeded any former one which had been made for the preceding forty years. The annual supply, says Mr. Lewis, required by the lord Warden (under whose immediate superintendance they are placed) is sixty-four brace, twenty-three of which ought to be given to his majesty and the Cofferer's Office. Besides these sixty-four brace, several are annually killed by the proprietors of the purlieus, whose right so to do is not, in all instances, confined to the purlieu itself. The timber of this forest has been long rapidly declining, and that, says Mr. Lewis, to an alarming extent. In the year 1608 there were 123,927 trees fit for the navy; making 197,405 loads, besides 118,072 loads of dotard and decayed trees. In 1783 there were 12,447 trees fit for the navy, and 596 decayed oaks; making altogether 20,830 loads of timber. The average annual supply to the navy for the last twenty years, up to the year 1811, has been about 885 loads of oak, and 270 of beech. From 3000 to 4000 beech trees are annually marked and cut by the officers of this forest, as assignments of fuel as they are commonly called. The mineralogy of this county presents but few materials to the geologist. There is a little ironstone, and considerable quantities of potters' clay in various parts, besides some stone for building and other purposes.

This county sends twenty members to parliament, exclusive of the Isle of Wight: viz. two for the county; two for Winchester; two for Southampton; two for Christchurch; two for Portsmouth; two for Petersfield; two for Stockbridge; two for Lymington; two for Whitechurch; and two for Andover. It is said, perhaps invidiously, that the Treasury are the proprietors or patrons of this county. Among its eminent natives, may be mentioned Dr. Thomas Bilson, a learned prelate; born at Winchester, 1536; died 1616. Dr. W. Coward, a physician who wrote on materialism; born at Winchester, about 1657; died about 1725. William Curtis, the botanist; born at Alton, about 1746; died 1799. Jonas Hanway; born at Portsmouth, 1712; died 1786. Giles Jacob, author of the Law Dictionary; born at Romsey, 1690; died 1744. William Lily, the grammarian; born at Odiham, about 1466; died 1522. Dr. Robert Lowth, the learned grammarian and prelate; born at Winchester, 1710; died 1787. Sir William Petty, a learned and ingenious projector and writer; born at Romsey, 1623; died 1687. Thomas Sternhold, who assisted Hopkins in turning the Psalms into metre; died 1549. William Warham, an eminent prelate and statesman; born at Okeley; died 1532. Thomas Warton, biographer, antiquary, and poet; born at Basingstoke, 1728; died 1790. Also at the same place his brother, Dr. Joseph Warton, a learned divine, critic, and poet; born about 1722; died 1800. Dr. Isaac Watts, the divine and poet; born at Southampton, 1674; died 1741. William of Wykeham, a learned prelate, statesman, and architect; born 1324; died 1404. Rev. Dr. Edward Young, the poet; born at Upham, 1681; died 1707. The city of Winchester is a bishop's see, and gives the title of marquis to the Poulet family. There are no manufactures of consequence in this county. The few there are consist chiefly of shalloons and coarse woollens. Malt is made in pretty large quantities at Andover.

Hampshire, an extensive county of Massachusetts, United States; bounded north by the states of New Hampshire and Vermont, south by the state of Connecticut, east by Worcester county, and west by Berkshire. Its principal towns lie on both sides of Connecticut River. These are Springfield the chief town, West Springfield, Northampton, Haddley, Hatfield, Deerfield, and Northfield. It is generally fertile and produces the necessaries of life, and some of its luxuries, in great plenty. It contains fifty-four townships.

Hampshire, a county of Virginia, bounded north and north-west by the Potomack River, which divides it from the state of Maryland. It is about sixty miles long and fifty broad. It is well watered by the Potomack. Iron ore and coals have been discovered here. The chief town is Romney.

Hampshire, New, one of the United States of North America, bounded north by Lower Canada, east by Maine, south by Massachusetts, and west by Vermont, from which it is separated by Connecticut River. It is 160 miles long, and from nineteen to ninety broad; containing 9491 square miles. Population, in 1790, 141,885; in 1800, 183,858; and in 1810, 214,460. The number of militia, in 1817, amounted to 25,794.

The counties, number of towns, population, and Chief Towns, are exhibited in the following Table.

Counties.	Towns.	Populat.	Chief Towns.
Cheshire	35	40,988	Charlestown, Keene, Walpole
Coos	25	3,991	Lancaster
Grafton	35	28,462	Haverhill, Plymouth
Hillsborough	40	49,249	Amherst, Hopkinton
Rockingham	45	50,175	Portsmouth, Exeter, Concord
Strafford	32	41,595	Dover, Gilmanton, Rochester
	212	214,460	

The seat of government is Concord; but Portsmouth is much the largest town, and the only sea-port. There are eleven banks in this state.

There is a college at Hanover, and academies are established at Atkinson, Chesterfield, Deerfield, Exeter, Gilmanton, Hampton, Haverhill, Lancaster, Londonderry, Newmarket, New Ipswich, Plainfield, Portsmouth, and Salisbury. Some of these academies, particularly those at Exeter and Plainfield, are liberally endowed. Public schools are supported throughout the state, and afford to all the inhabitants the means of common education.

The following statement respecting the several denominations of Christians was made in the year 1817; Congregationalists, 103 ministers; Baptists, fifty-three churches; Friends, eighteen meetings; Methodists, six ministers; Presbyterians, three ministers; Episcopalians, three ministers; Universalists, three ministers; Shakers, two societies. The whole number of houses of public worship, in 1817, was 261.

The climate of New Hampshire is subject to the extremes of heat and cold, but the air is generally pure and salubrious. Morning and evening fires become necessary from about the middle of September. Cattle are housed from the beginning of November; and in the course of this month the earth and rivers generally become thoroughly frozen and covered with snow. The open country is generally cleared of snow in April, but in the woods it very often lies in the northern parts of the state till May.

The whole extent of sea coast in this state, from the southern boundary to the mouth of the Piscataqua harbour, is eighteen miles. The shore is generally a sandy beach, and bordering upon it are salt marshes, intersected by creeks. There are several coves, convenient for fishing vessels, but the entrance of the Piscataqua is the only harbour for ships. For twenty or thirty miles from the sea the country is either level, or variegated by small hills and valleys. Then commences a country the surface of which is greatly diversified by hills, valleys, and several elevated mountains, among which are the White Mountains, accounted the highest in the United States. The other most considerable summits are Moosehillock, Monadnock, Kearsarge, Sunapee, Ossipee, &c. Some of the most remarkable natural objects of curiosity are the cave in Chester, the rock in Durham, Bellows Falls in Walpole, and particularly the Notch of the White Mountains.

Five of the largest rivers in New England rise either wholly or in part in this state. These are the Connecticut, Merrymack, Androscoggin, Saco, and Piscataqua. The other most considerable rivers are the Upper and Lower Ammonoosuc, Sugar River, Ashuelot, Contoocook, Margallaway, and Nashua. The principal lakes are Winnipiseogee, Umbagog, Ossipee, Sunapee, Squam, and Newfound lakes.

There is a great variety of soil in this state; a considerable proportion is fertile, and it is generally better adapted to grazing than tillage. The interval lands on the large rivers are esteemed the most valuable. These produce various kinds of grain in great abundance. But the uplands, of an uneven surface, and of a rocky, warm, moist soil, are accounted the best for grazing. The principal articles of produce are beef, pork, mutton, butter, cheese, wheat, rye, Indian corn, oats, barley, pulse, and flax. The number of neat cattle, in 1812, was calculated at 211,534; horses 32,161; sheep 364,892. Apples are abundant, and no good husbandman thinks his farm complete without an orchard. Other kinds of fruit are not extensively cultivated.

The manufactures of New Hampshire have of late greatly increased. There are now upwards of thirty cotton and woollen manufactories, and nine or ten paper mills. There is a glass manufactory company in Keene, incorporated in 1814; and there are establishments for the manufacture of iron in Franconia. There are also several furnaces for casting iron, hollow ware, &c. Among the towns where the most considerable manufacturing establishments are situated, are Exeter, Peterborough, Franconia, Pembroke, New Ipswich, Keene, Dover, &c. The principal articles of export are lumber, fish, beef, pork, horses, neat cattle, sheep, flax seed, pot and pearl ashes. The total amount of the exports from Portsmouth, in 1798, was 723,241 dollars; and in 1816, 140,293 dollars.

The executive power is vested in a governor and a council of five members. The legislature is composed of a senate of twelve members, and a house of representatives. Every town containing 150 ratable polls is entitled to send one representative, and one for every additional 300 polls. All the above officers are elected annually by the people, on the second Tuesday in March. The legislature meets annually on the first Wednesday in June. New Hampshire sends six representatives to congress.

New Hampshire was discovered in 1614 by captain Smith; and the first settlements, consisting of fishermen and planters, were established in 1623. In consequence of a disunion among the settlers, they renounced the right of self-government, and placed themselves under the state of Massachusetts. About the year 1680, however, it was again established into a royal government, which was dissolved by the provincial convention of 1775. Its present constitution was adopted in 1784.

HAMPTON, a town of Middlesex, on the Thames, twelve miles W. S. W. of London, and two from Richmond and Kingston. It is chiefly famous for its royal palace, called Hampton Court, built by Cardinal Wolsey, who furnished it richly, and had 280 silk beds here for strangers. The buildings, gardens, and two parks, to which William III. made considerable additions, are about four miles in circumference, and watered on three sides by the Thames. The grand facade along the Thames extends 328 feet; the portico, colonnade, and grand entrance, are executed in a magnificent style of architecture. On a pediment in the front of the palace is a bas-relief of the triumph of Hercules over Envy, opposite to which is a large oval bason. At the entrance of the grand walk are two marble vases of exquisite workmanship, one of them by

Cibber, father of the poet, and the other by a foreigner, they having been executed as a trial of skill; the one has a bas-relief of the triumphs of Bacchus, and the other of Amphitrite and the Nereids. In the parterres are four brass statues of a Gladiator, Apollo, Diana, and Saturn. On the south side of the palace is the Privy-Garden, which was sunk ten feet to open a view to the Thames, having a fountain in the centre. The palace consists of three quadrangles; the first and second are gothic; but in the last is a most beautiful colonnade of the Ionic order, in which are the royal apartments.

HAMPTON, a town of the United States, the capital of Elizabeth county, Virginia. It is situated at the head of a bay which runs up north from the head of James's river, called Hampton road, five miles north-west from Point Comfort. Corn and leather are imported from this place to a considerable extent. It is eleven miles north from Norfolk, sixty E. S. E. from Richmond, and 180 west by south from Philadelphia.

HAN, for have, in the plural. Obsolete.

HAN'APER, *n. s.* Low Lat. *hanaperium*. A treasury; an exchequer. The clerk of the hanaper receives the fees due to the king for the seal of charters and patents.

The fines for all original writs were wont to be immediately paid into the *hanaper* of the Chancery. *Bacon.*

The HANAPER, or HAMPER, is an office in Chancery, under the direction of a master, his deputy and clerks, comptroller, &c., answering, in some measure, to the fiscus among the Romans. The clerk or warden of the hanaper receives also all money due for commissions and writs; and attends the keeper of the seal daily in term time, and at all time of sealing; and takes into his custody all sealed charters, patents, &c., which he receives into bags, but anciently, it is supposed into hampers, which gave name to the office.

HANAU, or HANAU MUNZENBURG, a rich tract of country in the electorate of Hesse-Cassel, extending east and west along the north bank of the Maine, and deriving its name from the town of Hanau, its capital. Its extent is about 470 square miles, and its population 74,000; the prevailing religion is Calvinism. Here are several extensive forests and mines of silver, copper, salt, and cobalt. This territory was formerly a separate government, under the counts of Hanau; but that family becoming extinct in 1736, it has since formed part of the dominions of Hesse-Cassel.

HANAU, a large town of Hesse-Cassel, situated on the Kinzig, not far from its junction with the Maine. It is divided into the old and new town, each of which is distinctly governed. The former is ill built, but contains a magnificent castle, and a good classical school. The new town is much larger and more regular, and has a large square, in which is the council-house, and a public well in each corner. The houses in this part are mostly in the Dutch style, having been built by Walloon and Flemish emigrants of the seventeenth century. A part of its population is also descended from Calvinists, who emigrated from France, under Louis XIV. A canal goes from the Maine to the walls of the town, for the convenience of trade. A large proportion of the inhabitants are employed in manufacturing watches, jewellery, camblets, and hats; but the largest manufacture is that of silk. Wood, iron, corn, and flour, are also articles of traffic. Wilhelmsbad, in the neighbourhood, has a well known mineral spring, and public buildings; this place is also the seat of the supreme court for the district, and is the residence of the elector's deputy, generally the heir apparent. In 1792, Hanau was attacked, but not occupied, by the French: but it was entered by them in 1796, in 1797, and afterwards in 1805. In the end of October 1813, an Austrian and Bavarian corps opposed here the grand army of the French in their retreat from Leipsic, and a sanguinary conflict took place, in which the Bavarians were defeated. Inhabitants 12,000, thirteen miles east of Frankfort on the Maine, thirty S. S. E. of Wetzlar, and twenty-seven east of Mentz. Long. 8° 59′ E., lat. 50° 9′ N.

HANAU-LICHTENBERG, a principality belonging formerly to a younger branch of the counts of Hanau. It is chiefly in Alsace, but a part of it on the German side of the Rhine. It is now shared between France, Baden, and Hesse-Darmstadt. The population of the whole is calculated at rather more than 80,000.

HA'NCES, or HAUNCHES, in architecture, the ends of elliptical arches; and these are the arches of smaller circles than the scheme, or middle part of the arch.

The sweep of the arch will not contain above fourteen inches, and perhaps you must cement pieces to many of the courses in the *hance*, to make them long enough to contain fourteen inches. *Moxon.*

HANCOCK, county of Maine, United States, bounded north by Penobscot county, east by Washington county, south by the Atlantic, and west by Lincoln and Kennebeck counties. The chief town is Castine. It is well watered by the Penobscot and Union rivers.

HAND, *n. s.* Sax. þan'ð, þon'ð, and in all the Teutonic dialects. The palm with the fingers; the member with which we hold or use any instrument.

And on a wall this king his eyen cast,
And saw an *hand*, armles, that wrote ful fast;
For fere of whiche he quoke, and siked sore.
This *hand*, that Balthasar so sore agast,
Wrote mane, techel, phares, and no more.
Chaucer. The Monkes Tale.

The nectarine and curious peach
Into my *hands* themselves do reach. *Marvell.*

They laid *hands* upon him, and bound him *hand* and foot. *Knolles's History of the Turks.*

That wonderful instrument the *hand*, was it made to be idle? *Berkeley.*

They *hand* in *hand*, with wandering steps and slow,
Through Eden took their solitary way. *Milton.*

Each at the head
Levelled his deadly aim; their fatal *hands*
No second stroke intend. *Id.*

Measure of four inches; a measure used in the matches of horses; a palm.

Side, right or left.

For the other side of the court-gate on this *hand*, and that *hand*, were hangings of fifteen cubits. *Exod.* xxxviii. 15.

Part; quarter; side.

It is allowed on all *hands*, that the people of England are more corrupt in their morals than any other nation this day under the sun. *Swift.*

Ready payment with respect to the receiver.

Of which offer the bassa accepted, receiving in *hand* one year's tribute. *Knolles's History.*

These two must make our duty very easy; a considerable reward in *hand*, and the assurance of a far greater recompence hereafter. *Tillotson.*

Ready payment with regard to the payer.

Let not the wages of any man tarry with thee, but give it him out of *hand*. *Tob.* iv. 14.

Rate: price.

Time is the measure of business; money of wares: business is bought at a dear *hand*, where there is small dispatch. *Bacon.*

Terms; conditions; rate.

With simplicity admire and accept the mystery; but at no *hand* by pride, ignorance, interest, or vanity wrest it to ignoble senses.

Taylor's Worthy Communicant

It is either an ill sign or an ill effect, and therefore at no *hand* consistent with humility. *Taylor.*

Act; deed; external action.

Thou sawest the contradiction between my heart and *hand*. *King Charles.*

I venerate the man whose heart is warm,
Whose *hands* are pure, whose doctrine, and whose life
Coincident, exhibit lucid proof
That he is honest in the sacred cause. *Cowper.*

Labor; act of the hand.

Alnashar was a very idle fellow, that never would set his *hand* to any business during his father's life. *Addison.*

I rather suspect my own judgment than I can believe a fault to be in that poem, which lay so long under Virgil's correction, and had his last *hand* put to it. *Id.*

Performance.

Where are these porters,
These lazy knaves? Ye have made a fine *hand!* fellows,
There's a trim rabble let in. *Shakspeare.*

Power of performance.

He had a great mind to try his *hand* at a Spectator, and would fain have one of his writing in my works. *Addison.*

A friend of mine has a very fine *hand* on the violin. *Id.*

Attempt; undertaking.

Out of them you dare take in *hand* to lay open the original of such a nation. *Spenser on Ireland.*

Manner of gathering or taking.

As her majesty hath received great profit, so may she, by a moderate *hand*, from time to time reap the like. *Bacon.*

Workmanship; power or act of manufacturing or making.

An intelligent being, coming out of the *hands* of infinite perfection, with an aversion or even indifferency to be reunited with its author, the source of its utmost felicity, is such a shock and deformity in the beautiful analogy of things, as is not consistent with finite wisdom and perfection. *Cheyne.*

I will hear it
With all the tender sufferance of a friend,
As calmly as the wounded patient bears
The artist's *hand* that ministers his cure. *Otway.*

Manner of acting or performing.

The master saw the madness rise;
His glowing cheeks, his ardent eyes;
And while he heaven and earth defyed,
Changed his *hand*, and checked his pride.
Dryden.

Agency; part in action.

God must have set a more than ordinary esteem upon that which David was not thought fit to have a *hand* in. *South.*

The act of giving or presenting.

Let Tamar dress the meat in my sight, that I may eat it at her *hand*. 2 *Sam.* xiii. 5.

To-night the poet's advocate I stand,
And he deserves the favour at my *hand*.
Addison.

Act of receiving any thing ready to one's hand, when it only waits to be taken.

His power reaches no farther than to compound and divide the materials that are made to his *hand*; but can do nothing towards the making or destroying one atom of what is already in being. *Locke.*

Many, whose greatness and fortune were not made to their *hands*, had sufficient qualifications and opportunities of rising to these high posts. *Addison.*

Care; necessity of managing

Jupiter had a farm a long time upon his *hands*, for want of a tenant to come up to his price. *L'Estrange.*

When a statesman wants a day's defence,
Or envy holds a whole week's war with sense,
Or simple pride for flattery makes demands,
May dunce by dunce be whistled off my *hands*.
Pope.

Discharge of duty.

Let it therefore be required, on both parts, at the *hands* of the clergy, to be in meanness of estate like the apostles: and at the *hands* of the laity, to be as they who lived under the apostles. *Hooker.*

Reach; nearness: as, at hand, within reach, near, approaching.

Your husband is at *hand*, I hear his trumpet. *Shakspeare.*

Cousins, I hope the days are near at *hand*,
That chambers will be safe. *Id.*

He is at *hand*, and Pindarus is come
To do you salutation. *Id.*

The sight of his mind was like some sights of eyes; rather strong at *hand* than to carry afar off. *Bacon.*

Any light thing that moveth, when we find no wind, sheweth a wind at *hand*. *Id.*

A very great sound near *hand* hath strucken many deaf. *Id.*

It is not probable that any body should effect that at a distance, which, nearer *hand*, it cannot perform. *Browne.*

When mineral or metal is to be generated, nature needs not to have at *hand* salt, sulphur, and mercury. *Boyle.*

Manual management.

Nor swords at *hand*, nor hissing darts afar,
Are doomed t' avenge the tedious bloody war.
Dryden.

State of being in preparation.

Where is our usual manager of mirth?
What revels are in *hand*? Is there no play,
To ease the anguish of a torturing hour?
Shakspeare.

State of being in present agitation.

I looked upon her with a soldier's eye;
That liked, but had a rougher task in *hand*
Than to drive liking to the name of war.
Shakspeare.

It is indifferent to the matter at *hand* which way the learned shall determine of it. *Locke.*

Cards held at a game.

There was never a *hand* drawn, that did double the rest of the habitable world, before this. *Bacon.*

That which is used in opposition to another.

He would dispute,
Confute, change *hands*, and still confute.
Hudibras.

Scheme of action.

Consult of your own ways, and think which *hand*
Is best to take. *Ben Jonson.*

They who thought they could never be secure, except the king were first at their mercy, were willing to change the *hand* in carrying on the war. *Clarendon.*

Advantage; gain; superiority.

The French king, supposing to make his *hand* by those rude ravages in England, broke off his treaty of peace, and proclaimed hostility. *Hayward.*

Competition; contest;

She in beauty, education, blood,
Holds *hand* with any princess in the world.
Shakspeare.

Transmission; conveyance; agency of conveyance.

The salutation by the *hand* of me Paul.
Col. v. 18.

Possession; power.

Sacraments serve as the moral instruments of God to that purpose; the use whereof is in our *hands*, the effect in his. *Hooker.*

And though you war, like petty wrangling states,
You're in my *hand*; and, when I bid you cease,
You shall be crushed together into peace. *Dryden.*

Between the landlord and tenant there must be a quarter of the revenue of the land constantly in their *hands*. *Locke.*

It is fruitless pains to learn a language, which one may guess by his temper he will wholly neglect, as soon as an approach to manhood, setting him free from a governor, shall put him into the *hands* of his own inclination. *Locke.*

Vectigales Agri were lands taken from the enemy, and distributed amongst the soldiers, or left in the *hands* of the proprietors under the condition of certain duties. *Arbuthnot.*

Pressure of the bridle.

Hollow men, like horses, hot at *hand*,
Make gallant show and promise of their mettle.
Shakspeare.

Method of government; discipline; restraint.

Menelaus bare an heavy *hand* over the citizens, having a malicious mind against his countrymen.
2 *Mac.* v. 23.

He kept a strict *hand* on his nobility, and chose rather to advance clergymen and lawyers.. *Bacon.*

However a strict *hand* is to be kept upon all desires of fancy, yet in recreation fancy must be permitted to speak. *Locke.*

Influence; management.

Flattery, the dangerous nurse of vice,
Got *hand* upon his youth, to pleasures bent.
Daniel.

That which performs the office of a hand in pointing.

The body, though it moves, yet not changing perceivable distance with other bodies, as fast as the ideas of our own minds do naturally follow one another, the thing seems to stand still; as is evident in the *hands* of clocks and shadows of sun-dials. *Locke.*

Agent; person employed; a manager.

The wisest prince, if he can save himself and his people from ruin, under the worst administration, what may not his subjects hope for when he changeth *hands*, and maketh use of the best? *Swift.*

Giver and receiver.

This tradition is more likely to be a notion bred in the mind of man, than transmitted from *hand* to *hand* through all generations. *Tillotson.*

An act; a workman; a soldier

Your wrongs are known: impose but your commands,
This hour shall bring you twenty thousand *hands*.
Dryden.

Demetrius appointed the painter guards, pleased that he could preserve that *hand* from the barbarity and insolence of soldiers. *Dryden.*

A dictionary containing a natural history requires too many *hands*, as well as too much time, ever to be hoped for. *Locke.*

Catch or reach without choice.

The men of Israel smote as well the men of every city as the beast, and all that came to *hand*.
Judges.

A sweaty reaper from his tillage brought
First fruits, the green ear, and the yellow sheaf,
Unculled as came to *hand*. *Milton.*

Form or cast of writing.

Solyman shewed him his own letters intercepted, asking him if he knew not that *hand*, if he knew not that seal? *Knolles.*

Here is the' indictment of the good lord Hastings,
Which in a set *hand* fairly is engrossed;
Eleven hours I've spent to write it over. *Shakspeare.*

Being discovered, by their knowledge of Mr. Cowley's *hand*, I happily escaped. *Denham.*

If my debtors do not keep their day,
Deny their *hands*, and then refuse to pay,
I must attend. *Dryden.*

The way to teach to write is to get a plate graved with the characters of such *hand* you like. *Locke.*

Whether men write court or Roman *hand*, or any other, there is something peculiar in every one's writing. *Cockburn.*

Constantia saw that the *hand* writing agreed with the contents of the letter. *Addison.*

They were wrote on both sides, and in a small *hand*. *Arbuthnot.*

I present these thoughts in an ill *hand*; but scholars are bad penmen, we seldom regard the mechanick part of writing. *Felton.*

Hand over head. Negligently; rashly; without seeing what one does.

So many strokes of the alarm bell of fear and awaking to other nations, and the facility of the titles, which *hand over head* have served their turn, doth ring the peal so much the louder. *Bacon.*

A country fellow got an unlucky tumble from a tree: Thus 'tis, says a passenger, when people will be doing things *hand over head*, without either fear or wit. *L'Estrange.*

Hand to hand. Close fight.

In single opposition, *hand to hand*,
He did confound the best part of an hour.
Shakspeare.

He issues, ere the fight, his dread command,
That slings afar, and poniards *hand to hand*,
Be banished from the field. *Dryden.*

Hand in hand. In union; conjointly.

Had the sea been Marlborough's element, the war had been bestowed there, to the advantage of the country, which would then have gone *hand in hand* with his own. *Swift.*

Hand in hand. Fit; pat.

As fair and as good, a kind of *hand in hand* comparison, had been something too fair and too good for any lady in Brittany. *Shakspeare.*

Hand to mouth. As want requires.

I can get bread from *hand to mouth*, and make even at the year's end. *L'Estrange.*

To bear in hand. To keep in expectation; to elude.

A rascally yea forsooth knave, to *bear in hand*, and then stand upon security. *Shakspeare.*

To be hand and glove. To be intimate and familiar; to suit one another.

HAND, *v. a.* From the noun.

To give or transmit with the hand.

Judas was not far off, not only because he dipped in the same dish, but because he was so near that our Saviour could *hand* the sop unto him. *Brown.*

I have been shewn a written prophecy that is *handed* among them with great secrecy. *Addison.*

To guide or lead by the hand.

Angels did *hand* her up, who next God dwell.
Donne.

By safe and insensible degress he will pass from a boy to a man, which is the most hazardous step in life: this therefore should be carefully watched, and a young man with great diligence *handed* over it.
Locke.

To seize; to lay hands on.

Let him, that makes but trifles of his eyes,
First *hand* me: on mine own accord, I'll off.
Shakspeare.

To manage; to move with the hand.

'Tis then that with delight I rove,
Upon the boundless depth of love:
I bless my chains, I *hand* my oar,
Nor think on all I left on shore. *Prior.*

To transmit in succession, with *down*; to deliver from one to another.

I know of no other way of securing these monuments, and making them numerous enough to be *handed down* to future ages. *Addison.*

They had not only a tradition of it in general, but even of several the most remarkable particular accidents of it likewise, which they *handed downwards* to the succeeding ages. *Woodward.*

Arts and sciences consist of scattered theorems and practices, which are *handed* about amongst the masters, and only revealed to the filii artis, 'till some great genius appears, who collects these disjointed propositions, and reduces them into a regular system.
Arbuthnot.

One would think a story so fit for age to talk of, and infancy to hear, were incapable of being *handed down* to us. *Pope.*

HAND is much used in composition for that which is manageable by the hand, as a *handsaw*; or borne in the hand, as a *handbarrow*, &c.

HAND, a member of the human body, at the extremity of the arm. See ANATOMY. The mechanism of the hand is excellently fitted for the various uses and occasions we have for it, and the great number of arts and manufactures in which it is to be employed. It consists of a compages of nerves, and little bones joined into each other, which give it a great degree of strength, and at the same time an unusual flexibility, to enable it to handle adjacent bodies, lay hold of them, and grasp them, in order either to draw them towards us or thrust them off. Anaxagoras is said to have maintained, that man owes all his wisdom, knowledge, and superiority over other animals, to the use of his hands. The right hand was the place of honor and respect. Amongst the Greeks and Romans it was customary for inferiors to walk on the left hand of superiors, that the right hand might be ready to afford protection and defence to their left side, which, on account of the awkwardness of the left hand, was more exposed to danger.

HAND, in falconry, is used for the foot of the hawk. To have a clean, strong, slender, glutinous hand, well clawed, are good qualities of a hawk or falcon.

HAND, in the manege, is also used for the fore foot of a horse: also for a division of the horse into two parts, with respect to the rider's hand. The fore hand includes the head, neck, and fore quarters; the hind hand is all the rest of the horse.

HANDS are borne in coat armour, dexter and sinister, that is, right and left; expanded or open; and after other manners. A bloody hand in the centre of the escutcheon is the badge of a baronet of Great Britain.

HANDA, Celt. Aonda, i. e. the isle of one color, an inhabited island of Scotland, on the coast of Sutherland, one mile square. It has a large tremendous rock on the north, from eighty to 100 fathoms high, much frequented by sea-fowls.

HAND-BARROW, *n. s.* A frame on which any thing is carried by the hands of two men, without wheeling on the ground.

A *hand-barrow*, wheelbarrow, shovel, and spade.
Tusser.

Set the board whereon the hive standeth on a *hand-barrow*, and carry them to the place you intend.
Mortimer.

HAND-BASKET, *n. s.* A portable basket.

You must have woollen yarn to tie grafts with, and a small *hand-basket* to carry them in. *Mortimer.*

HAND-BELL, *n. s.* A bell rung by the hand.

The strength of the percussion, is the principal cause of the loudness or softness of sounds; as in ringing of a *hand-bell* harder or softer. *Bacon.*

HAND-BREADTH, *n. s.* A space equal to the breadth of the hand; a palm.

A border of an *hand-breadth* round about. *Exodus.*

Off goth the skinne, an *hondbrede* al aboute
Chaucer. The Milleres Tale.

The eastern people determined their *hand-breadth* by the breadth of barley-corns, six making a digit, and twenty-four a *hand's-breadth.* *Arbuthnot.*

HAND'ED, *adj.* }
HAND'ER, *n. s.* }
HAND'ILY, *adv.* } From hand. Having the use of either hand; with hands joined: hander,
HAND'INESS, *n. s.* } one who transmits from
HAND'Y, *n. s.* } party to party: handily with skill or dexterity: handiness, skill; readiness: handy, performed with the hand; dexterous; skilful; convenient; or near.

They were but few, yet they would easily overthrow the great numbers of them, if ever they came to *handy* blows. *Knolles.*

Into their inmost bower
Handed they went. *Milton.*
Both parties now were drawn so close,
Almost to come to *handy* blows. *Hudibras.*

Many are right *handed*, whose livers are weakly constituted; and many use the left, in whom that part is strongest. *Browne.*

They would assume, with wondrous art,
Themselves to be the whole who are but part,
Of that vast frame the church; yet grant they were
The *handers* down, can they from thence infer
A right t' interpret? Or would they alone,
Who brought the present, claim it for their own?
Dryden.

She stript the stalks of all their leaves; the best
She culled, and them with *handy* care she drest. *Id.*

The servants wash the platter, scour the plate;
And each is *handy* in his way. *Id.*

HANDEL (George Frederick), an eminent master and composer of music, born at Halle, in Upper Saxony, on the 24th of February, 1684. His father was a physician in that city, and was upwards of sixty years of age when he was born. During his infancy young Handel amused himself with musical instruments, and made considerable progress in the science before he was seven years of age. His propensity for music at last became so strong that his father, who designed him for the law, forbade him to touch an instrument. Handel, however, privately conveyed a small clavichord to a room in the uppermost part of the house, to which he constantly stole when the family were asleep; and thus made such advances in his art as enabled him to play on the harpsichord. He was first noticed by the duke of Saxe Weissenfels on the following occasion. His father went to see another son, by a former wife, who was valet de chambre to the duke, and young Handel, being then in his seventh year, accompanied him. While he was in the duke's court it was impossible to keep him from harpsichords; and he sometimes went into the organ loft at church, and played after service was over. On one of these occasions the duke, happening to go out later than usual, found something so uncommon in his manner of playing, that he enquired for him, and was so much taken with the musical genius he exhibited that he persuaded his father to let him follow his inclinations. On his return to Halle, Handel was placed under Zackaw, the organist of the cathedral, and was even then able to supply his master's place in his absence. At nine years of age he began to compose church services for voices and instruments, and continued to compose one every week for three years. At fourteen he far excelled his master, and was sent to Berlin. The opera was then encouraged by Frederick I. king of Prussia, and under the direction of Buononcini, Attilio, and other eminent Italian masters. Buononcini, being of a haughty disposition, treated Handel with contempt; but Attilio behaved to him with kindness, and he profited much by his instructions. His abilities soon recommended him to the king, who frequently made him presents. After this he went to Hamburgh, where the opera was little inferior to that of Berlin. Soon after his arrival his father died; and, his mother being left in narrow circumstances, he thought it necessary to procure some scholars, and to accept a place in the orchestra. At this time the first harpsichord in Hamburgh was played by one Keser, who also excelled in composition; but he, having involved himself in debt, was obliged to abscond. Upon this vacancy, the person who had been used to play the second harpsichord claimed the first by right of succession; but was opposed by Handel, who founded his claim solely upon his abilities. After much dispute it was decided in favor of Handel; but his antagonist, as they were coming out of the orchestra, made a push at Handel's breast with a sword, which must undoubtedly have killed him, had there not fortunately been a music-book in the bosom of his coat. Handel, though yet but in his fifteenth year, became composer to the house: and the success of Almeria, his first opera, was so great, that it ran thirty nights without interruption. Within less than a year after this he set two others, called Florinda and Norene, which were received with equal applause. During his stay here, which was about four or five years, he also composed a considerable number of sonatas, which are now lost. His talents now procured him the acquaintance of many persons of note, particularly the prince of Tuscany, brother to John Gaston de Medicis, the grand duke. This prince pressed him to go with him to Italy; but this offer Handel declined, being resolved not to give up his independence for any advantage that could be offered him. In his nineteenth year Handel took a journey to that country, where he was received with the greatest kindness by the prince of Tuscany, as well as by the grand duke; and notwithstanding the difference between the style of the Italian music and the German, to which Handel had hitherto been accustomed, he set an opera called Roderigo, which pleased the grand duke so well that he was rewarded with 100 sequins and a service of plate. After staying about a year in Florence he went to Venice, where he is said to have been first discovered at a masquerade, by his exquisite performance on the harpsichord. Here he composed his opera called Agrippina, which was performed twenty-seven nights successively, with the highest applause. From Venice he proceeded to Rome, where he became acquainted with cardinal Ottoboni and many other dignitaries, by whom he was frequently attacked on account of his religion; but Handel declared he would live and die in the religion in which he had been educated. He now composed an oratorio called Resurrectione, and 150 cantatas, besides some sonatas and other music. Ottoboni contrived to have a trial of skill between him and Dominici Scarlatti. When they came to the organ Scarlatti himself yielded the superiority to Handel. From Rome Handel went to Naples; after which he paid a second visit to Florence: and at last, having spent six years in Italy, set out for his native country. In his way thither he was introduced at the court of Hanover by baron Kilmanseck; when the elector (afterwards king George I.) offered him a pension of 1500 crowns a year, as an inducement for him to continue. This offer he declined, on account of his having promised to visit the court of the elector palatine. The elector, being made

acquainted with this objection, generously ordered him to be told, that his acceptance of the pension should not restrain him from his promise, but that he should be at full liberty to be absent a year or more if he chose it. Soon after the place of master of the chapel was bestowed upon Handel; and having visited his mother, who was now aged and blind, and his old master Zackaw, and staid some time at the court of the elector palatine, he set out for England, where he arrived in 1710. Operas were then a new entertainment here, and Handel set a drama called Rinaldo, which was performed with uncommon success. Having staid a year in this country he returned to Hanover; but, in 1712, again came over to England; and, the peace of Utrecht being concluded a few months afterward, he composed a grand Te Deum and Jubilate on the occasion. He now found the nobility very desirous that he should resume the direction of the opera house in the Hay Market; and queen Anne having added her authority to their solicitations, and conferred on him a pension of £200 a year, he remained in Britain till the death of the queen and the accession of king George I.; who added a pension of £200 a year to that bestowed by queen Anne; and this was soon after increased to £400, on his being appointed to teach the young princesses music.

In 1715 Handel composed his opera of Amadige; but from that time to 1720 he composed only Teseo and Pastor Fido. About this time a project was formed by the nobility for erecting a kind of academy at the Hay Market, to secure to themselves a constant supply of operas composed by Handel, and performed under his direction. No less than £50,000 were subscribed for this scheme, and it was proposed to continue the undertaking for fourteen years. Handel went over to Dresden, to engage singers, and returned with Senesino and Duristanti. Buononcini and Attilio had still a strong party, but not equal to that of Handel; and therefore in 1720 he obtained leave to perform his opera of Radamisto. The house was so crowded that many fainted; and £2 were offered by some for a seat in the gallery. The contention, however, still ran very high between Handel's party and that of the two Italian masters. It was on this occasion that dean Swift wrote the following epigram:—

> Some say that signior Buononcini
> Compared to Handel 's a mere ninny:
> Others do swear that to him Handel
> Is hardly fit to hold the candle.
> Strange that such high contests should be
> 'Twixt Tweedle-dum and Tweedle-dee!

At last it was determined that the rivals should be jointly employed in an opera, in which each should take a distinct act, and he who by the general suffrage was allowed to have given the best proof of his ability should be put in possession of the house. This opera was called Muzio Scævola, and Handel set the last act. It is said that Handel's superiority was owned even in the overture; but, when the act was performed, there remained no pretence for doubt. The academy was now firmly established, and Handel conducted it for nine years with great success; but about that time an irreconcileable enmity took place between him and Senesino; whom Handel resolved to dismiss, and the nobility resolved not to permit him. The haughtiness of Handel's temper would not allow him to yield, and the affair ended in the dissolution of the academy. His audience dwindled away, and the offended nobility raised a subscription against him, to carry on operas in the play-house in Lincoln's Inn Fields. Against this opposition Handel bore up four years: three in partnership with Heidegger, and one by himself: but, though his own musical powers were superior to those of his antagonists, the astonishing voice of Farinelli, whom the opposite party had engaged, determined the victory against him. At last Handel, having spent all he was worth in a fruitless opposition, desisted; but was deranged for some time after, and his right arm was rendered useless by a stroke of the palsy. In this deplorable situation he was sent to the baths of Aix-la-Chapelle; from which he received relief. Returning to England, in 1736, his Alexander's Feast was performed with applause at Covent Garden. The success and splendor of the Hay Market was by this time so much reduced by mismanagement, that lord Middlesex undertook the direction of it himself, and applied to Handel for composition. He accordingly composed his operas called Faramondo and Alessandro Severo, for which, in 1737, he received £1000. In 1738 he had £1500 from a single benefit, and nothing seemed wanting to retrieve his affairs, except such concessions on his part as his opponents had a right to expect. These, however, he could not be prevailed upon to make; and refused to enter into any engagements upon subscription. After having tried a few more operas at Covent Garden, without success, he introduced that species of music called oratorios, which he thought better suited to the gravity of an English audience. This was by some thought a profanation, and the oratorios at first met with little success; so that in 1741 Handel again quitted England, and went to Dublin. His Messiah here brought him into universal favor. In nine months he had brought his affairs into order; and on his return to England, in 1742, found the public more favorably disposed towards his oratorios. His Messiah became a great favorite; and Handel, with a generous humanity, determined to perform it annually for the benefit of the Foundling Hospital. In 1743 he had a return of his paralytic disorder; and in 1751 became quite blind. This last affliction sunk him into the deepest despondency; and, finding it impossible to manage his oratorios alone, he was assisted by Mr. Smith, with whose aid they were continued till within eight days of his death. During the latter part of his life his mind was often disordered, yet at times it appears to have resumed its full vigor, and he composed several songs, choruses, &c. From October, 1758, his health declined very fast. On the 6th of April, 1759, his last oratorio was performed, at which he was present, and he died on the 14th. On the 20th he was buried in Westminster Abbey. His musical powers are best expressed by Arbuthnot's reply to Pope, who seriously asked his opinion of him

as a musician; 'Conceive,' said he, 'the highest you can of his abilities, and they are much beyond any thing you can conceive.'

HAND'FAST, *n. s.* Hand and fast. Hold; custody. Obsolete.

Thou shalte stond by the post,
As thou were *honde-fast*.
Chaucer. The Cokes Tale.

If that shepherd be not in *handfast*, let him fly.
Shakspeare.

HAND-FASTING, an ancient custom which formerly took place in various parts of Scotland every year. At a stated time it was the custom for the unmarried persons of both sexes to choose a companion with whom they were to live till that time next year. If they were pleased with each other at that time, then they continued together for life; if not, they separated, and were free to make another choice as at first. The fruit of their connexion, if there were any, was always attached to the disaffected person. A priest, whom they named Book i' bosom, because he carried in his bosom a bible or a register of the marriages, came from time to time to confirm the marriages. Mr. Brown traces this custom from the Romans.

HANDFUL, *n. s.* As much as the hand can grasp, or contain; sometimes expressive of length, or distance, rather than quantity; also a small quantity by comparison.

Being in possession of the town, they had their *handful* to defend themselves from firing. *Raleigh.*

Take one vessel of silver and another of wood, each full of water, and knap the tongs together about an *handful* from the bottom, and the sound will be more resounding from the vessel of silver than that of wood. *Bacon.*

He could not, with such a *handful* of men, and without cannon, propose reasonably to fight a battle.
Clarendon.

The peaceful scabbard where it dwelt,
The rancour of its edge had felt;
For of the lower end two *handful*
It had devoured, it was so manful. *Hudibras*

I saw a country gentleman at the side of Rosamond's pond, pulling a *handful* of oats out of his pocket, and gathering the ducks about him. *Addison.*

HA'ND-GALLOP, *n. s.* A slow and easy gallop, in which the hand presses the bridle to hinder increase of speed.

Ovid, with all his sweetness, has as little variety of numbers and sounds as he: he is always upon a *hand-gallop*, and his verse runs upon carpet ground.
Dryden.

HAND-GUN, *n. s.* A gun wielded by the hand.

Guns have names given them, some from serpents or ravenous birds, as culverines or colubrines; others in other respects, as cannons, demicannons, *hand-guns*, and muskets. *Camden.*

HAND'ICRAFT, *n. s.* } Manual occupa-
HAND'ICRAFTSMAN, *n. s.* } tion: a man who lives by manual labor.

O miserable age! virtue is not regarded in *handicraftsmen*. *Shakspeare.*

He has simply the best wit of any *handicraftsman* in Athens. *Id.*

The principal bulk of the vulgar natives are tillers of the ground, free servants, and *handicraftsmen*; as smiths, masons, and carpenters. *Bacon.*

The covenants thou shalt teach by candle-light,
When puffing smiths, and every painful trade
Of *handicrafts*, in peaceful beds are laid. *Dryden.*

Particular members of convents have excellent mechanical geniuses, and divert themselves with painting, sculpture, architecture, gardening, and several kinds of *handicrafts*. *Addison.*

The prophaneness and ignorance of *handicraftsmen*, small-traders, servants, and the like, are to a degree very hard to be imagined greater. *Swift.*

It is the landed man that maintains the merchant and shop-keeper, and *handicraftsmen*. *Id.*

The nurseries for children of ordinary gentlemen and *handicraftsmen* are managed after the same manner. *Gulliver's Travels.*

HAN'DIWORK, *n. s.* Handy and work. Work of the hand; product of labor; manufacture.

The heavens declare the glory of God, and the firmament sheweth his *handiwork*. *Psalms.*

As proper men as ever trod upon neat's-leather have gone upon my *handiwork*. *Shakspeare.*

In general they are not repugnant unto the natural will of God, which wisheth to the works of his own hands, in that they are his own *handiwork*, all happiness; although, perhaps, for some special cause in our own particular, a contrary determination have seemed more convenient. *Hooker.*

He parted with the greatest blessing of human nature for the *handiwork* of a taylor. *L'Estrange.*

HA'NDKERCHIEF, *n. s.* Hand and kerchief. A piece of silk or linen used to wipe the face, or cover the neck.

He was torn to pieces with a bear: this avouches the shepherd's son, who has not only his innocence, but a *handkerchief* and rings of his, that Paulina knows. *Shakspeare.*

She found her sitting in a chair, in one hand holding a letter, in the other her *handkerchief*, which had lately drunk up the tears of her eyes. *Sidney.*

Confederate in the cheat, they draw the throng,
And cambric *handkerchiefs* reward the song. *Gay.*

The Romans did not make use of *handkerchiefs*, but of the lacinia or border of the garment, to wipe their face. *Arbuthnot.*

HAN'DLE, *v. a.* & *n. s.* Belg. *handelen*; Swe. *handla*; Dan. *handle*. To touch, or feel, with the hand: to manage; to make familiar with: figuratively, to treat; to mention in writing or conversation; to deal with, or practise upon: handle, that part by which any thing is held; and hence, figuratively, that of which use is made.

They that *handle* the law know me not.
Jerem. ii. 8.

Leaving to the author the exact *handling* of every particular, and labouring to follow the rules of abridgment. 2 *Mac.*

He left nothing fitting for the purpose
Untouched, or slightly *handled* in discourse.
Shakspeare.

Her eyes, her hair, her cheek, her gait, her voice,
Thou *handlest* in thy discourse. *Id.*

That fellow *handles* his bow like a crow-keeper.
Id.

Pray you, my lord, give me leave to question; you shall see how I'll *handle* her. *Id.*

Talbot, my life, my joy, again returned!
How wert thou *handled*, being prisoner? *Id.*

No hand of blood and bone
Can gripe the sacred *handle* of our sceptre,
Unless he do profane, steal, or usurp. *Id.*

Fortune turneth the *handle* of the bottle, which is easy to be taken hold of; and after the belly, which is hard to grasp. *Bacon.*

Of a number of other like instances we shall speak more, when we *handle* the communication of sounds. *Id.*

There is nothing but hath a double *handle*, or at least we have two hands to apprehend it. *Taylor.*

By Guidas Ubaldus, in his treatise, for the explication of this instrument, the subtilties of it are largely and excellently *handled*. *Wilkins's Dædalus.*

They were well enough pleased to be rid of an enemy that had *handled* them so ill. *Clarendon.*

A carpenter that had got the iron work of an axe, begged only so much wood as would make a *handle* to it. *L'Estrange.*

An incurable shyness is the general vice of the Irish horses, and is hardly ever seen in Flanders, because the hardness of the winters forces the breeders there to house and *handle* their colts six months every year. *Temple.*

Of bone the *handles* of my knives are made,
Yet no ill taste from thence affects the blade,
Or what I carve; nor is there ever left
Any unsavory haut-goust from the haft. *Dryden.*

A beam there was, on which a beechen pail
Hung by the *handle* on a driven nail. *Id.*

The bodies which we daily *handle* make us perceive, that, whilst they remain between them, they hinder the approach of the part of our hands that press them. *Locke.*

They overturned him in all his interests by the sure but fatal *handle* of his own good nature. *South.*

In an argument, *handled* thus briefly, every thing cannot be said. *Atterbury.*

HAND'LESS, *adj.* Hand and less. Without a hand.

Speak, my Lavinia, what accursed hand
Hath made thee *handless?* *Shakspeare.*

His mangled myrmidons,
Noseless, *handless*, hackt, and clipt, come to him,
Crying on Hector. *Id.*

HAND'MAID, *n. s.* A maid that waits at hand.

Those of my family their master slight,
Grown despicable in my *handmaid's* sight. *Sandys.*

Brave Burgundy, undoubted hope of France!
Stay, let thy humble *handmaid* speak to thee. *Shakspeare.*

I will never set politicks against ethicks, especially for that true ethicks are but as a *handmaid* to divinity and religion. *Bacon.*

She gave the knight great thanks in little speech,
And said she would his *handmaid* poor remain. *Fairfax.*

Heaven's youngest teamed star
Hath fixed her polished car,
Her sleeping Lord with *handmaid* lamp attending. *Milton.*

Love led them on; and faith, who knew them best
Thy *handmaids*, clad them o'er with purple beams
And azure wings, that up they flew so drest,
And speak the truth of thee on glorious themes
Before the judge. *Id.*

By viewing nature, nature's *handmaid*, Art,
Makes mighty things from small beginnings great;
Thus fishes first to shipping did impart,
Their tail the rudder, and their head the prow. *Dryden.*

Since he had placed his heart upon wisdom, health, wealth, victory, and honour, should always wait on her as her *handmaids*. *Addison.*

Then Criticism the Muse's *handmaid* proved,
To dress her charms and make her more beloved. *Pope.*

And her head drooped as when the lily lies
O'ercharged with rain: her summoned *handmaids* bore
Their lady to her couch with gushing eyes. *Byron. Don Juan.*

HAND'MILL, *n. s.* Hand and mill. A mill moved by the hand.

Oft the drudging ass is driven with toil;
Returning late, and loaden home with gain
Of bartered pitch, and *handmills* for the grain. *Dryden.*

HANDS *off*. A vulgar phrase for keep off; forbear.

They cut a stag into parts; but, as they were entering upon the dividend, *hands off* says the lion. *L'Estrange.*

HAND'SAILS, *n. s.* Sails managed by the hand.

The seamen will neither stand to their *handsails*, nor suffer the pilot to steer. *Temple.*

HAND'SAW, *n. s.* A saw manageable by the hand.

My buckler cut through and through, and my sword hacked like a *handsaw*. *Shakspeare.*

To perform this work, it is necessary to be provided with a strong knife and a small *handsaw*. *Mortimer.*

HANDSEL, *n. s.* & *v. a.* Dutch, *hansel*, a first gift. The first act of using any thing; the first act of sale. It is now not used, except in the dialect of trade.

The apostles term it the pledge of our inheritance, and the *handsel* or earnest of that which is to come. *Hooker.*

Thou art joy's *handsel*; heaven lies flat in thee,
Subject to every mounter's bended knee. *Herbert.*

In timorous deer he *handsels* his young paws,
And leaves the rugged bear for firmer claws. *Cowley.*

I'd show you
How easy 'tis to die, by my example,
And *handsel* fate before you. *Dryden.*

HA'NDSOME, *adj.* & *v. a.* } Gothic, *handsam*; Dut. *handsaem*, ready, dexterous. These words denote a species of corporeal beauty, and is a general assemblage of whatever is agreeable in person or figure: in manner, it signifies dignity; grace; elegance; in act, convenience; liberality; generosity.
HAND'SOMELY, *adv.* }
HAND'SOMENESS, *n. s.* }

A carpenter, after he hath sawn down a tree, hath wrought it *handsomely*, and made a vessel thereof. *Wisdom.*

Under it he may cleanly convey any fit pillage that cometh *handsomely* in his way. *Spenser.*

For a thief it is so *handsome*, as it may seem it was first invented for him. *Id.*

For *handsomeness'* sake, it were good you hang the upper glass upon a nail. *Bacon.*

Him all repute
For his device in *handsoming* a suit;
To judge of lace he hath the best conceit. *Donne.*

In cloths, cheap *handsomeness* doth bear the bell. *Herbert.*

Accompanying her mourning garments with a doleful countenance, yet neither forgetting *handsomeness* in her mourning garments, nor sweetness in her doleful countenance. *Sidney.*

When the kind nymph, changing her faultless shake,
Becomes unhandsome, *handsomely* to 'scape. *Waller.*

Persons of the fairer sex like that *handsomeness* for which they find themselves to be the most liked. *Boyle.*

A great man entered by force into a peasant's house, and, finding his wife very *handsome*, turned the good man out of his dwelling. *Addison.*

I am finding out a convenient place for an almshouse, which I intend to endow very *handsomely* for a dozen superannuated husbandmen. *Id.*

That easiness and *handsome* address in writing is hardest to be attained by persons bred in a meaner way. *Felton.*

HAND'-VICE, *n. s.* Hand and vice. A vice to hold small work in.—Moxon.

HAND'-WRITING, *n. s.* Hand and writing. A cast or form of writing peculiar to each hand.

That you beat me at the mart, I have your hand to show;
If the skin were parchment, and the blows you gave me ink,
Your own *handwriting* would tell you what I think. *Shakspeare.*

To no other cause than the wise providence of God can be referred the diversity of *handwritings*. *Cockburn.*

HA'NDY-DANDY, *n. s.* A play in which children change hands and places.

See how yond justice rails upon yond simple thief! Hark in thine ear: change places; and, *handy-dandy*, which is the justice, which is the thief? *Shakspeare.*

Neither cross and pile, nor ducks and drakes, are quite so ancient as *handy-dandy*. *Arbuthnot and Pope.*

HANG, *v. a.* Preter. and part. pass. hanged or hung, anciently hong. Sax. þangan. All the northern dialects have this word. To suspend; to fasten in such a manner as to be sustained, not below, but above.

Strangely visited people he cures;
Hanging a golden stamp about their necks;
Put on with holy prayers. *Shakspeare.*

His great army is utterly ruined, he himself slain in it, and his head and right hand cut off, and *hung* up before Jerusalem. *South.*

To place without any solid support.

Thou all things hast of nothing made,
That *hangest* the solid earth in fleeting air,
Veined with clear springs, which ambient seas repair. *Sandys.*

To choke and kill by suspending by the neck, so as that the ligature intercepts the breath and circulation.

But, trewely, by day it may not be,
Men wolden say, that we were theeves strong,
And for our owen tresoun don us *hong*.
Chaucer. The Pardoneres Tale.

No painter no close up the piece and see
This crowd of traitors *hanged* in effigy. *Marvell.*

Thieves at home must *hang*; but he that puts
Into his overgorged and bloated purse
The wealth of Indian provinces escapes. *Cowper.*

He hath commission from thy wife and me
To *hang* Cordelia in the prison. *Shakspeare.*

Hanging supposes human soul and reason
This animal's below committing treason;
Shall he be *hanged*, who never could rebel?
That's a preferment for Achitophel. *Dryden.*

To display; to show aloft.

This unlucky mole misled several coxcombs; and, like the *hanging* out of false colours, made some of them converse with Rosalinda in what they thought the spirit of her party. *Addison.*

To let fall below the proper situation; to decline.

There is a wicked man that *hangeth* down his head sadly; but inwardly he is full of deceit. *Ecclus.* xix. 26.

The beauties of this place should mourn;
The immortal fruits and flowers at my return
Should *hang* their withered head; for sure my breast
Is now more poisonous. *Dryden.*

The rose is fragrant, but it fades in time;
The violet sweet, but quickly past the prime;
While lilies *hang* their heads, and soon decay;
And whiter snow in minutes melts away. *Id.*

The cheerful birds no longer sing;
Each drops his head, and *hangs* his wing. *Prior.*

To fix in such a manner as in some directions to be moveable.

The gates and the chambers they renewed, and *hanged* doors upon them. 1 *Mac.* iv. 57.

To cover or charge by any thing suspended.

Hung be the heavens with black, yield day to night! *Shakspeare.*

The pavement ever foul with human gore;
Heads and their mangled members *hung* the door. *Dryden.*

To furnish with ornaments or draperies fastened to the wall.

Musick is better in chambers wainscotted than *hanged*. *Bacon.*

If e'er my pious father for my sake
Did grateful offerings on thy altars make,
Or I increased them with my sylvan toils,
And *hang* thy holy roofs with savage spoils,
Give me to scatter these. *Dryden.*

Sir Roger has *hung* several parts of his house with the trophies of his labours. *Addison.*

Thus o'er the dying lamp the unsteady flame,
Hangs quivering on the point, leaps off by fits
And falls again as loth to quit its hold. *Id.*

HANG, *v. n.*

To be suspended; to be supported above, not below.

Over it a fair portcullis *hung*,
Which to the gate directly did incline,
With comely compass and compacture strong. *Spenser.*

To depend; to fall loosely on the lower part; to dangle.

Upon her shoulders wings she wears,
Like *hanging* sleeves, lined through with ears. *Hudibras.*

If gaming does an aged sire entice,
Then my young master swiftly learns the vice,
And shakes in *hanging* sleeves the little box and dice. *Dryden.*

To bend forward.

By *hanging* is only meant a posture of bending forward to strike the enemy. *Addison.*

To float; to play.

And fall these sayings from that gentle tongue,
Where civil speech and soft persuasion *hung*? *Prior.*

To be supported by something raised above the ground.

Whatever is placed on the head may be said to *hang*; as we call *hanging* gardens such as are planted on the top of the house. *Addison.*

To rest upon by embracing.

She *hung* about my neck, and kiss on kiss
She vied. *Shakspeare.*

To-day might I, *hanging* on Hotspur's neck,
Have talked of Monmouth's grave. *Id.*

Faustina is described in the form of a lady sitting upon a bed, and two little infants *hanging* about her neck. *Peacham.*

To hover; to impend.

He hath a heavenly gift of prophecy;
And sundry blessings *hang* about his throne,
That speak him full of grace. *Shakspeare.*

Odious names of distinction, which had slept while the dread of popery *hung* over us, were revived. *Atterbury.*

To be loosely joined.

Whither go you?
— To see your wife: is she at home?
— Ay, and as idle as she may *hang* together. *Shakspeare.*

To drag; to be incommodiously joined.

In my Lucia's absence
Life *hangs* upon me, and becomes a burden. *Addison.*

To be compact or united: with *together*.

In the common cause we are all of a piece; we *hang together*. *Dryden.*

Your device *hangs* very well *together*; but is it not liable to exceptions? *Addison.*

To adhere, unwelcomely or incommodiously.

A cheerful temper shines out in all her conversation, and dissipates those apprehensions which *hang* on the timorous or the modest, when admitted to her presence. *Id.*

Shining landskips, gilded triumphs, and beautiful faces, disperse that gloominess which is apt to *hang* upon the mind in those dark disconsolate seasons. *Id.*

To rest; to reside.

Sleep shall neither night nor day
Hang upon his penthouse lid. *Shakspeare.*

To be in suspense; to be in a state of uncertainty.

Thy life shall *hang* in doubt before thee, and thou shalt fear day and night, and shalt have none assurance of thy life. *Deut.*

To be delayed; to linger.

A noble stroke he lifted high,
Which *hung* not, but so swift with tempest fell
On the proud crest of Satan. *Milton.*

She thrice essayed to speak: her accents *hung*,
And faultering dyed unfinished on her tongue. *Dryden.*

To be dependent on.

Oh, how wretched
Is that poor man that *hangs* on princes' favours! *Shakspeare.*

Great queen! whose name strikes haughty monarchs pale,
On whose just sceptre *hangs* Europa's scale. *Prior.*

To be fixed or suspended with attention.

Though wondering senates *hung* on all he spoke,
The club must hail him master of the joke. *Pope.*

To have a steep declivity.

Sussex marl shews itself on the middle of the sides of *hanging* grounds. *Mortimer.*

To be executed by the halter.

The court forsakes him, and sir Balaam *hangs*. *Pope.*

To decline; to tend down.

His neck obliquely o'er his shoulders *hung*,
Pressed with the weight of sleep that tames the strong. *Pope.*

HANG'ER, *n. s.* } Derivatives of hang. Hanger
HANG'ER-ON, } is that by which any thing
HANG'ING, *n. s.* } hangs in a depending po-
HANG'MAN, *n. s.* } sition; a short broad sword. Hanger-on, a dependent; one who eats and drinks without payment. Hanging, drapery hung against the walls by way of ornament; foreboding death by the halter. Hangman, a public executioner; a term of reproach.

Beforen his triumphe walketh she,
With gilte chaines on hire necke *honging*.
Chaucer. The Monkes Tale.

One cried, God bless us! and Amen! the other;
As they had seen me with these *hangman's* hands:
Listening their fear, I could not say Amen,
When they did say God bless us. *Shakspeare.*

A storm, or robbery, call it what you will,
Shook down my mellow *hanginge*, nay, my leaves,
And left me bare to weather. *Id.*

Surely, sir, a good favour you have; but that you have a *hanging* look. *Id.*

Like rich *hangings* in an homely house,
So was his will in his old feeble body. *Id.*

Who makes that noise there? who are you?
—Your friend, sir, the *hangman*: you must be so good, sir, to rise, and be put to death. *Id.*

Men do not stand
In so ill case, that God hath with his hand
Signed kings blank charters to kill whom they hate;
Nor are they vicars, but *hangmen* to fate. *Donne.*

Being informed that his breakfast was ready, he drew towards the door, where the *hangings* were held up. *Clarendon.*

If the wife or children were absent, their rooms were supplied by the umbræ, or *hangers-on*. *Browne.*

This monster sat like a *hangman* upon a pair of gallows; in his right hand he was painted holding a crown of laurel, and in his left hand a purse of money. *Sidney.*

Her eyes with scalding rheum were galled and red,
Cold palsy shook her head, her hands seemed withered,
And on her crooked shoulders she had wrapped
The tattered remnants of an old striped *hanging*,
Which served to keep her carcase from the cold.
Otway's Orphan.

Now purple *hangings* cloath the palace walls,
And sumptuous feasts are made in splendid halls.
Dryden.

Lucas Van Leyden has infected all Europe with his designs for tapestry, which, by the ignorant, are called ancient *hangings*. *Id.*

What Æthiops lips he has!
How full a snout, and what a *hanging* face! *Id.*

They all excused themselves save two, which two he reckoned his friends, and all the rest *hangers-on*. *L'Estrange.*

I never new a critick, who made it his business to lash the faults of other writers, that was not guilty of greater himself; as the *hangman* is generally a worse malefactor than the criminal that suffers by his hand. *Addison.*

Rome oft has heard a cross haranguing,
With prompting priests behind the *hanging*. *Prior.*

He is a perpetual *hanger-on*, yet nobody knows how to be without him. *Swift.*

HANGER (George), or colonel Hanger, lord Coleraine, was destined for the army, and a commission was procured for him at an early period of life. He served in America during the war of independence, but was never after-

wards able to obtain a higher rank than that of major of the British legion of cavalry. In 1789 he published An Address to the Army, in reply to strictures by Roderic Mackenzie, on Tarleton's History of the Campaigns of 1780 and 1781, 8vo. He was a very eccentric but amusing companion. On the death of his elder brother he succeeded, in 1814, to his title, which, however, he refused to assume; and when addressed by it he was not at all pleased. He died at his house near the Regent's park in 1824, aged seventy-three, leaving a considerable number of publications, the most interesting and amusing of which is his Life, Adventures, and Opinions, 1801, 2 vols. 8vo. In one of his books he introduced a portrait of himself suspended a la lanterne.

HANG-TCHEOU-FOU, the metropolis of the province of Tche-Kiang, in China. It is, according to the Chinese, the paradise of the earth; and may be considered as one of the richest, best situated, and largest cities of the empire. It is twelve miles in circumference, exclusive of its suburbs; and the number of its inhabitants amounts to more than 1,000,000. It is computed that there are 10,000 workmen within its walls employed in manufacturing silk. A small lake, called Si-hou, washes the bottom of its walls on the west side; its water is pure, and its banks are covered with flowers. Halls and open galleries, supported by pillars, and paved with large flag-stones, are erected on piles upon its banks for the convenience of walking; causeways, cased with cut stone, intersect the lake in different directions; and the openings which are left in them at intervals, for the passage of boats, are covered by handsome bridges. In the middle of the lake are two islands, in which a temple and several pleasure-houses have been built. The emperor has a small palace in the neighbourhood. The city has a garrison of 3000 Chinese, under the command of the viceroy; and 3000 Tartars, commanded by a general of the same nation. It has under its jurisdiction seven cities of the second and third class.

HANIFAH, or Hanfa (Aba), surnamed Al Nooma, the most celebrated doctor of the orthodox Mussulmans. He was the son of Thabet, and was born at Coufah in the eightieth year of the Hegira. He founded the sect of the Hanifites, which continues to be the most popular of the four principal sects among the Mussulmans. Like other teachers of new opinions, he suffered persecution during his life, being imprisoned at Bagdad till he died, by the caliph Almansor, for refusing to subscribe to the doctrine of absolute predestination. But his opinions were afterwards brought into such credit by Abou Joseph, a sovereign judge under the caliph Hadi, that to be a Hanifite was reckoned synonymous with being a good Mussulman; and about 335 years after his death, which happened in the 150th year of the Hegira, Schaw Melick built a magnificent monument to his memory, and a college, which he appropriated solely to the professors of Aba Hanifah's doctrines. The most eminent of his successors were Achmed Ben Ali, Al Giaffas, and Al Razzi. A mosque in the temple of Mecca is appropriated to them.

HANK, *n. s.* Isl. Goth. Dan. and Swed. *hank*, a chain or coil of rope; a skein of thread; a tye: a check; an influence. A low word.

Do we think we have the *hank* that some gallants have on their trusting merchants, that, upon peril of losing all former scores, he must still go on to supply? *Decay of Piety.*

HA'NKER, *v. n.* Dut. *hunkeren.* To long importunately; to have an incessant wish: it has commonly *after* before the thing desired. It is scarcely used but in familiar language.

And now the saints began their reign,
For which they had yearned so long in vain,
And felt such bowel *hankerings*,
To see an empire all of kings. *Hudibras.*

Among women and children, care is to be taken that they get not a *hankering* after these juggling astrologers and fortune-tellers. *L'Estrange.*

The shepherd would be a merchant, and the merchant *hankers* after something else. *Id.*

The wife is an old coquette, that is always *hankering* after the diversions of the town. *Addison.*

The republick that fell under the subjection of the duke of Florence, still retains many *hankerings* after its ancient liberty. *Addison.*

Do'st thou not *hanker* after a greater liberty in some things? If not, there's no better sign of a good resolution. *Calamy.*

HANKIUS (Martin), professor of history at Breslau, in the seventeenth century, was born in 1633. He was author of several works of erudition; the most celebrated of which is his treatise De Romanorum rerum Scriptoribus. He died in 1709, aged seventy-six.

HANMER (Jonathan), M. A., a learned English divine, born at Barnstaple about 1605, and educated at Cambridge. He was minister of Bishop's Tawton, and lecturer of Barnstaple; but ejected for nonconformity in 1662. He wrote A View of Ecclesiastical Antiquity, and a Discourse on Confirmation. He died in 1687.

Hanmer (Sir Thomas), an eminent English author and statesman, born in 1676, and educated at Westminster and Oxford. He was early elected M. P. for Suffolk, and in 1713 was chosen speaker, an office which he discharged with great impartiality. He published a superb edition of Shakspeare, in 6 vols. 4to., at Oxford, in 1744, with elegant engravings by Gravelot. He died at Suffolk, April the 5th 1746.

HANNA, a fertile province of Moravia, circle of Olmutz, inhabited by a tribe of Sclavonians called Hannaks. Their agriculture is superior to that of their race in general, and they have considerable herds of cattle and poultry. Hanna is about 400 square miles in extent.

HANNIBAL, the son of Hamilcar, the Carthaginian general, has been already noticed under the articles Amilcar and Carthage; with whose history indeed his life is so blended that we need only to take it up after his leaving that country. Having lost a sea-fight with the Rhodians, through the cowardice of Apollonius, one of the admirals of Antiochus the Great, he fled into Crete, to avoid falling into the hands of the Romans. On his arrival in this island he took sanctuary among the Gortynii; but as he

had brought great treasure along with him, and knew the avarice of the Cretans, he secured his riches by the following stratagem :—He filled several vessels with melted lead, just covering them over with gold and silver. These he deposited in the temple of Diana, in presence of the Gortynii, with whom, he said, he trusted all his treasure. Justin tells us, that he left this with them as a security for his good behaviour, and lived for some time very quietly in these parts. He took care, however, to conceal his riches in hollow statues of brass, which he left exposed as things of little value. At last he retired to the court of Prusias king of Bithynia, where he found means to unite several of the neighbouring states with that prince into a confederacy against Eumenes king of Pergamus, an ally of the Romans; and during the subsequent war several times defeated Eumenes, more through the force of his own genius than the valor of his troops. The Romans, hearing of these important services, despatched T. Quinctius Flaminius as an ambassador to Prusias, in order to procure his destruction. At his first audience he complained of the protection given to that famous general, representing him 'as the most inveterate and implacable enemy the Romans ever had; as one who had ruined both his own country and Antiochus, by drawing them into a destructive war with Rome.' Prusias, to ingratiate himself with the Romans, immediately sent a party of soldiers to surround Hannibal's house. The Carthaginian had contrived seven secret passages from his house, to evade the machinations of his enemies. But, guards being posted at all these, he could not fly. Perceiving, therefore, no possibility of escaping, he had recourse to poison, which he had long reserved for such a melancholy occasion. Then taking it in his hand, 'Let us, said he, deliver the Romans from the disquietude with which they have long been tortured, since they have not patience to wait for an old man's death. Flaminius will not acquire any glory by a victory gained over a betrayed and defenceless person. This single day will be a lasting testimony of the degeneracy of the Romans. Their ancestors gave Pyrrhus intelligence of a design to poison him, that he might guard against the impending danger, even when he was at the head of a powerful army in Italy; but they have deputed a person of consular dignity to excite Prusias impiously to murder one who has taken refuge in his dominions, in violation of the laws of hospitality.' Then, having denounced dreadful imprecations against Prusias, he drank the poison, and expired at the age of seventy years. Cornelius Nepos says, that he put an end to his life by a subtile poison which he kept in a ring. Rollin has contrasted his character with that of Scipio Africanus. He enumerates the qualities which make a complete general; and, having then given a summary of what historians have related of both commanders, is inclined to give the preference to Hannibal. 'There are, however, he says, two difficulties which hinder him from deciding; one drawn from the characters of the generals whom Hannibal vanquished; the other from the errors he committed.' These have been answered by Mr. Hooke, who has taken some pains to vindicate Hannibal's character, by fully and fairly comparing it with that of Scipio Africanus, and other Roman commanders.

HANNIBALIANUS (Flavius Claudius), nephew of Constantine the Great, was by him appointed king of Pontus, Cappadocia, and Armenia Minor; but was murdered by Constantius II. A. D. 338.

HANNO, a general of the Carthaginians, entered the ocean through the Straits of Gibraltar, and discovered several countries. He would have continued his navigation, had he not been in want of provisions. He wrote an account of his voyage, which Sigismund Gelenius published in Greek at Basil, in 1533. He lived, according to Pliny, when the affairs of the Carthaginians were in the most flourishing condition.

HANOVER, formerly an electorate, but now a kingdom of Germany, is of a compact rectangular figure; bounded by the Elbe on the north-east, the German Ocean on the north-west, Dutch Friesland and Prussian Westphalia on the south-west, and the kingdom of Saxony on the south-east. It stretches from 50° 18′ to 53° 54′ N. lat., and from 6° 58′ to 11° 56′ E. long. It is about 150 English miles from south-east to north-west, and 100 from north-east to south-west, and comprises a surface of 14,000 square miles, with a population of 1,303,000; which gives about ninety inhabitants to each square mile.

The original state was the duchy of Brunswick, to which Lunéburg was afterwards added; when its princes took the title of dukes of Brunswick Lunéburg. The district of Hoya was subjoined in 1543, and that of Diepholtz in 1585. The principality of Hildersheim was obtained partly in the sixteenth century, and partly in 1815. Osnaburg was annexed in 1648; Verden in 1715, and the duchy of Bremen in 1719. Bentheim was acquired in 1753; East Friesland, Lingen, the lordship of Meppen, and part of the Lordship of Rheina, were all added to the former territory, in 1815. At this period Hanover ceded to Prussia a small district north of the Elbe; and to the grand duchy of Oldenburg, another tract on the western frontier. The dukedom of Brunswick Lunéburg was raised to the electorate of Hanover, in 1692, and to the kingdom of the same name, by the Congress of Vienna, in 1815. It now consists of the following eleven provinces, which, with the chief towns and population, are thus exhibited in Ein Beschreibung des Königreichs Hanover, 1817.

Provinces.	Sq. Miles, English.	Population.	Chief Towns.	Inhabitants.
1. Archbishopric of Bremen, dukedom of Verden, and Land Hadeln . .	2669	191,160	Verden . .	3,500
2. Dukedom of Lunéburg	4261	245,967	Lunéburg .	10,000
3. Counties of Hoya and Diepholtz .	1424	105,120	Hoya . .	1,700
4. Principality of Kalenburg, and county of Spiegelberg	1046	138,306	Hanover .	25,000
5. Bishopric of Hildesheim	685	128,938	Hildesheim	11,000
6. Principalities of Gottingen and Grubenhagen	1171	178,929	Gottingen .	9,000
7. Bishopric of Osnaburg	925	126,037	Osnaburg .	7,000
8. County of Lingen	132	20,143	Lingen . .	2,000
9. Circle of Meppen and Emsbuhren.	766	29,541	Meppen .	1,600
10. County of Bentheim	360	24,364	Bentheim .	11,000
11. Principality of East Friesland . .	1117	125,610	Emden . .	12,000

These provinces comprehend 107 bailiwics of very various dimensions and population.

The sea-coast of Hanover, particularly towards the mouth of the Elbe, is fertile but flat, and preserved by broad dykes and ditches similar to those of Holland. Here, indeed, is no elevation that can be called mountainous. But southward the celebrated Hartz range extends from the territories of Goshar to the frontier. It is covered with wood, and amply enriched with minerals. The silver mines were discovered so early as 968, and are supposed to have been the first opened in Europe. Iron, copper, lead, zinc, vitriol, and sulphur, are wrought to a great extent. The whole rests upon a bed of granite, which shoots up through the highest of the mountains. Of these, the Brocken, or Blocksberg, consisting entirely of granite, rises to the height of 3500 feet above the sea: a number of huge masses, near its summit, have given rise to a conjecture that it had lost part of its height in consequence of some violent convulsion. The iron mines yield a revenue to the government (i. e. one tenth of the produce), amounting to £115,000 per annum.

The admirer of the majesty of nature will find ample gratification in the scenery of the Hartz; the want of corn fields being compensated by the beauty and extent of the forests, by the bold and picturesque form of the rocks, and the immensity of the view from the top of the Blocksberg. Tradition makes this mountain the resort of all the witches of the north; and the Spectre of Brocken, though a phenomenon perfectly natural, is calculated to strike the ignorant peasant with terror, and even to excite surprise in the philosopher. See Hartz.

Hanover is watered by the Elbe, the Weser (flowing through the heart of the country), the Ilmenau, the Oste, the Ocker, the Leine, the Hunta, and the Ems. It has some small fresh water lakes, as the Dummersee, in Diepholtz, about twelve miles in circuit; the Steinhudermeer, in the province of Kalenburg, about four miles long and two broad; and the Dollart, at the mouth of the Ems (rather an estuary than a lake), twelve miles across. Its canals are all of short course. The Bremen Canal, designed to unite the Hamme, the Oste, and the Schwinge, is scarcely completed; nor the Treckschuit Canal, intended to connect Witmund with Aurich. The Pappenburg Canal is only navigable from the Ems.

Its climate greatly resembles that of the eastern shores of England, but in the south the cold is severe on the mountains, and the country ill adapted to corn. In the valleys both the soil and the climate are more favorable, and all kinds of grain arrive at maturity.

Agriculture is in a very backward state in Hanover; the feudal tenures having as yet been an insuperable bar to improvement.

The chief vegetable productions are grain of all kinds, which she exports; peas, potatoes, flax, hemp, tobacco and madder; wood, which is largely used for fuel, as well as for architectural purposes; pitch, and tar. The rotation of crops usually followed is first a fallow, on which the land is cultivated for potatoes, peas, or flax; then winter corn, either rye or wheat, but chiefly the former, and to them succeeds summer corn, either barley or oats. The increase of grain is not estimated to exceed four for one of the quantity sown. The breeding and fattening of cattle is confined to particular portions. By the latest enumeration, but before some of the last additions of territory, there were 224,500 horses; 675,926 head of horned cattle; 1,540,794 sheep and lambs; 15,728 goats and kids: 176,974 swine; and 1498 asses and mules. The heath land, especially in the province of Lunéburg, is largely used for rearing bees. The hives are transported in waggons, at the commencement of the spring, to the more southern countries, where the flowers bloom early, and are afterwards brought back when the heath flowers are fit for them. Large numbers of geese are also kept by the bauers on the moist situations, and their flesh is salted for winter consumption. These two sources of wax, honey, and feathers, yield the principal disposable produce of some provinces.

The manufactures of Hanover are numerous, but of inconsiderable size; few except linen, linen yarn, and domestic utensils, affording a surplus beyond the consumption. Hauseleinwand, or household linen, is made in almost every family: a second sort, called lowentleinen, is also common; the finer linens are only made in some of the cities to a small extent,

and almost wholly consumed by the richer families. Sailcloth and hempen linen is made in East Friesland and the duchy of Bremen, and is chiefly exported. Spinning is, indeed, the constant employ of females in the villages during the long winter nights. Stockings, whether of linen, cotton, or worsted, are usually made at home; and, in some parts, much oil is made from linseed. Pottery and paper is made in many parts. In the cities, woollen cloths, silk and cotton goods, hosiery, hats, soap, and leather, are also manufactured. The principal branches of trade that employ capital are the breweries of Hanover, Embeck, and Goslar, and the corn distilleries of the different cities.

Embden, the chief port of Hanover, has a small export trade in hops, rape-seed, oil-cake, fruit, hams, &c.; and, in fruitful years, some corn is exported. The imports consist of tea, coffee, sugar, indigo, tobacco, wine, and superior manufactured articles. The great roads to the fairs of Leipsic and Frankfort, passing through Hanover, create a pretty large commission trade, and give employment to many barges, waggons, horses, and men. On the whole, the exports and imports are said to nearly balance, and the amount to be about £500,000 sterling. This is also about the amount of the national revenue: and the hereditary estates of the king yield another £500,000. The imposts consist of a land-tax, post, carriage, and horse duties; duties on the products of the mines and forests, on salt, coals, turf, mills, and fisheries. Part of the public revenue supports the schools and the university of Gottingen, but the far greater part is devoted to military purposes; Hanover having ten garrison towns, and a force of about 20,000 regular troops. Every soldier may demand his discharge and a pension after twenty years' service: the number of these pensioners is at present considerable; but they are liable to do militia duty. Manufacturing establishments connected with the army are, one of small arms at Hertzberg; one of gunpowder at Hersen, near Hameln; and a cannon foundry in Hanover. The only naval force of Hanover is a brig of war, moored off the city of Stade, to enforce the tolls which all merchant vessels passing up the Elbe are bound to pay, and which amounts to about £5000 sterling annually. The public debt was contracted chiefly in the war of 1756; it never was considerable; and, the sovereign having discharged his part of the capital, the residue due by the states does not exceed £2,000,000. The whole executive government is in the king; and the aristocracy has immense weight; but a legislative assembly of 102 deputies is obtaining an increase of power and consideration. The king is of age at eighteen; during a minority the states of the kingdom are guardians; and the succession is only in the male line. Should this fail in the present family, that of the duke of Brunswick will succeed. At the diet of the empire Hanover now occupies the fifth rank, and has four votes in the general assembly.

The legal system is very complicated, being a compound of the old Roman law, the constitution of the empire, and all kinds of provincial customs. Many inferior judges and magistrates are appointed by the proprietors of estates; and some of those nominated by the king are rather by his prerogative as owner of some estates than as the monarch. Some of these jurisdictions have the power of life and death, but the latter is rarely inflicted. A court of appeal at Zell has extensive power, and it is intended to increase its authority. Its decisions are highly esteemed for their equity.

In Hanover there is an equal establishment of Lutherans, Catholics, and Reformed; the smaller sects of Menonites, Hernhuthers, and others, enjoying full protection. The Lutherans amount to about 1,050,000; the Catholics to 160,000; the Reformed to 90,000; the remainder comprise Jews and the smaller Christian sects. The Lutheran church is regulated by superintendents in Hanover, Stade, Osnabrüch, Hildesheim, Aurich, and Hohnstein. The Catholics have bishops at Osnabrüch, Hildesheim, and Regersburg; and the provinces of Meppen and Eimsbuhren are under the spiritual jurisdiction of the Prussian bishop of Münster. In some of the consistories the Lutherans and Reformed are united. Schools are established in every village; others, somewhat more comprehensive, are provided in the small towns; and in the more populous places are academies, or high-schools, for the education of those farther advanced. There are also seminaries at Hanover and Lunéburg for educating the children of rank of both sexes, from eight to fifteen years of age. One of these, called the Georgianum, has a provision on a liberal footing for forty boys, who are educated either for a military or a civil profession. The schools of a higher order are well organised; and the university of Gottingen is universally esteemed in Europe. See GOTTINGEN.

Hanover has the Leipsigen and the Convention standards of money. The public accounts are kept in the latter. The gold coin called Georgs d'or is five rix dollars eight groschen in convention money; or, in Leipsigen money, four rix dollars sixteen groschen. The other gold coin, the gold-gulden, is two rix dollars six groschen in convention, two dollars two groschen in Leipsigen money.

The long measure is the rood of eight ells, of two feet; the foot being twelve inches. Six Hanoverian are equal to five Brabant ells. Land is measured by hufen and morgens. The hufe is thirty morgens, the morgen 120 ruthen, equal to 24·844 Paris feet. The morgen by which woodland is measured contains 160 ruthen. The liquid measure is the eimen, of 3·136 cubic inches, or the anker of 1·960 cubic inches. The latter makes sixteen stübchens, or thirty-two kannen—sixty-four quartiere, or 128 nosel. The weights in common use are ships-pounds, lies-pounds, hundreds, and customary pounds. The ships-pound is equal to twenty lies-pounds; the hundred is 110 lies-pounds. The lies-pound is divided into two marks, the mark into eight ounces, the ounce into two loths, the loth into four quentins. The local weights and measures vary.

In respect to manners, the Hanoverians are said to possess all the frankness and simplicity of their ancestors; and the higher classes speak

a very pure idiom of the Teutonic language. In the towns, and particularly in the capital, a successful imitation of English habits is observed; but the nobility have too strong prejudices of birth to tolerate much of this. In some places, the descendants of the Wendsor Vandals preserved for a long time the use of the Sclavonic language. The only order of knighthood is the Guelphic, instituted by his present majesty in 1814.

The elector of Hanover is descended from the ancient family of the Guelphs, dukes and electors of Bavaria, one of whom, Henry the Lion, in 1140, married Maude, eldest daughter of king Henry II. of England. Their son William succeeded to Brunswick Lunéburg, and his son Otho was created duke thereof. The dominions descended in a direct line to Ernest, who divided them upon his death, in 1546, into two branches, that of Brunswick Lunéburg Wolfenbuttel, and Brunswick Lunéburg Zell. The possessor of the latter, Ernest Augustus, was head of the college of German princes, and married Sophia, daughter of Frederick elector Palatine and king of Bohemia, by Elizabeth, daughter of James I. king of Great Britain. Sophia being the next protestant heir to the house of Stuart, the parliament fixed the crown upon her on queen Anne's demise; and George Lewis, her eldest son, became king of Great Britain in consequence; since which the electors of Hanover have filled the British throne. Hanover has been of course involved in the wars of Great Britain, and in that of 1756 her territory was all along the scene of operations. This war cost her nearly 80,000 men, or a tenth of her population: but her troops acquired high repute.

During the first war with revolutionary France, the neutrality of Hanover was maintained; but in 1801 that country was taken possession of by Prussia; and in 1803 the first act of Buonaparte was to overrun it, and carry off the public property. In 1806 Hanover was ceded by the French to the Prussians; but, on war breaking out between these nations, the electorate was again occupied by Buonaparte. Part of it was then annexed to the kingdom of Westphalia, and at the end of 1810 Buonaparte declared the country along the coast annexed to France. On the expulsion of the French from Germany, in October 1813, the whole electorate was restored; but the title, in 1815, was changed for that of king of Hanover.

Hanover, the capital of the foregoing kingdom, and of the principality of Calenberg, is situated in a sandy district on the Leine, a navigable river which joins the Weser. It is in the form of a half-moon, separated by the river into two parts, called the Old and New Town. The general appearance is imposing: the towns, formerly surrounded with walls and ditches, having the ramparts levelled, and laid out into an esplanade and streets, where a very elegant monument has been erected to Leibnitz. Outside of the walls is the Gartengemeinde, consisting of a mixture of houses and gardens. On entering the streets, the town has an antiquated aspect, particularly what is called the Old Town. The materials for building are generally brick, with wooden frame-work. Some houses have the bricks used for the doors and windows only. Inscriptions, denoting the date of building, and containing passages from the Psalms, which formerly appeared on the houses, are now for the most part erased, and improvements are going on with great spirit. The population, which in 1811 was only 21,000, is now nearly 25,000. The New Town, which stands on the right side of the river, is built in good style; and the houses in the new street, called George Strass, facing the rampart, are separated from it by iron chains, suspended on stone pillars.

The elector's palace is a large edifice of late erection, having been destroyed by fire, and rebuilt in 1791. It is receiving improvements, and will be rendered an elegant modern edifice. The public library, founded by Leibnitz, is also a good building, containing a fine collection of books. There are five Lutheran churches; the Calvinists and Catholics have each their chapels; and the Jews a synagogue. The charitable institutions are an orphan-house, two hospitals, and two poor-houses. For education there is a gymnasium, a female school of industry, and several elementary schools. The Georgianum is a school erected in 1796, for the education of forty sons of Hanoverian nobles, admitted at the age of ten, and paying a small sum on their entrance; after which their education is gratuitous. The other objects of curiosity are the mews, the church of the castle, the gardens of the baroness Deken and of count Walmoden, the wood of Ellenztied, and the Lutheran burial-ground; but, above all, Herrenhausen, a country mansion of the royal family, at some distance from the town. The approach is by a long avenue of lime trees, and the building, though by no means elegant, is respectable, and the grounds laid out with perfect uniformity; the water-works are good, and the garden contains a very superior botanical collection.

Hanover, a county of Virginia, United States, bounded north-east by Spottsylvania, Caroline, and King William counties, east by New Kent, south by Henrico, south-west by Goochland county, and west by Louisa county; distant from Washington 103 miles. Population 15,082.

Hanover, a post town of Grafton county, New Hampshire, United States, on the east side of the Connecticut; fifty-three north-west of Concord, 102 W. N. W. of Portsmouth, and 115 north-west of Boston: from Washington 495. Population 2135. Dartmouth College is situated in the south-west part of this township, about half a mile east of the river, on a beautiful plain, where there is a handsome village with two congregational meeting-houses; and a handsome bridge across the river, connecting the town with Norwich. Dartmouth College was founded by Dr. Eleazer Wheelock, and chartered by royal grant in 1769. The funds, which were originally created by charitable individuals, have been increased by grants from the legislatures of New Hampshire and Vermont; and afford, at present, an increasing annual income of about 1600 dollars.

HANOVER, or M'Allister's Town, a post town in York county, Pennsylvania, between Cadorus Creek and a branch of the Little Conewago. It is seven miles north of the Maryland line, eighteen miles south-west of York, and 106 west by south of Philadelphia.

HANOVER, NEW, an island in the Pacific, seen by Carteret in 1767, and said by him to be about thirty miles in length. It presents a flat surface to the north-west, and has a chain of high central mountains extending towards the south-east. The passage between this and New Ireland is full of reefs and islets. The south-west part is situated in long. 148° 27′ E., lat. 2° 49′ S.

HANRIOT, or HENRIT (Francis), one of the bloody revolutionary leaders of France under the despotism of Robespierre. He was born about 1761 at Nanterre; and, after having been a menial servant and a custom-house officer, in which situations he is said to have behaved with dishonesty, he became a police spy. Attaching himself to the jacobins, he first distinguished himself in directing the massacres which took place in the prisons of Paris September 2nd, 1792; and, continuing his cruel career, was appointed commander of the national guards. Supported by Murat, on the 2nd of June, 1793, he surrounded the Convention with an armed force, and obliged the members to return, and pass decrees of accusation against the Girondists. He acted on all occasions as a faithful partizan of Robespierre, whom, when accused, he in vain endeavoured to support, and was arrested and suffered with his chief by the well-merited axe of the guillotine, July 29th, 1794. He displayed on the scaffold a fearlessness worthy of a better cause.

HANS. See HANSE.

HANSBACH, a town of Bohemia, in the circle of Leitmeritz, with manufactures of paper, cotton, &c. Twelve miles north of Kamnitz.

HANSE, an ancient name for a society or company of merchants; particularly that of certain cities in Germany, &c., hence called Hanse Towns. The word is Teutonic; and signifies alliance, confederacy, or association. Some derive it from the German words am-see, that is on the sea; as the first Hanse Towns were all situated on the sea-coast: whence they are said to have been first called am-zee-stenen, i. e. cities on the sea; and afterwards, by abbreviation, hansee, and hanse. The Hanse Towns, or the Hanseatic Society, were several maritime cities of Germany, who entered into a league for the mutual protection of their commerce. Bremen and Amsterdam were the first two that formed it; whose trade received such advantage by their fitting out two men of war in each to convoy their ships, that more cities continually entered into the league: even kings and princes made treaties with them, and were often glad of their assistance and protection; by which means they grew so powerful, both by sea and land, that they raised armies as well as navies, enjoyed countries in sovereignty, and made peace or war, though always in defence of their trade, as if they had been a united state or commonwealth.—At this time also many cities, though they had no great interest in trade, or intercourse with the ocean, came into their alliance for the preservation of their liberties; so that, in 1200, we find no less than seventy-two cities in the list of the Hanse Towns; particularly Bremen, Amsterdam, Antwerp, Rotterdam, Dort, Bruges, Ostend, Dunkirk, Middleburgh, Calais, Rouen, Rochelle, Bourdeaux, St. Malo, Bayonne, Bilboa, Lisbon, Seville, Cadiz, Carthagena, Barcelona, Marseilles, Leghorn, Naples, Messina, London, Lubec, Rostock, Stralsund, Stetin, Wismar, Konigsberg, Dantzic, Elbing, and Marienburg. The alliance was now so powerful, that their ships of war were often hired by other princes to assist them against their enemies. They not only awed, but often defeated, all that opposed their commerce; and, particularly in 1358, they took such revenge of the Danish fleet in the Sound, for having interrupted their commerce, that Waldemar III. king of Denmark, for the sake of peace, gave them up all Schonen for sixteen years; by which they commanded the passage of the Sound in their own right.—In 1428 they made war on Erick IX. king of Denmark with 250 sail, carrying on board 12,000 men. These so ravaged the coast of Jutland, that the king was glad to make peace with them. Many privileges were bestowed upon the Hanse Towns by Louis XI., Charles VIII., Louis XII., and Francis I. kings of France; as well as by the emperor Charles V., who had various loans of money from them; and by king Henry III., who also incorporated them into a trading body, in acknowledgment for money which they advanced to him, as well as for the services they did him by their naval force in 1206.

These towns exercised a jurisdiction among themselves; for which purpose they were divided into four colleges or provinces, distinguished by the names of their four principal cities, viz. Lubec, Cologne, Brunswick, and Dantzic, wherein were held their courts of judicature. They had a common stock or treasury at Lubec, and power to call an assembly as often as necessary. They kept warehouses for the sale of their merchandise in London, Bruges, Antwerp, Bergen in Norway, Revel in Livonia, and Novogorod in Muscovy; which were exported to most parts of Europe, in English, Dutch, and Flemish bottoms. One of their principal magazines was at London, where a society of German merchants was formed, called the Steel-yard Company. To this company great privileges were granted by Edward I., but revoked by act of parliament in 1552, in the reign of Edward VI., on a complaint of the English merchants that this company had so engrossed the cloth trade, that in 1551 they had exported 50,000 pieces, while all the English together had shipped off but 1100. Queen Mary I., who ascended the throne the year following, having resolved to marry Philip the emperor's son, suspended the execution of the act for three years: but after that term, whether by reason of some new statute, or in pursuance of that of king Edward, the privileges of the company were no longer regarded, and all efforts of the Hanse Towns to recover this loss were in vain. Another accident that happened to their mortification was while queen Elizabeth was at war with the Spaniards. Sir Francis Drake happening to meet sixty ships in the Tagus, loaded with corn,

belonging to the Hanse Towns, took out all the corn as contraband goods which they were forbid to carry by their original patent. The Hanse Towns having complained of this to the diet of the empire, the queen sent an ambassador thither to declare her reasons. The king of Poland likewise interested himself in the affair, because the city of Dantzic was under his protection. At last, though the queen strove hard to preserve the commerce of the English in Germany, the emperor excluded the English company of merchant adventurers, who had considerable factories at Stade, Embden, Bremen, Hamburg, and Elbing, from all trade in the empire. In short, the Hanse Towns, in Germany in particular, were not only in so flourishing, but in so formidable a state, from the fourteenth to the sixteenth centuries, that they gave umbrage to all the neighbouring princes, who threatened a strong confederacy against them; and, as the first step towards it, commanded all the cities within their dominion or jurisdiction to withdraw from the Hanse, or union. This immediately separated all the cities of England, France, and Italy, from them. The Towns, on the other hand, prudently put themselves under the protection of the empire; and, as the cities just now mentioned had withdrawn from them, so they withdrew from several more, and made a decree among themselves, that none should be admitted into their society but such as stood within the limits of the German empire, or were dependent thereon; except Dantzic, which continued a member, though it only had been summoned formerly to the imperial diet. By these means they maintained their confederacy for the protection of their trade, as it was begun, without being any more envied by their neighbours. Hereby likewise they were reduced to Lubec, Bremen, Hamburgh, and Dantzic; in the first of which they kept their register, and held assemblies once in three years at least. Their proceedings now became insignificant: Lubec, Hamburgh, and Bremen, continued cities of the German empire; but in 1810 they were seized by Buonaparte to effect what he called the continental system.

On the overthrow of his power, in 1814, these towns were restored to liberty, and admitted as members of the Germanic diet; and, under the name of Hanse Towns, they maintain a kind of commercial treaty with each other, and have recently erected a court of appeal at Lubec.

HA'NT, for has not, or have not.

That roguish leer of your's makes a pretty woman's heart ake: you *ha'nt* that simper about the mouth for nothing. *Addison.*

HANTCHONG, a first rate city of China in the south of the fertile province of Chen-si but surrounded by forests. Its chief articles of trade are cinnabar, musk, wax, and honey. It stands in long. 106° 44′ E., and lat. 32° 59′ N.

HANTS, a county of Nova Scotia, containing the townships of Falmouth, Newport, and Windsor. It is about twenty miles square and partly unsettled, but well watered throughout.

HANWAY (Jonas), was born at Portsmouth in Hampshire, on the 12th of August 1712. His father, Mr. Thomas Hanway, was an officer in the naval service. At the age of seventeen he was sent to Lisbon, and was bound apprentice to a merchant in that city in June 1729. His early life was marked with that attention to business, and love of regularity, which afterwards distinguished his character. On the expiration of his apprenticeship he entered into business at Lisbon as a merchant, but not long after returned to London. He afterwards connected himself as a partner in Mr. Dingley's house in St. Petersburgh; where he arrived on the 10th of June 1743. The trade of the English over the Caspian Sea into Persia at this period had been entrusted to the care of Mr. Elton, who had injudiciously engaged in the service of Nadir Shah, to build ships on the Caspian after the European manner. This had alarmed the merchants in the Russian trade, who resolved to send one of their body into Persia. On this occasion Mr. Hanway offered his service, which was accepted. He set out on the 10th of September; and after experiencing various dangers in that kingdom, during twelve months, returned to St. Petersburgh, January 1st, 1745, without being able to establish the intended trade by the Caspian; partly through the jealousy of the Russian court on account of Elton's connexions with the Persians, and partly by the Persian revolutions. He now settled at St. Petersburgh; where he remained five years, and interested himself greatly in the concerns of the merchants who had engaged in the Caspian trade: but, having a desire to see his native country, he left St. Petersburgh on the 9th of July 1750. In 1753 he published An Historical Account of the British Trade over the Caspian Sea; with a Journal of Travels from London through Russia into Persia; and back again through Russia, Germany, and Holland: to which are added, the Revolutions of Persia during the present century, with the particular History of the great Usurper Nadir Kouli: 4 vols. 4to. In 1754 he published A Letter to Mr. John Spranger, on his excellent Proposal for Paving, Cleansing, and Lighting the Streets of Westminster, &c. 8vo. A few years afterwards many of Mr. Hanway's ideas, thrown out in this pamphlet, were adopted. In 1756 he printed A Journal of Eight Days' Journey from Portsmouth to Kingston upon Thames, with an Essay on Tea; which was reprinted in 2 vols. 8vo., in 1757. At this juncture, Great Britain being on the eve of a war with France, he published Thoughts on the Duty of a good Citizen with Regard to War and Invasion, in a Letter from a Citizen to his Friend, 8vo. About the same time several gentlemen formed a plan, which was matured and perfected by Mr. Hanway, for providing the navy with sailors, by furnishing poor children with necessaries to equip them for the service of their country. Mr. Hanway published three pamphlets on this subject, and the treasurer of the society, accompanied by Mr. Hanway, having waited on the king, the society received £1000 from his majesty, £400 from the prince of Wales, and £200 from the princess dowager. This excellent institution was the favorite object of Mr. Hanway's care, and continued to flourish under his auspices. In 1758 he became an advocate for the Magdalen Charity, and published A Letter to Robert Dingley, esq., being a propo-

sal for the Relief and Employment of friendless Girls and repenting Prostitutes, 4to. He also printed some other tracts on the same subject In 1759 he wrote Reasons for an Augmentation of at least Twelve Thousand Mariners, to be employed in the Merchants' Service and Coasting Trade, in thirty-three Letters to Charles Gray, esq., of Colchester, 4to.

The many useful and public-spirited plans, which Mr. Hanway had promoted, had now rendered his character popular; while his disinterestedness, and the sincerity of his intentions, were conspicuous to all. Five principal citizens of London waited on lord Bute, then prime minister, and requested that some notice might be taken of a man who, at the expense of his own private fortune, and by the most unremitting application, had rendered such meritorious services to his country. Accordingly he was, in July 1762, appointed one of the commissioners for victualling the navy; a post which he held above twenty-one years. The next act of public beneficence, in which he engaged, was the collection of money for the sufferers by the fire at Montreal, in Quebec, in May, 1765, when a fourth part of the city was consumed. On this occasion Mr. Hanway, in conjunction with two other gentlemen, collected £8415. In 1766 a dreadful fire broke out in Bridge Town in Barbadoes, which consumed property to the amount of nearly £100,000. A subscription was opened, in which Mr. Hanway was a principal actor, and £14,886 were collected, and transmitted to the unfortunate sufferers. At subsequent periods he continued to interest himself in various other plans for relieving the distresses of different classes of the community, and particularly those of young chimney sweepers. In 1774 he enlarged a former publication, under the title of Virtue in Humble Life: containing reflections on the reciprocal duties of the Wealthy and Indigent, the Master and the Servant, 2 vols. 8vo. In 1783, finding his health decline, he resigned his office at the victualling board, and immediately received a grant of his whole salary, as a pension for life. This favor he owed to the esteem which his majesty, to whom he was personally known, entertained for him. He now promoted a subscription for the relief of the many black poor who wandered about the metropolis; and the lords of the treasury seconded the design, by directing £14 a head to be issued to the committee, to enable them to send the blacks to such places abroad as might be fixed on. After encountering many obstacles, about 300 negroes were sent, properly accommodated with necessaries, to Africa. In summer 1786 Mr. Hanway's health declined visibly. He had long felt the approach of a disorder in the bladder, which, increasing by degrees, caused a stranguary; and at length, on the 5th of September 1786, put a period to a life spent almost entirely in the service of his fellow creatures. On the 13th he was interred in the family vault at Hanwell, where a superb monument is erected to his memory. Mr. Hanway is said to have been the first man in Britain who carried an umbrella.

HANYANG, a city of China, of the first rank, at the conflux of the river Han and Yantse Long. 113° 44′ E., lat. 63° 19′ N.

HAP, *n. s.* & *v. n.* | HAPHAZ'ARD, *n. s.* | HAP'LY, *adj.* | HAP'LESS, *adj.* | HAP'PEN, *v. a.* | HAP'PILY, *adv.* | HAP'PINESS, *n. s.* | HAP'PY, *adj.* Goth. and Teut. *happe*; Welsh *anhap*. Whatever falls out by chance whether good or evil; to light upon unexpectedly: hapless unfortunate or unlucky: happily and happiness have reference to a state of felicity; pleasure; prosperity; fortuitous elegance: applied to address it implies readiness.

Say not I have sinned, and what harm hath *happened* unto me, *Ecclus.* v. 4.

Bring forth your strong reasons, and shew us what shall *happen*. *Isaiah.*

And able for to helpen all a shire
In any case that might fallen or *happe*:
Chaucer. Prologue to Cant. Tales.

And *happed* that alone as he wos borne,
He saw a maiden walking him beforne.
Id. The Wif of Bathes Tale.

Whether art it were, or heedless *hap*,
As through the flowering forest rash she fled,
In her rude hairs sweet flowers themselves did lap,
And flourishing fresh leaves and blossoms did enwrap.
Spenser.

It will be too late to gather ships or soldiers, which may need to be presently employed, and whose want may *hap* to hazard a kingdom. *Spenser.*

Happiness is that estate whereby we attain, so far as possibly may be attained, the full possession of that which simply for itself is to be desired, and containeth in it after an eminent sort the contentation of our desires, the highest degree of all our perfection. *Hooker.*

The former of these is the most sure and infallible way: but so hard that all shun it, and had rather walk as men do in the dark by *hap-hazard*, than tread so long and intricate mazes for knowledge sake. *Id.*

To have ejected whatsoever that church doth make account of, without any other crime than 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, might *haply* have pleased some few men, who, having begun such a course themselves, must be glad to see their example followed. *Id.*

Things casual do vary, and that which a man doth but chance to think well of cannot still have the like *hap*. *Id.*

Solyman commended them for their valour in their evil *haps*, more than the victory of others got by good fortune. *Knolles.*

Hapless Ægeon, whom the fates have marked
To bear the extremity of dire mishap!
Shakspeare.

This love of theirs myself have often seen,
Haply when they have judged me fast asleep.
Id.

I come to wive it wealthily in Padua:
If wealthily, then *happily* in Padua. *Id.*

Am I *happy* in thy news?
— If to have done the thing you gave in charge
Beget your happiness, be *happy* then;
For it is done. *Id.*

Run you to the citadel,
And tell my lord and lady what hath *happ'd*.
Id

In destructions by deluge, the remnant which *hap* to be reserved are ignorant people. *Bacon.*

Nor feared she among the bands to strav
Of armed men! for often had she seen
The tragick end of many a bloody fray:
Her life had full of *haps* and hazards been.
Fairfax.

Happy the man, who his whole time doth bound
Within the' enclosure of his little ground. *Cowley.*

Oh! *happiness* of sweet retired content,
To be at once secure and innocent. *Denham.*

Certain graces and *happinesses*, peculiar to every language, give life and energy to the words. *Id.*

Leviathan, which God of all his works
Created hugest, that swim the ocean stream,
Him *haply* slumbering on the Norway foam,
The pilot of some small night-foundered skiff
Deeming some island oft, as seamen tell,
Who fixed anchor in his scaly rind,
Moors by his side. *Milton.*

Truth and peace, and love, shall ever shine
About the supreme throne
Of him, to whose *happy* making sight alone,
Our heavenly guided soul shall climb. *Id.*

To warn
Us, *haply* too secure, of our discharge
From penalty, because from death released
Some days. *Id.*

I have *happened* on some other accounts relating to mortalities. *Graunt.*

And when he *happened* to break off
I' th' middle of his speech, or cough,
H' had hard words ready to show why
And tell what rules he did it by. *Hudibras.*

Curst be good *haps*, and curst be they that build
Their hopes on *haps*, and do not make despair
For all these certain blows the surest shield. *Sidney.*

At other end Uran did Strephon lend
Her *happy* making hand. *Id.*

Preferred by conquest, *happily* o'erthrown,
Falling they rise to be with us made one. *Waller.*

Chymists have been more *happy* in finding experiments than the causes of them. *Boyle.*

If it so fall out that thou art miserable for ever, thou hast no reason to be surprised, as if some unexpected thing had *happened* to thee. *Tillotson.*

Philosophers differ about the chief good or *happiness* of man. *Temple.*

Yet in this agony his fancy wrought,
And fear supply'd him with this *happy* thought.
Dryden.

Neither is it so trivial an undertaking to make a tragedy end *happily*; for 'tis more difficult to save than kill. *Id.*

Here *hapless* Icarus had found his part,
Had not the father's grief restrained his art. *Id.*

We live at *hap-hazard*, and without any insight into causes and effects. *L'Estrange.*

A fox had the *hap* to fall into the walk of a lion. *Id.*

The various and contrary choices that men make in the world, argue that the same thing is not good to every man alike: this variety of pursuits shews, that every one does not place his *happiness* in the same thing. *Locke.*

We take our principles at *hap-hazard* upon trust, and then believe a whole system, upon a presumption that they are true. *Id.*

Happy the man who void of care and strife,
In silken or in leathern purse retains
A splendid shilling. *Philips's Splendid Shilling.*

Did his *hapless* passion equal mine,
I would refuse the bliss. *Smith.*

Then *haply* yet your breast remains untouched,
Though that seems strange. *Rowe.*

Though the presence of imaginary good cannot make us *happy*, the absence of it may make us miserable. *Addison.*

Formed by thy converse, *happily* to steer
From grave to gay, from lively to severe.
Pope.

Some beauties yet no precepts can declare:
For there's a *happiness* as well as care. *Id.*

Formed by some rule that guides but not constrains,
And finished more through *happiness* than pains. *Id.*

One gentleman is *happy* at a reply, and another excels in a rejoinder. *Swift.*

Let us now see what conclusions may be found for instruction of any other state, that may *haply* labour under the like circumstances. *Id.*

The voice of the Eternal said Be free,
And this divine prerogative to thee
Does virtue, *happiness*, and heaven convey.
Beattie.

Thou winged and cloud-cleaving minister,
Whose *happy* flight is nighest unto heaven,
Well may'st thou swoop so near me—I should be
Thy prey, and gorge thine eaglets.
Byron. Manfred.

And of the *happiest* moments which were wrought
Within the web of my existence, some
From thee, fair Venice! have their colours caught.
Id. Childe Harold.

HAPAE, or HABEI, a cluster of low fertile islets among the Friendly Islands. They are four or more in number, about six or seven miles in length, and from two to three in breadth, joined together by reefs. They lie about long. 185° 36′ to 185° 45′ E., lat. 19° 39′ to 19° 53′ S.

HAPSAL, a sea-port of Russia, in Esthonia, on the coast of the Baltic, five miles south-west of Revel, opposite Dago Isle.

HAPSBURG, an ancient castle of the Helvetic republic, in the canton of Bern, seated near Schintnach, on a hill, upon the right bank of the Aar, three miles above Bruck. It was the cradle of the house of Austria, having been built by count Vernor bishop of Strasburgh, in the eleventh century, and by him given to his brother Radbad, whose son Vernor first took the title of count Hapsburg, which his descendants continued to bear till the elevation of Rodolph I. to the imperial throne. It was then given as a fief to the lords of Waldeck, but fell under the dominion of the Bernois in 1415, when they conquered Argow. It is now in ruins: five miles north of Lenzburg.

HAQUE, in old statutes, a little hand-gun, prohibited to be used for destruction of game, &c., by 33 Hen. VIII. cap. 5, and 2 and 3 Edw. VI. cap. 14. There is also the demi-haque, or half-haque, within the said acts.

HA'QUETON, *n. s.* Fr. *haqueton*. A coat of mail.

And next his shert an *haketon*.
Chaucer. The Rime of Sire Thopas.

HARAN, CHARRAN, or CHARRÆ, a city of Mesopotamia, celebrated for having been the place whither Abraham retreated, after he left Ur (Gen. xi. 31, 32.); where Terah his father died, and was buried; whither Jacob retired, when he fled from Esau (Id. xxvii. 45, xxviii. 10, &c.); and where Crassus the Roman general was defeated and killed by the Parthians. It was situ-

ated between the Euphrates and the Chebar, at a good distance from their junction.

HARANGUE', *n. s.*, *v. n.* & *v. a.* } French,
HARANG'UER, *n. s.* } *harangue*.

The original of the French word is questioned: Menage thinks it a corruption of hearing, English; Junius imagines it to be *discours au rang*, to a circle, which the Ital. *arringo* seems to favor. Perhaps it may be from *orare*, or *orationare*, orationer, oraner, aranger, haranguer.—*Johnson*. A speech; a popular oration; to make a speech; to address by an oration, as he 'harangued the troops.' Haranguer, a public speaker, generally used in a contemptuous sense.

Gray-headed men, and grave, with warriors mixed,
Assemble, and *harangues* are heard, but soon
In factious opposition. *Milton.*

Nothing can better improve political school-boys than the art of making plausible or implausible *harangues*, against the very opinion for which they resolve to determine. *Swift.*

Many preachers neglect method in their *harangues*. *Watts.*

HARASS, *v. a.* & *n. s.* Fr. *harasser*, from *harasse*, a heavy buckler.—*Du Cange*. To weary; to fatigue; to tire with labor and uneasiness: harass, waste; a disturbance.

These troops came to the army but the day before, *harassed* with a long and wearisome march. *Bacon.*

The men of Judah, to prevent
The *harass* of their land, beset me round.
Milton.

Our walls are thinly manned, our best men slain;
The rest, an heartless number, spent with watching,
And *harassed* out with duty. *Dryden.*

Nature oppressed, and *harassed* out with care,
Sinks down to rest. *Addison.*

HAR'BINGER, *n. s.* } Fr. *herberge*;
HARBOUR, *n. s.*, *v. n.* & *v. a.* } Dutch, *herberg*,
HAR'BOURAGE, *n. s.* } *herberger*; Ital.
HAR'BOURER, *n. s.* } *albergo*. One
HAR'BOURLESS, *adj.* } who goes be-
HAR'BROUGH, *n. s.* } fore to provide

lodgings; a forerunner. Harbour, a lodging; a port; a haven for shipping; an asylum or shelter: to sojourn; to entertain; to shelter or protect. Harbourless, without shelter; wanting a harbour. The general and primary idea is a place of rest and security.

The fame anon thurgout the town is born,
How Alla king shal come on pilgrimage,
By *herbergeours* that wenten him beforn.
Chaucer. The Man of Lawes Tale.

——— Now Lordinges, trewely
Ye ben to me welcome right hertily,
For by my trouthe, if that I shal not lie,
I saw not this yere swiche a compagnie
At ones in this *herberwe*, as is now.
Id. Prologue to the Canterbury Tales.

Shortly, I woll *herberowe* me,
There I hope best to hulstred be.
Id. Romaunt of the Rose.

Let in us, your king, whose laboured spirits,
Forewearied in this action of swift speed,
Crave *harbourage* within your city walls.
Shakspeare.

Three of your argosies
Are richly come to *harbour* suddenly. *Id.*

This night let's *harbour* here in York. *Id.*

They are sent by me,
That they should *harbour* where their lord would be.
Id.

Make all our trumpets speak, give them all breath,
Those clamorous *harbingers* of blood and death. *Id.*

I'll be myself the *harbinger*, and make joyful
The hearing of my wife with your approach. *Id.*

My lady bids me tell you, that though she *harbours* you as her uncle, she's nothing allied to your disorders. *Id.*

Knaves I know, which in this plainness
Harbour more craft, and more corrupter ends,
Than twenty silky ducking observants. *Id.*

Underneath this stone doth lie
As much beauty as could die,
Which in life did *harbour* give
To more virtue than doth live.
Ben Jonson.

Sin, and her shadow death, and misery,
Death's *harbinger*. *Milton.*

And now of love they treat, 'till th' evening star,
Love's *harbinger*, appeared. *Id.*

Before him a great prophet, to proclaim
His coming, is sent *harbinger*, who all
Invites. *Id.*

Come fair Repentance, daughter of the skies!
Soft *harbinger* of soon returning virtue!
The weeping messenger of grace from Heaven.
Brown's Athelstan.

Harbour yourself this night in this castle: this country is very dangerous for murthering thieves to trust a sleeping life among them. *Sidney.*

Southwards they bent their flight,
And *harboured* in a hollow rock at night:
Next morn they rose, and set up every sail;
The wind was fair, but blew a mackrel gale.
Dryden.

For *harbour* at a thousand doors they knocked;
Not one of all the thousand but was locked. *Id.*

As Ormond's *harbinger* to you they run;
For Venus is the promise of the Sun. *Id.*

Let me be grateful; but let far from me
Be fawning cringe, and false dissembling look,
And servile flattery, that *harbours* oft
In courts and gilded roofs. *Philips.*

They leave the mouths of Po,
That all the borders of the town o'erflow;
And, spreading round in one continued lake,
A spacious hospitable *harbour* make. *Addison.*

Doubly cursed
Be all those easy fools who give it *harbour*.
Rowe.

Let not your gentle breast *harbour* one thought
Of outrage from the king. *Id.*

Dear solitary groves where peace does dwell,
Sweet *harbours* of pure love and innocence!
Rochester's Valentinian.

We owe this old house the same kind of gratitude that we do to an old friend who *harbours* us in his declining condition, nay even in his last extremities. *Pope.*

How people, so greatly warmed with a sense of liberty, should be capable of *harbouring* such weak superstition; and that so much bravery and so much folly can inhabit the same breasts. *Id.*

How guilt once *harboured* in the conscious breast
Intimidates the brave, degrades the great.
Dr. Johnson.

HARBINGER, in the king's household, an officer who has four yeomen under him, that ride a day's journey before the court when it travels, to provide lodgings, &c.

HARBOROUGH, or MARKET HARBOROUGH, a town of Leicestershire on the road to Derby

near the source of the Welland. The road enters the town by a ford in the river, but there is a bridge of six arches, adjoining the ford, for the use of carriages when the floods render the water impassable or unsafe: at other times this bridge is only used by horse and foot passengers. It is a great thoroughfare, and was famous, in Camden's time, for its fairs, where the best horses and colts are still sold. They are held April 29th, and October 19th. It has also a considerable manufacture of tammies, lastings, &c. The market is on Tuesday. The earl of Harborough built a neat market-house at his own expense here some years ago. Here is a chapel, which is a curacy, in the patronage of Christ Church College, Oxford, and is estimated at somewhat more than £100 a-year; it is dedicated to St. Dionysius, the Areopagite. There are also three meeting-houses in Harborough for Independents, Quakers, and Methodists. Many Roman antiquities have been found here. On the east of the town are traces of an encampment, which is considered as Roman: and the head quarters of king Charles I.'s army seem to have been in this place previous to the memorable battle of Naseby; Cromwell's letter to the speaker of the house of commons, giving an account of the battle, is dated here. It is eighty-three miles north-west of London, and fifteen south-east of Leicester.

Harbour Island, one of the smallest of the Bahama Islands, situated to the north of Eleuthera. Here is situated the parish church belonging to Eleuthera; and it has been long settled by a race who live chiefly upon fish. Their town contains about 600 whites, and 300 blacks, and is beautifully situated on the south side of the island in front of the harbour, which can only be entered at each end by vessels of small draught.

Harbour Island, a small island of the United States, in Pamlico Sound, near the coast of North Carolina. Long. 76° 32′ W., lat. 34° 50′ N.

HARBOURG, a small island in the English Channel, near the coast of France. Long. 1° 59′ W., lat. 48° 39′ N.

HARBURG, a town in the duchy of Lunéburg, Hanover, on the Elbe opposite to Hamburgh. It is the medium of intercourse between Hamburgh and the west country. An important article of traffic is bilberries, which are shipped here annually to the value of between £3000 and £4000 sterling, chiefly to Bourdeaux, to color the wines. Population 3650. Seven miles south of Hamburgh, and twenty-two north-west of Lunéberg. Long. 9° 56′ E., lat. 53° 28′ N.

HARD, *adj.* Sax. þeaꞃð; Dut. *hard;* Teut. *hard.* Firm; resisting penetration or separation; not soft; not easy to be pierced or broken.

Repose you there, while I to the *hard* house,
More *hard* than is the stone whereof 'tis raised;
Which even but now, demanding after you,
Denied me to come in. *Shakspeare.*

Difficult; not easy to the intellect.

The *hard* causes they brought unto Moses; but every small matter they judged themselves. *Exodus.*

When *hard* words, jealousies, and fears,
Set folks together by the ears. *Hudibras.*

Some diseases, when they are easy to be cured, are *hard* to be known. *Sidney.*

'Tis *hard* to say, if Clymene were moved
More by his prayer, whom she so dearly loved,
Or more with fury fired. *Dryden.*

As for the *hard* words which I was obliged to use, they are either terms of art, or such as I substituted in place of others that were too low. *Arbuthnot.*

Difficult of accomplishment; full of difficulties.

Is any thing too *hard* for the Lord? *Genesis.*

He now discerned he was wholly to be on the defensive, and that was like to be a very *hard* part too. *Clarendon.*

Possess
As lords a spacious world, to our native heaven
Little inferior, by my adventure *hard*
With peril great achieved. *Milton.*

Long is the way
And *hard*, that out of hell leads up to light;
Our prison strong. *Id.*

The love and pious duty which you pay
Have passed the perils of so *hard* a way. *Dryden.*

Nervous and tendinous parts have worse symptoms, and are *harder* of cure, than fleshy ones. *Wiseman.*

Painful; distressful: laborious action or suffering.

Rachael travailed, and she had *hard* labour. *Genesis.*

Worcester's horse came but to-day;
And now their pride and mettle is asleep,
Their courage with *hard* labour tame and dull,
That not a horse is half of himself. *Shakspeare.*

Continual *hard* duty, with little fighting, lessened and diminished his army. *Clarendon.*

When Sebastian weeps, his tears
Come *harder* than his blood. *Dryden.*

A man obliged to *hard* labour is not reduced to the necessity of having twice as much victuals as one under no necessity to work. *Cheyne.*

Cruel; oppressive; rigorous: as, a hard heart.

The bargain of Julius III. may be accounted a very *hard* one. *Browne's Vulgar Errours.*

Whom scarce my sheep, and scarce my painful plough,
The needful aids of human life allow;
So wretched is thy son, so *hard* a mother thou. *Dryden.*

If you thought that *hard* upon you, we would not refuse you half your time. *Id.*

Live thou to mourn the love's unhappy fate,
To bear my mangled body from the foe,
Or buy it back, and funeral rites bestow;
Or if *hard* fortune shall those dues deny,
Thou canst at least an empty tomb supply. *Id.*

A loss of one-third of their estates will be a very *hard* case upon a great number of people. *Locke.*

No people live with more ease and prosperity than the subjects of little commonwealths; as, on the contrary, there are none who suffer more under the grievances of a *hard* government than the subjects of little principalities. *Addison.*

To find a bill that may bring punishment upon the innocent, will appear very *hard.* *Swift.*

Sour; rough; severe.

What, have you given him any *hard* words of late? *Shakspeare.*

Rough ungovernable passions hurry men on to say or do very *hard* or offensive things. *Atterbury.*

Unfavorable; unkind.

As thou lovest me, do him not that wrong,
To bear a *hard* opinion of his truth. *Shakspeare.*

Absalom and Achitophel he thinks is a little *hard* on his fanatick patrons. *Dryden.*

Some *hard* rumours have been transmitted from t'other side the water, and rumours of the severest kind. *Swift.*

Insensible; inflexible.

If I by chance succeed
In what I write, and that's a chance indeed,
Know I am not so stupid or so *hard*,
Not to feel praise, or fame's deserved reward.
Dryden.

Unhappy; vexatious.

It is a very *hard* quality upon our soil or climate, that so excellent a fruit, which prospers among all our neighbours, will not grow here. *Temple.*

Vehement; keen; severe: as, a hard winter; hard weather.

Full *hard* it is with flesh-hook, or with oules
To ben yclawed. *Chaucer. The Sompnoures Tale.*

Unreasonable; unjust.

It is a little *hard*, that, in an affair of the last consequence to the very being of the clergy, this whole reverend body should be the sole persons not consulted. *Swift.*

It is the *hardest* case in the world, that Steele should take up the reports of his faction, and put them off as additional fears. *Id.*

Forced; not easily granted.

If we allow the first couple, at the end of one hundred years, to have left ten pair of breeders, which is no *hard* supposition; there would arise from these, in fifteen hundred years, a greater number than the earth was capable of. *Burnet.*

Powerful; forcible.

The stag was too *hard* for the horse, and the horse flies for succour to the man that's too *hard* for him, and rides the one to death, and outright kills the other. *L'Estrange.*

Let them consider the vexation they are treasuring up for themselves, by struggling with a power which will be always too *hard* for them. *Addison.*

A disputant, when he finds that his adversary is too *hard* for him, with slyness turns the discourse. *Watts.*

Shall our pale withered hands, be still stretched out,
Trembling, at once, with eagerness and age?
With av'rice and convulsions grasping *hard?*
Grasping at air, for what has earth beside?
Young's Night Thoughts.

Austere; rough, as liquids.

In making of vinegar, set vessels of wine over against the noon sun, which calleth out the more oily spirits, and leaveth the spirit more sour and *hard.* *Bacon.*

Harsh; stiff; constrained.

Get thee glass eyes;
And like a scurvy politician seem
To see the things thou dost not—how, now, now, now:
Pull off my boots:—*harder, harder*; so.
Shakspeare. King Lear.

Others, scrupulously tied to the practice of the ancients, make their figures *harder* than even the marble itself. *Dryden.*

His direction is *hard*, his figures too bold, and his tropes, particularly his metaphors, insufferably strained. *Id.*

Not plentiful; not prosperous

There are bonfires decreed; and, if the times had not been *hard*, my billet should have burnt too. *Dryden.*

Avaricious; faultily sparing.

These thanks I pray you:
And know that when Sebastian weeps, his tears
Come *harder* than his blood. *Dryden.*

HARD, *adv.* *Hardo*, very old German.

Close; near; often with *by*.

Abimelech went *hard* unto the door of the tower, to burn it with fire. *Judges.*

The Philistines followed *hard* upon Saul. 2 *Samuel.*

A little lowly hermitage it was,
Down in a dale *hard by* a forest's side,
Far from resort of people that did pass
In travel to and fro. *Spenser.*

Scarce had he said, when *hard* at hand they spie
That quicksand nigh, with water covered. *Id.*

Hard by was a house of pleasure, built for a summer retiring place. *Sidney.*

They doubted a while what it should be, 'till it was cast up even *hard* before them; at which time they fully saw it was a man. *Id.*

When these marshal the way, *hard* at hand comes the master and main exercise. *Shakspeare.*

Hard by a cottage chimney smokes,
From betwixt two aged oaks. *Milton.*

Diligently; laboriously; incessantly; vehemently; earnestly; importunately.

Geneura rose in his defence,
And prayed so *hard* for mercy from the prince,
That to his queen the king the offender gave.
Dryden.

An ant works as *hard* as a man who should carry a heavy load every day four leagues. *Addison.*

Whoever my unknown correspondent be, he presses *hard* for an answer, and is earnest in that point. *Atterbury.*

Uneasily; vexatiously.

When a man's servant shall play the cur with him, look you it goes *hard*. *Shakspeare.*

Distressfully; so as to raise difficulties.

The question is *hard* set, and we have reason to doubt. *Browne.*

A stag that was *hard* set by the huntsmen, betook himself to a stall for sanctuary. *L'Estrange.*

Fast; nimbly; vehemently.

The wolves scampered away as *hard* as they could drive. *L'Estrange.*

With difficulty; in a manner requiring labor.

Solid bodies foreshow rain, as boxes and pegs of wood when they draw and wind *hard*. *Bacon.*

Tempestuously; boisterously.

When the north wind blows *hard*, and it rains sadly, none but fools sit down in it and cry; wise people defend themselves against it. *Taylor.*

HARDANGERFIORD, an extensive arm of the sea, which runs inland on the west coast of Norway, about ninety-eight miles in a north-east direction. It is between 59° 28′ and 60° 25′ of N. lat.

HA'RDBOUND, *adj.* Hard and bound. Costive.

Just writes to make his barrenness appear,
And strains from *hardbound* brains eight lines a year.
Pope.

HAR'DEN, *v. n.* & *v. a.* } From hard. To
HAR'DENER, *n. s.* } grow hard; to make hard; to confirm in wickedness; to stupify; to make firm or constant.

He stiffened his neck, and *hardened* his heart from turning unto the Lord. 2 *Chronicles.*

Then should I have comfort? yea, I would *harden* myself in sorrow. *Job.*

But exhort one another daily, lest any of you be *hardened* through the deceitfulness of sin. *Hebrews.*

They speken of sondy *harding* of metall
And speken of medecines therwithall,
And how and when it should *yharded* be,
Which is unknown algates unto me.
Chaucer. The Squires Tale.

The powder of loadstone and flint, by the addition of whites of eggs and gum-dragon, made into paste, will in a few days *harden* to the *hardness* of a stone. *Bacon.*

Even Lust, the master of a *hardened* face,
Blushes if thou be'st in the place;
To Darkness' curtains he retires;
In sympathising Night he roils his smoky fires.
Cowley.

Avoid the politic, the factious fool,
The busy buzzing, talking *hardened* knave.
Otway.

He that *hardeneth* his heart, and sets God and his judgments at defiance, and receives not the impressions of his word or rod, shall fall into mischief; his presumption will be his ruin; and whatever sin he falls into, it is owing to the *hardness* of his heart. *Henry. Prov.* xxviii. 14.

Religion sets before us not the example of a stupid Stoick, who had by obstinate principles *hardened* himself against all sense of pain; but an example of a man like ourselves, that had a tender sense of the least suffering, and yet patiently endured the greatest. *Tillotson.*

Sure he, who first the passage tried,
In *hardened* oak his heart did hide,
And ribs of iron armed his side. *Dryden.*

One raises the soul, and *hardens* it to virtue; the other softens it again, and bends it into vice. *Id.*

It is a melancholy consideration, that there should be several among us so *hardened* and deluded as to think an oath a proper subject for a jest. *Addison.*

Years have not yet *hardened* me, and I have an addition of weight on my spirits since we lost him. *Swift to Pope.*

HARDEN, a county of Kentucky, on the Ohio; distant from Washington 662 miles. Population 7581. The chief town is Elizabeth Town.

HARDENING, the giving a greater degree of hardness to bodies than they had before. There are several ways of hardening iron and steel, as by hammering them, quenching them in cold water, &c. See CASE-HARDENING and STEEL.

HARDERWICK, or HARDERWYCK, a town of the Netherlands, in Dutch Guelderland, on the Zuyder Zee. It was only a village till 1229, when Otho surrounded it with walls. It was afterwards one of the Hanse Towns: in 1503 it was mostly burnt down, but was soon after rebuilt with seven gates. In 1511 it was taken by Charles duke of Guelders; in 1552 by the troops of Charles V.; and in 1572 by the confederates. It has a university founded in 1618, converted in 1808 into an Athenæum or academy with eight professors: and the church of St. Martin is much admired. The trade is in corn, timber, and herrings. It is nineteen miles west of Deventer, twenty-five north-east of Utrecht, and forty east of Amsterdam.

HARD'FAVORED, *adj.*
HARD'HANDED, *adj.*
HARD'HEAD, *n. s.*
HARD'HEARTED, *adj.*
HARD'HEARTEDNESS, *n. s.*
HARD'IHEAD, *n. s.*
HARD'IHOOD, *n. s.*
HARD'IMENT, *n. s.*
HARD'INESS, *n. s.*
HARD'LABORED, *adj.*
HARD'MOUTHED, *adj.*
HARD'SHIP, *n. s.*
HARD'WARE, *n. s.*
HARD'WAREMAN, *n. s.*
HARD'Y, *adj.*

Compounds of hard: the primary meaning is applied to whatever makes resistance to external impressions.—Their meanings are mostly obvious. Hard-favored is coarse or harsh of countenance; hard-head the manner of fighting, in which the combatants dash heads together. Hardihood, hardiment, courage; bravery. Hardiness, hardship and fatigue; courage. Hard-labored, diligently wrought. Hardship, injury; oppression. Hardware, manufacture of metal. Hardy, bold; strong; confident, in a good and bad sense.

And to the tre she goeth, a ful gode pace,
For love made her so *hardy* in this case.
Chaucer. Legende of Good Women.

Then sawe I beautie with a nice atire,
And youth, all full of game and jolitee;
Fole *hardinesse*, flatterie, and desire,
Messagerie, and Mede, and other thre,
Hir names shall not here be tolde for me.
Id. The Assemble of Foules.

The which his mother seeing, gan to feare
Least his too haughty *hardiness* might reare
Some hard mishap in hazard of his life.
Spenser. Faerie Queene.

That stroke the *hardy* squire did sore displease. *Id.*

But full of fire and greedy *hardiment*,
The youthful knight could not for ought be staid.
Spenser.

Enflamed with fury and fierce *hardyhead*,
He seemed in heart to harbour thoughts unkind,
And nourish bloody vengeance in his bitter mind.
Id.

They are valiant and hardy; great endurers of cold, hunger, and all *hardiness*. *Id.*

On the gentle Severn's sedgy bank,
In single opposition, hand to hand,
He did confound the best part of an hour,
In changing *hardiment* with great Glendower.
Shakspeare.

If we, with thrice such powers left at home,
Cannot defend our own doors from the dog,
Let us be worried; and our nation lose
The name of *hardiness* and policy. *Id.*

When the blast of war blows in your ears,
Stiffen the sinews, summon up the blood,
Disguise fair Nature with *hardfavoured* looks,
Then lend the eye a terrible aspect. *Id.*

Hardhearted Clifford, take me from the world;
My soul to heaven. *Id.*

Hardhanded men that work in Athens here,
Which never laboured in their minds 'till now.
Id.

Perkin had gathered together a power of all nations, neither in number, nor in the *hardiness* and courage of their persons contemptible. *Bacon.*

Try the imagination of some in cock-fights, to make one cock more *hardy*, and the other more cowardly. *Id.*

Zeal was the spring whence flowed her *hardiment*. *Fairfax.*

Boldly assault the necromancer's hall,
Where if he be, with dauntless *hardihood*.
Milton.

When Vulcan came into the world, he was so *hard-favoured* that both his parents frowned on him.
Dryden.

'Tis time my *hardmouthed* coursers to controul,
Apt to run riot, and transgress the goal. *Id.*

But who can youth, let loose to vice, restrain?
When once the *hardmouthed* horse has got the rein,
He's past thy power to stop. *Id.*

I have been at *hardhead* with your butting citizens; I have routed your herd, I have dispersed them.
Id.

Recite
The feats of Amazons, the fatal fight
Betwixt the *hardy* queen and hero knight. *Id.*

Can you be so *hardhearted* to destroy
My ripening hopes, that are so near to joy? *Id.*

Hardheartedness and cruelty is not only an inhuman vice, but worse than brutal. *L'Estrange.*

The brother a very lovely youth, and the sister *hardfavoured*. *Id.*

He has the courage of a rational creature, and such an *hardiness* we should endeavour by custom and use to bring children to. *Locke.*

Who is there *hardy* enough to contend with the reproach which is prepared for those, who dare venture to dissent from the received opinions of their country?
Id.

You could not undergo the toils of war,
Nor bear the *hardships* that your leaders bore.
Addison.

Criminal as you are, you avenge yourself against the *hardiness* of one that should tell you of it.
Addison.

Is a man confident of his present strength? An unwholesome blast may shake in pieces his *hardy* fabrick. *South.*

How black and base a vice ingratitude is, may be seen in those vices which it is always in combination with, pride and *hardheartedness*, or want of compassion. *Id.*

In journeys or at home, in war or peace,
By *hardships* many, many fall by ease. *Prior.*

Could thirst of vengeance, and desire of fame,
Excite the female breast with martial flame?
And shall not love's diviner power inspire
More *hardy* virtue, and more generous fire? *Id.*

John Bull, otherwise a good-natured man, was very *hardhearted* to his sister Peg. *Arbuthnot.*

How cheerfully the hawkers cry
A satire, and the gentry buy!
While my *hardlaboured* poem pines,
Unsold upon the printer's lines. *Swift.*

They are ripe for a peace, to enjoy what we have conquered for them; and so are we, to recover the effects of their *hardships* upon us. *Id.*

Hardheartedness is an essential in the character of a libertine. *Clarissa.*

HARDINGE (Nicholas), an English lawyer, chiefly distinguished for the cultivation of the belles lettres. He studied at Eton and Cambridge; after which he kept terms at the Middle Temple and was called to the bar. In 1731 he obtained the office of clerk to the house of commons; in 1752 he was made joint secretary of the treasury; and was twice elected M. P. for the borough of Eye. He died aged fifty-seven in 1758. His works consist of some English poetry, and a volume of Latin poems.

HARDINGE (George), son of the preceding, born in 1744. After finishing his studies at Eton, he went to Trinity College, Cambridge; where his tutor was Dr. Watson, afterwards bishop of Llandaff. In 1769 he was created, by mandate, master of arts; and called to the bar the same year. The interest of his mother's brother, lord Camden, procured him the rank of serjeant-at-law; and he was subsequently appointed solicitor-general to her majesty. In 1787 he was made a Welsh judge, and in 1789 the queen's attorney-general. He died in the execution of his judicial duties, at Presteign, in Radnorshire, April 26th, 1816. He was a man of wit and humor, as well as great good sense and knowledge of the world. His speeches in parliament and in the courts have been published; as well as several contributions to miscellaneous literature, including three sermons. These have been also collected and printed, with his letters, and an account of his life by Mr. John Nichols.

HARDING (Thomas), D. D., was born in Devonshire in 1512. He was educated at Winchester; chosen fellow of New College, Oxford, in 1556; and appointed professor of Hebrew by king Henry VIII., whose half-reforming principles he adopted. On the accession of Edward VI. he became a complete protestant; but, on that of the Bloody Mary, he saw his error, recanted, and became a confirmed Papist; whereupon he was made prebendary of Winchester, and treasurer of the cathedral of Salisbury. Being deprived of his preferments, on the accession of queen Elizabeth, he went to Louvaine, where he began his famous controversy with bishop Jewel, against whom he wrote seven tracts in favor of Popery, between 1555 and 1567. He died in 1570. His works show him to have been a man of learning and abilities..

HARDION (James), an ingenious French author, and member of the Academy of Inscriptions, born at Tours, in 1686. He published a Universal History in 18 vols., and a Treatise on French Poetry and Rhetoric. He died in 1766.

HARDLY, *adv.* From hard.

With difficulty; not easily.

Touching things which generally are received, although in themselves they be most certain, yet, because men presume them granted of all, we are *hardliest* able to bring such proof of their certainty as may satisfy gainsayers, when suddenly and besides expectation they require the same at our hands.
Hooker.

There are but a few, and they endued with great ripeness of wit and judgment, free from all such affairs as might trouble their meditations, instructed in the sharpest and subtlest points of learning; who have, and that very *hardly*, been able to find out but only the immortality of the soul. *Id.*

God hath delivered a law as sharp as the two-edged sword, piercing the very closest and most unsearchable corners of the heart, which the law of nature can *hardly*, human laws by no means, possibly reach unto.
Id.

There are in living creatures parts that nourish and repair easily, and parts that nourish and repair *hardly*.
Bacon.

The barks of those trees are more close and soft than those of oaks and ashes, whereby the moss can the *hardlier* issue out. *Id.*

The father, mother, daughter they invite;
Hardly the dame was drawn to this repast.
Dryden.

Recovering *hardly* what he lost before,
His right endears it much, his purchase more. *Id.*

False confidence is easily taken up, and *hardly* laid down. *South.*

Scarcely; scantily; not lightly; with no likelihood.

The fish that once was caught, new bait will *hardly* bite. *Faerie Queene.*

They are worn, lord consul, so
That we shall *hardly* in our ages see
Their banners wave again. *Shakspeare.*

Hardly shall you find any one so bad, but he desires the credit of being thought good. *South.*

Almost not; barely.

The wandering breath was on the wing to part,
Weak was the pulse, and *hardly* heaved the heart.
Dryden.

There is *hardly* a gentleman in the nation who hath not a near alliance with some of that body. *Swift.*

Grudgingly; as an injury.

If I unwittingly
Have aught committed that is *hardly* borne
By any in this presence, I desire
To reconcile me. *Shakspeare.*

Severely; unfavourably.

If there are some reasons inducing you to think *hardly* of our laws, are those reasons demonstrative, are they necessary, or mere possibilities only? *Hooker.*

Rigorously; oppressively.

Many men believed that he was *hardly* dealt with. *Clarendon.*

They are now in prison, and treated *hardly* enough; for there are fifteen dead within two years. *Addison.*

They have begun to say, and to fetch instances where he has in many things been *hardly* used. *Swift.*

Unwelcomely; harshly.

Such information comes very *hardly* and harshly to a grown man; and, however softened, goes but ill down. *Locke.*

Not softly; not tenderly; not delicately.

Heaven was her canopy; bare earth her bed;
So *hardly* lodged. *Dryden.*

HA'RDNESS, *n. s.* From hard.

Durity; power of resistance in bodies.

Hardiness is a firm cohesion of the parts of matter that makes up masses of a sensible bulk, so that the whole does not easily change its figure. *Locke.*

From the various combinations of these corpuscles happen all the varieties of the bodies formed out of them in colour, taste, smell, *hardness*, and specifick gravity. *Woodward.*

Difficulty to be understood.

This label on my bosom
Is so from sense in *hardness*, that I can
Make no collection of it. *Shakspeare.*

Difficulty to be accomplished.

It was time now or never to sharpen my intention to pierce through the *hardness* of this enterprize. *Sidney.*

Concerning the duty itself, the *hardness* thereof is not such as needeth much art. *Hooker.*

Scarcity; penury.

The tenants poor, the *hardness* of the times,
Are all excuses for a servant's crimes. *Swift.*

Obduracy; profligateness.

Every commission of sin introduces unto the soul a certain degree of *hardness*, and an aptness to continue in that sin. *South.*

Coarseness; harshness of look.

By their virtuous behaviour they compensate the *hardness* of their favour, and by the pulchritude of their souls make up what is wanting in the beauty of their bodies. *Ray.*

Keenness; vehemence of weather or seasons.

If the *hardness* of the winter should spoil them, neither the loss of seed nor labour will be much. *Mortimer.*

Cruelty of temper; savageness; harshness; barbarity.

We will ask,
That if we fail in our request, the blame
May hang upon our *hardness*. *Shakspeare.*

They quicken sloth, perplexities unty,
Make roughness smooth, and *hardness* mollify.
Denham.

Stiffness; harshness.

Sculptors are obliged to follow the manners of the painters, and to make many ample folds, which are insufferable *hardnesses*, and more like a rock than a natural garment. *Dryden.*

Faulty parsimony; stinginess.

HARDNESS, in bodies, is a property directly opposite to fluidity, by which they resist the impression of any other substance, sometimes in an extreme degree. As fluidity has been found to consist in the motion of the particles of a body upon one another, in consequence of a certain action of the universal fluid, or elementary fire, among them; we must conclude that hardness consists in the absence of this action, or a deficiency of what is called latent heat. This is confirmed by observing, that there is an intermediate state betwixt hardness and fluidity, in which bodies will yield to a certain force, though they still make a considerable resistance. This is principally observed in the metals, and is the foundation of their ductility. It appears, indeed, that this last property, as well as fluidity, is entirely dependent on a certain quantity of latent heat absorbed, or otherwise acting within the substance itself; for all the metals are rendered hard by hammering, and soft by being put again into the fire and kept there for some time. The former operation renders them hot as well as hard; probably, as Dr. Black observes, because the particles of metal are thus forced nearer one another, and those of fire squeezed out from among them. By keeping them for some time in the fire, that element insinuates itself again among the particles, and arranges them in the same manner as before, so that the ductility returns. By a second hammering this property is again destroyed, returning on a repetition of the heating, or annealing, as it is called; and so on, as often as we please. Hardness appears to diminish the cohesion of bodies in some degree, though their fragility does by no means keep pace with their hardness. Thus, glass is very hard and very brittle; but flint, though still harder than glass, is much less brittle. Among the metals, however, these two properties seem to be more connected, though even here the connexion is by no means complete. Steel, the hardest of all the metals, is indeed the most brittle; but lead, the softest, is not the most ductile. Neither is hardness connected with the specific gravity of bodies; for a diamond, the hardest substance in nature, is little more than

half the weight of the lightest metal. As little is it connected with the coldness, electrical properties, or any other quality with which we are acquainted; so that, though the principle above laid down may be accepted as a general foundation for our enquiries, a great number of particulars remain yet to be discovered before we can offer any satisfactory explanation. All bodies become harder by cold; but this is not the only means of their doing so, for some become hard by heat as well as cold.

Mr. Quist and others have constructed tables of the hardness of different substances. The method pursued in constructing these tables was, by observing the order in which they were able to cut or make any impression upon one another. The following table, extracted from M. Magellan's edition of Cronstedt's Mineralogy, was taken from Dr. Quist, Sir T. Bergman, and Mr. Kirwan. The first column shows the hardness, and the second the specific gravity.

Diamond from Ormus	20	3·7
Pink diamond	19	3·4
Bluish diamond	19	3·3
Yellowish diamond	19	3·3
Cubic diamond	18	3·2
Ruby	17	4·2
Pale ruby from Brasil	16	3·5
Ruby spinell	13	3·4
Deep blue sapphire	16	3·8
Ditto paler	17	3·8
Topaz	15	4·2
Whitish ditto	14	3·5
Bohemian ditto	11	2·8
Emerald	12	2·8
Garnet	12	4·4
Agate	12	2·6
Onyx	12	2·6
Sardonyx	12	2·6
Occidental amethyst	11	2·7
Crystal	11	2·6
Cornelian	11	2·7
Green jasper	11	2·7
Reddish yellow ditto	9	2·6
Schoerl	10	3·6
Tourmaline	10	3·0
Quartz	10	2·7
Opal	10	2·6
Chrysolite	10	3·7
Zeolite	8	2·1
Fluor	7	3·5
Calcareous spar	6	2·7
Gypsum	5	2·3
Chalk	3	2·7

HA'RDOCK, *n. s.* I suppose the same with burdock.

> Why he was met even now,
> Crowned with rank fumiter and furrow-weeds,
> With *hardocks*, hemlock, nettles, cuckoo-flowers.
> *Shakspeare.*

HARDOUIN (John), a learned French Jesuit in the eighteenth century, remarkable for the paradoxes he advanced in his writings; in particular, That all the works of the ancient profane writers, except Cicero's works, Virgil's Georgics, Horace's Satires and Epistles, and Pliny's Natural History, are mere forgeries. He died at Paris in 1729, aged eighty-three. His principa. works are, 1. An edition of Pliny's Natural History, with notes, which is much esteemed; 2. An edition of the Councils, which made much noise; 3. Chronology Restored by Medals, 4to.; 4. A Commentary on the New Testament, folio; in which he pretends that our Saviour and his apostles preached in Latin, &c.

HARDS, *n. s.* The refuse or coarser part of flax.

HARDT (Herman von Der), a philological writer of Germany, was born in 1660 at Melle, Westphalia, where his father was director of the mint. He studied at Jena and Leipsic, and attached himself chiefly to oriental languages. The duke of Brunswick made him his librarian; and, in 1690, he was chosen professor of the Oriental languages in the university of Helmstadt; to which he induced the duke to present his library. In 1709, becoming rector of the gymnasium of Marienburg, he employed every moment he could spare in preparing for the press those works which have established his fame. Among these are, Autographia Lutheri aliorumque celebrium virorum ab anno 1517, ad ann. 1546, Reformationis Ætatem et Historiam egregiè Illustrantia, 3 vols. 8vo.; Magnum Concilium Constantiense de universali Ecclesiæ Reformatione, unione, et fide, 1697, 3 vols. folio, 1700—1742, 6 vols. folio, undertaken by order of the duke of Brunswick; Memorabilia Bibliothecæ novæ Rodolphiæ; Historia Litteraria Reformationis, 1717, 5 vols. folio; Tomus Primus in Jobum, Historiam populi Israelis in Assyriaco exilio, Samariâ Eversâ et Regno extincto Illustrans, Helmstadt, 1728, folio; the remainder of this work was never published. He died in 1746, leaving in MS. a History of the Reformation.

HARDUNHULLY, a town of the Mysore, south of India. It was taken by the rajah from a neighbouring petty prince, in the year 1614. Long. 77° 2′ E., lat. 11° 50′ N.

HARDY, a county of the north part of Virginia, bounded north-east by Hampshire county, east by Shenandoah county, south-west by Pendleton and Randolph counties, and north-west by Maryland. Population 5525. Chief town, Moore-fields.

HARE and HERE, differing in pronunciation only, signify both an army and a lord. So Harold is a general of an army; Hareman, a chief man in the army; Herwin, a victorious army; which are much like Stratocles, Polemarchus, and Hagesistratus, among the Greeks.

HARE, *n. s.* & *v. n.*
HARE'BELL, *n. s.*
HARE'BRAINED, *adj.*
HARE'FOOT, *n. s.*
HARE'LIP, *n. s.*
HARE'SEAR, *n. s.*
HAR'IER, *n. s.*

Saxon, þara; Erse. *karh*; Dan. and Swed. *hare*, from ear, or hear, Mr. Thomson suggests. A small quadruped, with long ears and short tail, that moves by leaps, remarkable for timidity, vigilance, and fecundity; the common game of hunters; also a constellation. The verb signifies to frighten or hurry with terror. Harebell, a blue flower. Harebrained, volatile; unsettled; wild. Harefoot, a bird; an herb. Harelip, a deficiency in the upper lip, constituting a disease, so called from

its resemblance to the lip of the hare. Haresear, a plant. Harier, a dog for hunting hares.

Thou shalt not lack
The flower that's like thy face, pale primrose; nor
The azured *harebell*, like thy veins.
Shakspeare. Cymbeline.

Dismayed not this
Our captains Macbeth and Banquo?
— As sparrows, eagles; or the *hare*, the lion.
Shakspeare.

The blots of nature's hand
Shall not in their issue stand;
Never mole, *harelip*, nor fear,
Shall upon their children be. *Id.*

That *hairbrained* wild fellow begins to play the fool, when others are weary of it. *Bacon.*

The *hare* appears, whom active rays supply
A nimble force, and hardly wings deny.
Creech.

We view in the open champaign a brace of swift greyhounds, coursing a good stout and well-breathed *hare*. *More.*

To *hare* and rate them, is not to teach but vex them.
Locke.

Hills, dales, and forests far behind remain,
While the warm scent draws on the deep-mouthed train.
Where shall the trembling *hare* a shelter find?
Hark! death advances in each gust of wind.
Gay's Rural Sports.

The third stitch is performed with pins or needles, as in *harelips*. *Wiseman.*

Poor is the triumph o'er the timid *hare*.
Thomson.

Just then a Council of the *hares*
Had met on national affairs. *Beattie.*

Hare, in zoology. See Lepus. The hare is a beast of venery, but peculiarly so termed in its second year. There are reckoned four sorts of them, from the places of their abode: viz. the mountain, the field, the marsh, and the wandering hares. The mountain hares are the swiftest; the field hares are not so nimble; those of the marshes are the slowest: but the wandering hares are the most dangerous to follow; for they are cunning in the ways and mazes of the fields, and, knowing the nearest ways, run up the hills and rocks, to the confusion of the dogs, and the discouragement of the hunters. Hares and rabbits are very mischievous to nurseries and new planted orchards, by peeling off the barks of the young trees: to prevent which, some bind ropes about the trees up to such a height as they are able to reach; some daub them with tar; but, though this keeps off the hares, it is itself mischievous to the trees; but this hurtful property of it is in some degree taken off by mixing any kind of fat or grease with it, and incorporating them well over the fire. This mixture is to be rubbed over the lower part of the trees in November, and will preserve them till that time next year, without any danger from these animals. It is only in winter, when other food is scarce, that these creatures feed on the barks of trees. Those who have the care of warrens have an odd way of fattening hares, viz. stopping up their ears with wax, and rendering them deaf. The hare is so timorous, that she continually listens after every noise, and will run a long way on the least suspicion of danger; so that she always eats in terror, and runs herself out of flesh continually. These are both prevented by her feeding in a safe place, without apprehension.

Hare, Java. See Cavia.

Hare, Patagonian. See Cavia.

Hare (Dr. Francis), an English bishop, educated at Eton, and a member of King's College, Cambridge; where he had the tuition of the marquis of Blandford, only son of the illustrious duke of Marlborough, who appointed him chaplain-general to the army. He afterwards obtained the deanery of Worcester, and thence was promoted to the bishopric of Chichester, which he held with the deanery of St. Paul's to his death, in 1740. He was dismissed from being chaplain to George I. in 1718, from party prejudices. About the end of queen Anne's reign he published a remarkable pamphlet, entitled The Difficulties and Discouragements which attend the study of the Scriptures in the Way of Private Judgment. He published many pieces against bishop Hoadly, in the Bangorian Controversy; and other learned works, which were collected after his death, and published in 4 vols., 8vo. 2. An edition of Terence, with Notes, in 4to. 3. The Book of Psalms in the Hebrew, put into the Original Poetical Metre, 4to. In this last work he pretends to have discovered the Hebrew metre, which was supposed to be irretrievably lost. But his hypothesis, though defended by some, has been confuted by Dr. Lowth in his Metricæ Hareanæ Brevis Confutatio, annexed to his lectures De Sacra Poesi Hebræorum.

Hare Island, a low island of Lower Canada, in the middle of the channel of the St. Lawrence, nearly eight miles in length, by the average breadth of about half a mile. It extends in a direction nearly parallel to the shores of the river. The soil is good, but uncultivated; and at each extremity are long and dangerous flats. It is 103 miles below Quebec.

HARFLEUR, a town of Normandy, in the department of the Lower Seine, on the Lezarda. It has some inferior manufactures, and was anciently a place of importance; but its harbour is now filled up. Harfleur was taken by the English in 1415 and 1440. Population 800 It is five miles east of Havre, and forty-nine west of Rouen.

HARFORD, a county of Maryland, United States, bounded north by York county in Pennsylvania, and east by Susquehannah River and Chesapeake Bay. It is watered by Bush River and Deer Creek. Harford is the chief town. Population 21,258.

HARIDI, a serpent formerly worshipped at Achmim in Upper Egypt. 'Upwards of a century ago,' says Mr. Savary, 'a religious Turk called Scheilk Haridi died here. He passed for a saint among the Mahommedans; who raised a monument to him, covered with a cupola, at the foot of the mountain. The people flocked from all parts to offer up their prayers to him. One of their priests, profiting by their credulity, persuaded them that God had made the soul of Scheilk Haridi pass into the body of a serpent. Many of these are found in the Thebais, which are harmless; and he had taught one to obey

his voice. He appeared with his serpent, dazzled the vulgar by his surprising tricks, and pretended to cure all disorders. Some lucky instances of success, due to nature alone, and sometimes to the imagination of the patients, gave him great celebrity. He soon confined his serpent Haridi to the tomb, producing him only to oblige princes and persons capable of giving him a handsome recompense. The successors of this priest, brought up in the same principles, found no difficulty in giving sanction to so profitable a fraud. They added to the general persuasion of his virtue that of his immortality. They had the boldness even to make a public proof of it. The serpent was cut in pieces in presence of the emir, and placed for two hours under a vase. At the instant of lifting up the vase, the priests, no doubt, had the address to substitute one exactly resembling it. A miracle was proclaimed, and the immortal Haridi acquired a fresh degree of consideration. This knavery procures them great advantages. The people flock from all quarters to pray at this tomb; and if the serpent crawls out from under the stone, and approaches the suppliant, it is a sign that his malady will be cured. No human reasoning would persuade these ignorant and credulous Egyptians that they are the dupes of a few impostors: they believe in the serpent Haridi as firmly as in the prophet.'

HARJEDELAN, a province of Sweden in Nordland, about 100 miles long, and from forty to fifty broad; abounding in pastures, cattle, woods, mines, lakes, rivers, and fish.

HARIERS, or HARRIERS, are endowed with an admirable gift of smelling, and are very bold in the pursuit of game. See CANIS and DOG.

HARIORPOOR, or Udiarpur, a town belonging to independent zemindars, in the province of Orissa, fifty miles south-west from Midnapoor. It is in lat. 21° 52′ N., long. 86° 52′ E.

HARIOT, or HERIOT, in law, a due belonging to a lord at the death of his tenant, consisting of the best beast, either horse, or cow, or ox, which he had at the time of his death; and in some manors the best goods, piece of plate, &c., are called hariots.

HARISCHON (Aaron), a learned rabbi, and karaite, in the fifteenth century; who wrote a Hebrew grammar, printed at Constantinople, in 1581: probably the same with Aaron, the Caraite, a Jewish physician at Constantinople, who, about 1294, wrote a commentary on the Pentateuch, printed at Jena, in folio in 1710, and of which there is an original MS. copy in the National Library at Paris.

HARK, *interj.* & *v. n.* Originally the imperative of the verb hark, which signifies to listen, and is a contraction of hearken.

What harmony is this? My good friends, *hark!*
Shakspeare.

Pricking up his ears, to *hark*
If he could hear too in the dark.
Hudibras.

The butcher saw him upon the gallop with a piece of flesh, and called out, *Hark* ye, friend, you may make the best of your purchase. *L'Estrange.*

Hark! methinks the roar that late pursued me,
Sinks like the murmurs of a falling wind. *Rowe.*

Not closest coverts can protect the game:
Hark! the dog opens; take thy certain aim.
Gay's Rural Sports.

Hark how loud the woods
Invite you forth! *Thomson.*

The cottage curs at early pilgrim bark;
Crowned with her pail the tripping milk-maid sings,
The whistling ploughman stalks afield, and *hark!*
Down the rough slope the ponderous waggon rings.
Beattie

Hark! forth from the abyss a voice proceeds,
A long low distant murmur of dread sound,
Such as arises when a nation bleeds
With some deep and immedicable wound.
Byron. Childe Harold.

HARL, *n. s.* The filaments of flax; any filamentous substance.

The general sort are wicker-hives, made of privet, willow, or *harl*, daubed with cow-dung. *Mortimer.*

HARLE, the bark of flax, which, when separated from the useless woody part, called the boon, by proper dressing, becomes itself the useful commodity well known by the name of flax.

HARLEIAN COLLECTION, a most valuable collection of useful and curious MSS. begun near the end of the last century, by R. Harley of Brampton Bryan, esq., afterwards earl of Oxford, and conducted upon the plan of the great Sir Robert Cotton. In August, 1705, he published his first considerable collection; and in less than ten years he had collected together nearly 2500 rare and curious MSS. Soon after this the celebrated Dr. George Hicks, Mr. Anstis, garter king at arms, bishop Nicholson, and many other eminent antiquaries, not only offered him their assistance in procuring MSS. but presented him with several that were very valuable. Being thus encouraged to perseverance by his success, he kept many persons employed in purchasing MSS. for him abroad, giving them written instructions for their conduct. By these means the MS. library was, in 1721, increased to nearly 6000 books, 14,000 original charters, and 500 rolls. His son Edward, earl of Oxford, still farther enlarged the collection; so that when he died, June 16th, 1741, it consisted of 8000 vols. several of them containing distinct and independent treatises, besides many loose papers, which have been since sorted and bound up in volumes; and above 40,000 original rolls, charters, letters patent, grants, and other deeds and instruments of great antiquity. The principal design of making this collection was the establishment of a MS. English historical library, and the rescuing from destruction such national records as had eluded the diligence of preceding collectors: but lord Oxford's plan was more extensive; for his collection abounds also with curious MSS. in every science. This collection is now in the British Museum.

HARLEM ISLE, a small island lying off the north-west coast of Ceylon, about four miles in circumference. Lat. 9° 41′ N., long. 79° 54′ E. This island belongs to the district of Jaffnapatam, and affords excellent feed for horses.

HARL'EQUIN, *n. s.* This name is said to have been given by Francis of France to a busy buffoon, in ridicule of his enemy Charles le Quint. Menage derives it more probably from

a famous comedian that frequented Mr. Harley's house, whom his friends called Harlequino, little Harley.—*Trev.* A buffoon who plays tricks to divert the populace; a jack-pudding; a zani.

The joy of a king for a victory must not be like that of a *harlequin* upon a letter from his mistress.
Dryden.

The man in graver tragick known,
Though his best part long since was done,
Still on the stage desires to tarry;
And he who played the *harlequin*,
After the jest still loads the scene,
Unwilling to retire, though weary. *Prior.*

HARLEQUIN, a buffoon, dressed in party-colored clothes; answering much the same purpose as a merry andrew on mountebank stages, &c. Harlequin is a standing character in modern pantomime entertainments.

HARLES (Theophilus Christopher), an eminent German scholar and critic, was a native of Culmbach, in Suabia. In 1764 he was appointed adjunct of the faculty of philosophy at Erlangen, and the next year obtained the chair of Greek and Oriental literature in the gymnasium of Cobourg. He returned in 1770 to Erlangen, with the title of director of the philological seminary, librarian, and professor of rhetoric and poetry. His first publication was De Præconum apud Græcos officio, 1764; followed by his dissertations, De Pedantismo Philologico, Cobourg, 1765; and De Galantismo Æsthetico et Philologico, 1768. He also wrote the lives of various philologers in Latin, of which the second edition was published at Bremen, 1770, 1772. He edited, besides editions of several of the Greek and Roman classics, a Greek and Latin poetical Anthology, and introductions to the history of Greek and Latin Literature. But the most important of his labors is the second edition of the Bibliotheca Græca of Fabricius, published at Hamburgh, 1790—1809, 12 vols. 4to. His death took place November 2d, 1814, at the age of seventy-six.

HARLEY (Robert), earl of Oxford and Mortimer, was the eldest son of Sir Edward Harley, and born in 1661. At the Revolution Sir Edward and his son raised a troop of horse at their own expense; and, after the accession of king William and queen Mary, he obtained a seat in parliament. His promotions were rapid: in 1702 he was chosen speaker of the house of commons; in 1704 he was sworn of queen Anne's privy council, and made secretary of state; in 1706 he was one of the commissioners for the treaty of Union; and in 1710 was appointed a commissioner of the treasury, and chancellor of the exchequer. A daring attempt was made on his life, March 8th, 1711, by the marquis of Guiscard, a French papist; who, when under examination before a committee of the privy council, stabbed him with a penknife. Of this wound, however, he soon recovered; and was the same year created earl of Oxford, and lord high treasurer, which office he resigned just before the queen's death. In 1715 he was impeached of high treason, and committed to the Tower; but was cleared by trial, and died on the 21st of May, 1724. He was not only an encourager of literature, but the greatest collector in his time of curious books and MSS.

HARLINGEN, a sea-port town of the Netherlands, in Friesland. It stands on the coast of the Zuyder Zee, at the mouth of a large canal, and was only a hamlet till 1234, when it was destroyed by the sea; and, being afterwards rebuilt, became a considerable town. In 1543 and 1579 it was enlarged by William prince of Orange. It is now well fortified, and naturally strong, as the adjacent country can easily be laid under water. The city is square; and the streets are handsome, straight, and clean, with canals in the middle. But, though the harbour is good, vessels of great burden cannot get into it until they are lightened. The manufactures are salt, bricks, tiles, canvas, and paper; a considerable trade is also carried on in all sorts of linen cloth, and the adjacent country yields abundance of corn and pasturage. Population 7349. The town lies fifteen miles west of Lewarden, and is the seat of the naval administration of the province.

HAR'LOT, *n. s.* } Welsh, *herlodes*, a girl.
HAR'LOTRY, *n. s.* } Others for *horelet*, a little whore. Others from the name of the mother of William the Conqueror. *Harlot* is used in Chaucer for a low male drudge. So far Johnson: but the word *hire* clearly supplies the etymology both of this word and whore; to both of which the Goth. *hor;* Dan. *hore*, answers. A whore; a strumpet. This word was, as Dr. Johnson says, formerly given to men as well as women. *Herlod*, in Welsh, is said to signify simply a young man, and *herlodes* a young woman: with us it seems always to have been a disgraceful appellation: harlotry, fornication; a name of contempt.

He was a gentil *harlot* and a kinde,
A better felow shulde a man not find.
Chaucer. Prologue to the Cant. Tales.

He was a jangler, and a goliardeis,
And that was most of sinne and *harlotries*. *Id.*
Thine be this might; I graunt it the;
My King of *Harlotes* shalt thou be.
Id. Romaunt of the Rose.

A peevish self-willed *harlotry*,
That no persuasion can do good upon.
Shakspeare.

Away, my disposition, and possess me with
Some *harlot's* spirit. *Id.*
They help thee by such aids as geese and *harlots*.
Ben Jonson.

In very dark nights sometimes you may find him
With a *harlot* got up on my crupper behind him.
Marvell.

The barbarous *harlots* crowd the publick place;
Go, fools, and purchase an unclean embrace.
Dryden.

Nor shall,
From Rome's tribunal, thy harangues prevail
'Gainst *harlotry*, while thou art clad so thin. *Id.*

HARLOTS were tolerated amongst the Jews, Greeks, and Romans. Fornication indeed was prohibited among the Jews, under several severe penalties; but these they explained as extending only to women of their own nation; hence the word strange woman is often used to signify a harlot. At Athens also the prostitutes were mostly foreigners; and such as debauched an Athenian female were liable to a penalty. Co-

rinth was a remarkable nursery of harlots, and gave birth to the noted Lais. Their accomplishments were often great, in all the polite and elegant parts of female education, viz. philosophy, dancing, singing, rhetoric, &c. Aspasir, the mistress of Pericles, was admired by Socrates for her learning. The more accomplished frequently amassed great fortunes. Phryne offered to rebuild the walls of Thebes, when destroyed by Alexander, on condition that they would perpetuate her memory and profession by an inscription. At Rome they were obliged to fix a bill over their doors, indicating their character and profession. It was also customary for them to change their names, after they had signified to the prætor their intention of leading such a dissolute life. Women whose grandfather, father, or husband, had been a Roman knight, were forbidden by the laws to make a public profession of lewdness.

HARM, *n. s.* & *v. a.* } Sax. aɲm; Goth. Swed. Dan. and Teut. *harm*. Injury; crime; wickedness; mischief; detriment; hurt: to hurt, or do injury.
HARM'FUL, *adj.*
HARM'FULLY, *adv.*
HARM'FULNESS, *n. s.*
HARM'LESS, *adj.*
HARM'LESSLY, *adv.*
HARM'LESSNESS, *n. s.* } The adjectives and adverbs imply the presence or absence of whatever is noxious, criminal, or injurious.

Ye wounded me, ye made me wo bestad;
Of grace, redresse my mortal grefe, as ye
Of all my *harm* the very causer be.
Chaucer. The Court of Love.

And, therto, I saw ner yet, a lesse
Harmful than she was in doing:
I say not that she n' hadde knowyng
What *harme* ywas; or elles, she
Had coulde no gode, so thinketh me.
Id. The Boke of the Duchesse.

A scholar is better occupied in playing or sleeping, than spending his time not only vainly, but *harmfully* in such kind of exercise. *Ascham.*

His dearly loved squire
His spear of heben-wood behind him bare,
Whose *harmful* head, thrice heated in the fire,
Had riven many a breast with pike-head square.
Spenser.

Touching ceremonies *harmless* in themselves, and hurtful only in respect of number, was it amiss to decree that those things that were least needful, and newliest come, should be the first that were taken away? *Hooker.*

She, like *harmless* lightning, throws her eye
On him, her brothers, me, her master; hitting
Each object with a joy. *Shakspeare.*

We, ignorant of ourselves,
Beg often our own *harms*, which the wise Powers
Deny us for our good. *Id.*

What sense had I of her stolen hours of lust?
I saw't not, thought it not, it *harmed* not me. *Id.*

The shipwright will be careful to gain by his labour, or at least to save himself *harmless*, and therefore suit his work slightly, according to a slight price. *Raleigh.*

The earth brought forth fruit and food for man, without any mixture of *harmful* quality. *Id.*

When, through tasteless flat humility,
In dough-baked men some *harmlessness* we see,
'Tis but his phlegm that's virtuous and not he.
Donne.

Let no man fear that *harmful* creature less, because he sees the apostle safe from that poison. *Hall.*

How are we happy still in fear of *harm*?
But *harm* precedes not sin. *Milton.*

He spent that day free from worldly trouble, *harmlessly*, and in a recreation that became a churchman. *Walton.*

Passions ne'er could grow
To *harm* another, or impeach your rest.
Waller.

For flax and oats will burn the tender field,
And sleepy poppies *harmful* harvests yield.
Dryden.

After their young are hatched, they brood them under their wings, lest the cold, and sometimes the heat, should *harm* them. *Ray.*

Secure and free they pass their *harmless* hours,
Gay as the birds that revel in the grove
And sing the morning up. *Tate's Loyal General.*

Compare the *harmlessness*, the credulity, the tenderness, the modesty, and the ingenuous pliableness to virtuous counsels, which is in youth untainted, with the mischievousness, the slyness, the craft, the impudence, the falsehood, and the confirmed obstinacy in an aged long-practised sinner. *South.*

They should be suffered to write on: it would keep them out of *harm's* way, and prevent them from evil courses. *Swift.*

And the loud hunters' shout;
O'er a weak *harmless* flying creature all
Mixed in mad tumult and discordant joy.
Thomson.

Bullets batter the walls which stand inflexible, but fall *harmlessly* into wood or feathers. *Decay of Piety.*

Thus Harold deemed, as on that lady's eye
He looked and met its beam without a thought,
Save admiration glancing *harmless* by.
Byron. Childe Harold.

HARMATTAN, a remarkable periodical wind which blows from the interior parts of Africa towards the Atlantic Ocean. It is described in the Philosophical Transactions as an easterly wind prevailing on that part of the coast of Africa which lies between Cape Verd in lat. 15° N., and Cape Lopez in lat. 1° S., during December, January, and February.

'This wind is by the French and Portuguese, who frequent the Gold coast, called simply the north-east wind, the quarter from which it blows. The English adopt the Fantee word harmattan. It comes on indiscriminately at any hour of the day, at any time of the tide, or at any period of the moon, and continues sometimes only a day or two, sometimes five or six days, and it has been known to last fifteen or sixteen. There are generally three or four returns of it every season. It blows with a moderate force, not quite so strong as the sea-breeze (which blows every day during the fair season from the west, W.S.W., and south-west); but somewhat stronger than the land wind at night from the north and N.N.W. A fog is one of the peculiarities which always accompanies the harmattan. Extreme dryness makes another extraordinary property of this wind. No dew falls during its continuance, nor is there the least appearance of moisture in the atmosphere. Vegetables of every kind are very much injured; all tender plants, and most of the productions of the garden, are destroyed; the grass withers, and becomes dry like hay; the vigorous evergreens likewise feel its pernicious influence; the branches of the

lemon, orange, and lime-trees droop; the leaves become flaccid, wither, and, if the harmattan continues to blow for ten or twelve days, are so parched as to be easily rubbed to dust between the fingers: the fruit of these trees, deprived of its nourishment, and stinted in its growth, becomes yellow and dry, without acquiring half its usual size. The parching effects of this wind are likewise evident on the external parts of the body. The eyes, nostrils, lips, and palate, are rendered dry and uneasy, and drink is often required, not so much to quench thirst, as to remove a painful aridity in the fauces. The lips and nose become sore, and even chapped; and, though the air be cool, yet there is a troublesome sensation of prickling heat on the skin. If the harmattan continues four or five days, the scarf-skin peels off, first from the hands and face, and afterwards from the other parts of the body, if it continues a day or two longer. Those laboring under fluxes and intermitting fevers, however, generally recover in a harmattan. It stops the progress of epidemics: the small pox, remittent fevers, &c., not only disappear, but those laboring under these diseases when an harmattan comes on, are almost certain of a speedy recovery.'

HARMER (Thomas), an oriental scholar and biblical critic, was a native of Norwich, where he was born in 1715. He received his education at a private academy in London, but his progress in the languages of the east was considerable, which is evinced in his annotations on Solomon's Song. But his best work is Observations on divers parts of Scripture, illustrated by the accounts of Travellers in the East, 4 vols. 8vo.; a treatise which has gone through several editions. He died in 1788, minister of a dissenting congregation at Wattesfield, Suffolk.

HARMODIUS, the friend of Aristogiton, who delivered his country from the tyranny of the Pisistratidæ. See ARISTOGITON, and ATTICA. The Athenians, to reward the patriotism of these illustrious citizens, made a law, that no person (according to some), or, as others with more probability affirm, no slave, should ever after be named Aristogiton or Harmodius.

HARMONIA, or HERMIONE, in fabulous history, the wife of Cadmus, both of whom were turned into serpents. See CADMUS. Though many ancient authors make Harmonia a princess of divine origin, the daughter of Mars and Venus, Athenæus, quoting Euhemerus, tells us, that she was only a player on the flute, in the service of the prince of Zidon, previous to her departure with Cadmus. This circumstance renders it probable, that, as Cadmus brought letters into Greece, his wife brought music thither.

HARMONICA. This word, when originally appropriated by Dr. Franklin to that peculiar form or mode of musical glasses which he himself, after a number of happy experiments, first contrived, was written armonica. It is derived from the Greek word ἁρμονια. The Dr., in his letter to F. Beccaria, has given a minute and elegant account of the harmonica. 'You have doubtless heard,' says he, 'the sweet tone that is drawn from a drinking glass, by pressing a wet finger round its brim. One Mr. Puckeridge, a gentleman from Ireland, was the first who thought of playing tunes formed of these tones. He collected a number of glasses of different sizes; fixed them near each other on a table; and tuned them, by putting into them water more or less as each note required. The tones were brought out by pressing his fingers round their brims. He was unfortunately burnt here, with his instrument, in a fire which consumed the house he lived in. Mr. E. Delaval, a most ingenious member of our Royal Society, made one in imitation of it with a better choice and form of glasses, which was the first I saw or heard. Being charmed with the sweetness of its tones, and the music he produced from it, I wished to see the glasses disposed in a more convenient form, and brought together in a narrower compass, so as to admit of a greater number of tones, and all within reach of hand to a person sitting before the instrument; which I accomplished after various intermediate trials, and less commodious forms, both of glasses and construction, in the following manner:—The glasses are blown as near as possible in the form of hemispheres, having each an open neck or socket in the middle. The thickness of the glass near the brim is about the tenth of an inch, or hardly quite so much, but thicker as it comes nearer the neck; which in the largest glasses is about an inch deep, and an inch and a half wide within; these dimensions lessening as the glasses themselves diminish in size, except that the neck of the smallest ought not to be shorter than half an inch. The largest glass is nine inches diameter, and the smallest three inches. Between these are twenty-three different sizes, differing from each other a quarter of an inch in diameter. To make a single instrument, there should be at least six glasses blown of each size; and out of this number one may probably pick thirty-seven glasses (which are different for three octaves with all the semitones) that will be each either the note one wants, or a little sharper than that note, and all fitting so well into each other as to taper pretty regularly from the largest to the smallest. It is true there are not thirty-seven sizes; but it often happens that two of the same size differ a note or half a note in tone, by reason of a difference in thickness, and these may be placed in the other without sensibly hurting the regularity of the taper form. The glasses being chosen, and every one marked with a diamond the note you intend it for, they are to be tuned by diminishing the thickness of those that are too sharp. This is done by grinding them round from the neck towards the brim, the breadth of one or two inches as may be required; often trying the glass by a well tuned harpsichord, comparing the note drawn from the glass by your finger with the note you want, as sounded by that string of the harpsichord. When you come near the matter, be careful to wipe the glass clean and dry before each trial, because the tone is something flatter when the glass is wet, than it will be when drying;—and, grinding a very little between each trial, you will thereby tune to great exactness. The more care is necessary in this, because if you go below your required tone there is no sharpening it again but by grinding somewhat off the brim, which will

afterwards require polishing, and thus increase the trouble. The glasses being thus tuned, you are to be provided with a case for them, and a spindle on which they are to be fixed. My case is about three feet long, eleven inches every way wide within at the biggest end, and five inches at the smallest end; for it tapers all the way to adapt it better to the conical figure of the set of glasses. This case opens in the middle of its height, and the upper part turns up by hinges fixed behind. The spindle is of hard iron, lies horizontally from end to end of the box within, exactly in the middle, and is made to turn on brass gudgeons at each end. It is round, an inch in diameter at the thickest end, and tapering to a quarter of an inch at the smallest.—A square shank comes from its thickest end through the box, on which shank a wheel is fixed by a screw. This wheel serves as a fly to make the motion equable, when the spindle, with the glasses, is turned by the foot like a spinning wheel. My wheel is of mahogany, eighteen inches diameter, and pretty thick, so as to conceal near its circumference about twenty-five pounds of lead.—An ivory pin is fixed in the face of this wheel, about four inches from the axis. Over the neck of this pin is put the loop of the string, that comes up from the moveable step to give it motion. The case stands on a neat frame with four legs. To fix the glasses on a spindle, a cork is first to be fitted in each neck pretty tight, and projecting a little without the neck, that the neck of one may not touch the inside of another when put together, for that would make a jarring. These corks are to be perforated with holes of different diameters, so as to suit that part of the spindle on which they are to be fixed. When a glass is put on, by holding it stiffly between both hands, while another turns the spindle, it may be gradually brought to its place. But care must be taken that the hole be not too small, lest in forcing it up the neck should split; nor too large, lest the glass, not being firmly fixed, should turn or move on the spindle, so as to touch or jar against its neighbouring glass. The glasses thus are placed one in another; the largest on the biggest end of the spindle, which is to the left hand: the neck of this glass is towards the wheel; and the next goes into it in the same position, only about an inch of its brim appearing beyond the brim of the first; thus proceeding, every glass when fixed shows about an inch of its brim (or three quarters of an inch, or half an inch, as they grow smaller) beyond the brim of the glass that contains it; and it is from these exposed parts of each glass that the tone is drawn, by laying a finger on one of them as the spindle and glasses turn round. My largest glass is G, a little below the reach of a common voice, and my highest G, including three complete octaves.—To distinguish the glasses more readily to the eye, I have painted the apparent parts of the glasses within-side, every semitone white, and the other notes of the octave with the seven prismatic colors; viz. C, red; D, orange; E, yellow; F, green; G, blue; A, indigo; B, purple; and C, red again;—so that the glasses of the same color (the white excepted) are always octaves to each other. This instrument is played upon by sitting before the middle of the set of glasses, as before the keys of a harpsichord, turning them with the foot, and wetting them now and then with a sponge and clean water. The fingers should be first a little soaked in water, and quite free from all greasiness; a little fine chalk is sometimes useful, to make them catch the glass and bring out the tone more readily. Both hands are used, by which means different parts are played together.—Observe, that the tones are best drawn out when the glasses turn from the ends of the fingers, and not when they turn to them. The advantages of this instrument are, that its tones are incomparably sweet beyond those of any other; that they may be swelled and softened at pleasure by stronger or weaker pressures of the finger, and continued to any length; and that the instrument, being once well tuned, never again wants tuning.' Some have proposed to use cork instead of the finger, but this substitute does not seem capable of producing the same mellowness and equality of tone with the finger. Alum water is also thought preferable to chalk. From what has already been said, it will easily be perceived, that this instrument requires to be tuned with the nicest degree of delicacy which the laws of temperament will possibly admit. The same rules, however, which are observed in tuning a harpsichord, will be equally effectual in tuning the harmonica; with this only difference, that greater delicacy in adjusting the chords should, if practicable, be attempted. Dr. Edmund Cullen, of Dublin, made what he considered an improvement on this instrument; but it is objected by connoisseurs, that a full bass cannot be executed upon it; and that the complete bass, practicable on the harmonica, is greatly preferable to the chords with which the Dr. proposes to grace each emphatic note, and with which, they allege, he deludes instead of satisfying the ear.'

HARMON'ICAL, *adj.*
HARMON'IC, *adj.*
HARMO'NIOUS, *adj.*
HARMO'NIOUSLY, *adv.*
HARMO'NIOUSNESS, *n. s.*
HAR'MONISE, *v. a.*
HAR'MONY, *n. s.*

Fr. *harmonique*; Greek, *αρμονικος*. Originally from Gr. *αρω*, to fit or suit, and signifies a state of fitness, suitability, or agreement; applied to sounds and to minds, and in both implies adaptation: in music, the adaptation of different modulated sounds to each other; in mind, co-operation of thought, sentiment, or affection: symmetrical; proportionate. Harmonise, to adjust equally.

> On every bough, the birdes herd I syng
> With voice of Angell in hir *harmonie*.
> *Chaucer. The Assemblie of Foules.*

> For al my chambre gan to ringe;
> Through singing of hir *harmony*,
> For instrument nor melody
> Wos no where herde yet, halfe so swete,
> Nor of accorde halfe so mete.
> *Id. Boke of the Duchesse.*

The pleasures of the eye and ear are but the effects of equality, good proportion, or correspondence; so that equality and correspondence are the causes of *harmony*. *Bacon.*

Harmonical sounds, and discordant sounds, are both active and positive; the blackness and darkness are, indeed, but privaties. *Id.*

After every three whole notes, nature requireth, for all *harmonical* use, one half note to be interposed. *Id.*

All the wide-extended sky,
And all the *harmonious* worlds on high,
And Virgil's sacred work shall dye. *Cowley.*

The *harmony* of things,
As well as that of sounds, from discord springs. *Denham.*

In us both one soul,
Harmony to behold in wedded pair!
More grateful than *harmonious* sounds to the' ear. *Milton.*

I no sooner in my heart divined,
My heart, which by a secret *harmony*
Still moves with thine, joined in connexion sweet! *Id.*

The sound
Symphonious, of ten thousand harps that tuned
Angelic *harmonies*. *Id.*
Thoughts that voluntary move *harmonious* numbers. *Id.*

Each sort a consort in that lovely place,
And virgin trebles wed the manly base
From whence the progeny of numbers new
Into *harmonious* colonies withdrew. *Marvell.*

If we look upon the world as a musical instrument, well-tuned, and *harmoniously* struck, we ought not to worship the instrument, but him that makes the musick. *Stillingfleet.*

Love first invented verse, and formed the rhime,
The motion measured, *harmonized* the chime. *Dryden.*

The verse of Chaucer is not *harmonious* to us; they who lived with him, thought it musical. *Id.*

God has made the intellectual world *harmonious* and beautiful without us; but it will never come into our heads all at once: we must bring it home piecemeal. *Locke.*

That all these distances, motions, and quantities of matter should be so accurately and *harmoniously* adjusted in this great variety of our system, is above the fortuitous hits of blind material causes, and must certainly flow from that eternal fountain of wisdom. *Bentley.*

Sure infinite wisdom must accomplish all its works with consummate *harmony*, proportion, and regularity. *Cheyne.*

Not chaos-like, together crushed and bruised;
But as the world, *harmoniously* confused:
Where order in variety we see,
And where, though all things differ, they agree. *Pope.*

So swells each wind-pipe; ass intones to ass,
Harmonic twang of leather, horn, and brass. *Id.*

Harmony is a compound idea, made up of different sounds united. *Watts.*

Now the soft hour
Of walking comes for him who lonely loves
To seek the distant hills, and there converse
With Nature; there to *harmonize* his heart,
And in pathetic song to breath around
The *harmony* to others. *Thomson.*

Every copse
Deep-tangled, tree irregular and bush
Bending with dewy moisture, o'er the heads
Of the coy quiristers that lodge within,
Are prodigal of *harmony*. *Id. Seasons.*

Then let the winds howl on! their *harmony*
Shall henceforth be my music. *Byron's Childe Harold.*

HARMONY. The sense which the Greeks gave to this word, in their music, is not easy to be determined. In the ancient treatises that are extant harmony appears to be that department whose object is the agreeable succession of sounds, merely considered as high or low; in opposition to the two others called rhythmica and metrica, which have their principle in time and measure. This leaves our ideas concerning that aptitude of sound vague and undetermined; nor can we fix them without studying for that purpose all the rules of the art; and, even after we have done so, it will be very difficult to distinguish harmony from melody, unless we add to the last the ideas of rhythmus and measure; without which, in reality, no melody can have a distinguishing character: whereas harmony is characterised by its own nature, independent of all other quantities except the chords or intervals which compose it. It appears by a passage of Nicomachus, and by others, that they likewise gave the name of harmony to the chord of an octave, and to concerts of voices and instruments, which performed in the distance of an octave one from the other, and which is more commonly called antiphone. Harmony, according to the moderns, is a succession of chords agreeable to the laws of modulation. For a long time this harmony had no other principle but such rules as were almost arbitrary, or solely founded on the approbation of a practised ear, which decided concerning the agreeable or disagreeable succession of chords, and whose determinations were at last reduced to calculation. But F. Mersenne and M. Saveur having found that every sound, however simple in appearance, was always accompanied with other sounds less sensible, which constitute with itself a perfect chord-major; with this experiment M. Rameau set out, and upon it formed the basis of his harmonic system, which he extended to many volumes. Signior Tartini, taking his route from an experiment which is more delicate, yet not less certain, reached conclusions similar to those of Rameau, by pursuing a path whose direction seems quite opposite. According to M. Rameau, the treble is generated by the bass; Signior Tartini makes the bass result from the treble. One deduces harmony from melody, and the other supposes the contrary. To determine from which of the two schools the best performances are likely to proceed, no more is necessary than to investigate the end of the composer, and discover whether the air is made for the accompaniments, or the accompaniments for the air. At the word *system*, in Rousseau's Musical Dictionary, is given a delineation of that published by Signior Tartini. Here he continues to speak of M. Rameau, whom he has followed through this whole work, as the artist of greatest authority in the country where he writes. In reality, when this author took it in his head to dignify with the title of demonstration the reasonings upon which he established his theory, every one turned the arrogant pretence into ridicule. The Academy of Sciences loudly disapproved a title so ill founded, and so gratuitously assumed; and M. Estive, of the Royal Society at Montpelier, has shown him, 'that, even to begin with this proposi-

tion, that according to the law of nature sounds are represented by their octaves, and that the octaves may be substituted for them, there was not any one thing demonstrated or even firmly established, in his pretended demonstration.' But without quoting his arguments, which are too long for insertion, we readily grant, that the system of harmony by M. Rameau is neither demonstrated, nor capable of demonstration. But it will not follow, that any man of invention can so easily and so quickly subvert those aptitudes and analogies on which the system is founded. Every hypothesis is admitted to possess a degree of probability proportioned to the number of phenomena for which it offers a satisfactory solution. The first experiment of M. Rameau is, that every sonorous body, together with its principal sound and its octave, gives likewise its twelfth and seventeenth major above; which being approximated as much as possible, even to the chords immediately represented by them, return to the third, fifth, and octave, or, in other words, produce perfect harmony. This is what nature, when solicited, spontaneously gives; this is what the human ear, unprepared and uncultivated, imbibes with ineffable avidity and pleasure. We do not contend for the truth of M. Rameau's second experiment. Nor is it necessary we should. The first, expanded and carried into all its consequences, resolves the phenomena of harmony in a manner sufficient to establish its authenticity and influence. The difficulties for which it affords no solution are too few and trivial either to merit the regard of an artist, or a philosopher, as M. D'Alembert, in his Elements, has clearly shown. Rousseau and his opponent are agreed in this, that the harmonics conspire to form one predominant sound; and are not to be detected but by the nicest organs, applied with the deepest attention. It is equally obvious, that, in an artificial harmony, by a proper management of this wise institution of nature, dissonances themselves may be either entirely concealed or considerably softened. So that, since by nature sonorous bodies in actual vibration are predisposed to exhibit perfect harmony, and since the human ear is fabricated in such a manner as to perceive it, the harmonical chaos of M. Rousseau has in fact no existence. Nor does it avail him to pretend, that, before the harmonics can be extinguished, sonorous bodies must be impelled with a force which alters the chords, and destroys the purity of the harmony; for this position is equally false both in theory and practice: in theory, because an impulse, however forcible, must proportionally operate on all the parts of any sonorous body, so far as it extends; in practice, because the human ear actually perceives the harmony to be pure. What effects his various manœuvres upon the organ may have, we leave to such as have leisure and curiosity enough to try the experiments; but it is apprehended, that, when tried, their results will leave the system of Rameau, particularly as remodelled by D'Alembert, in its full force. Of all the whims and paradoxes maintained by this philosopher, none is more extravagant than his assertion, that every chord, except the simple unison, is displeasing to the human ear; nay, that we are only reconciled to octaves themselves, by being inured to hear them from our infancy. Strange, that nature should have fixed this invariable proportion between male and female voices, whilst at the same time she inspired the hearers with such violent prepossessions against it, as were invincible but by long and confirmed habit. See Music, &c.

Harmony, Direct, is that in which the bass is fundamental, and in which the upper parts preserve among themselves, and with that fundamental bass, the natural and original order which ought to subsist in each of the chords that compose this harmony.

Harmony, Inverted, is that in which the fundamental or generating sound is placed in some of the upper parts, and when some other sound of the chord is transferred to the bass beneath the others.

Harmony, a village of the United States, in the county of Gibson Indiana; famous as a recent property of the eccentric but benevolent Mr. Owen. It is seated on the Wabash, and is so called from being settled by a sect called the Harmonists, who held their property in common, and sold it to Mr. Owen. They had a very extensive establishment here for the manufacture of wool, and their Merino cloth was said not to be surpassed by any in the United States. They also cultivated the vine.

HARMOSTA, or Harmostes, Greek Ἁρμοστης from ἁρμοω, to adapt. In antiquity, a magistrate among the Spartans, whereof there were several, whose business was to look to the building of citadels, and repairing the forts and fortifications.

HARMOSYNIANS, ἁρμοσυνοι, in antiquity, magistrates among the Spartans, who, after the death of Lycurgus, were appointed to enforce the observance of that law which required married women to wear veils in the streets; whereby they were distinguished from single females, who were allowed to go abroad with their faces uncovered.

HARNESS, *n. s.* & *v. a.* Fr. *harnois;* supposed from Runick *iern* or *hiern*; Welsh and Erse *hiairn*, iron. Mr. Thomson says, from Goth. *her*, an army. Armour; defensive furniture of war; somewhat antiquated. The traces of draught-horses, particularly of carriages of pleasure: to dress in armour; or to fix horses in their traces.

Harness the horses, and get up the horsemen, and stand forth with your helmets. *Jer.* xlvi. 4.

These folke taken litel regard of the riding of Goddes son of heven, and of his *harneis*, whan he rode upon the asse, and had non other *harneis* but the poure clothes of his disciples, ne we rede not that ever he rode on any other beste.
Chaucer. The Persones Tale.

But all hir horse *harneis* and other gere,
Was in a sute, according everichone,
As ye have herd the foresaid trumpets were.
Id. The Floure and the Leaf.

Before the door her iron chariot stood,
All ready *harnessed* for journey new. *Spenser.*

A goodly knight, all dressed in *harness* meet,
That from his head no place appeared to his feet.
Id.

Of no right, nor colour like to right,
He doth fill fields with *harness*. *Shakspeare.*
He was *harnessed* light, and to the field goes he.
Id.

Or wilt thou ride? thy horses shall be trapped,
Their *harness* studded all with gold and pearl. *Id.*

Were I a great man, I should fear to drink:
Great men should drink with *harness* on their throats.
Id.

When I plow my ground, my horse is *harnessed* and chained to my plough.
Hale's Origin of Mankind.

Their steeds around,
Free from their *harness*, graze the flowery ground.
Dryden.

Full fifty years *harnessed* in rugged steel,
I have endured the biting winter's blast! *Rowe.*

To the *harnessed* yoke
They lend their shoulder, and begin their toil.
Thomson.

HARNESS comprehends the whole equipage and accoutrements of a cavalier heavily armed; as casque, cuirass, &c. Some derive the word from the Greek ἀρναξις, a lamb's skin, because they anciently covered themselves therewith. Du Cange observes, that the word harnesium is used in the corrupt Latin in the same sense, and that it comes from the High Dutch harness or harnisch. Others derive it from the Italian arnese; others from the Celtic harnes, a cuirass. —Under king Richard II. stat. 7, c. 13, it was expressly forbidden to ride in harness with launcegays. In stat. 2 Henry VI., c. 14, harness seems to include all kinds of furniture for offence as well as defence, both of men and horses; as swords, buckles for belts, girdles, &c.

HARO, HAROL, or HAROU, or Clamour de Haro, in the Norman customs, was a cry or formula of invoking the assistance of justice against the violence of some offender, who, upon hearing the word haro, was obliged to desist, on pain of being severely punished for his outrage, and to go with the party before the judge. The word is commonly derived from ha and roul, as being supposed an invocation of the sovereign power, to assist the weak against the strong; from Raoul first duke of Normandy, who, about A. D. 912, rendered himself venerable by his strict justice: so that they called on him even after his death when they suffered any oppression. Some derive it from Harold king of Denmark, who in 826 was made grand conservator of justice at Mentz. Others from the Danish aa, rau, q. d. help me; a cry raised by the Normans in flying from a king of Denmark, named Roux, who made himself duke of Normandy. The letters of the French chancery had formerly this clause, Nonobstant clameur de haro, &c. The haro had anciently such vast power, that a poor man of Caen, named Asselin, in virtue of it, arrested the corpse of William the Conqueror, in the middle of the funeral procession, till his son Henry paid the value of the land whereon the chapel was built in which he was interred.

HAROLD I. and III. See ENGLAND.

HAROMSZEK, a province of Transylvania, at the south-east corner of the country of the Szeklers, adjoining to European Turkey. The Carpathian Mountains are its barrier on this side. It is divided into the upper and lower circles, containing seven districts, and is intersected by various steep mountains, but has valleys along the banks of the Alt and the Teketengy, beautifully fertile. Its extent is about 800 square miles; and there are 4080 families who pay taxes. The inhabitants cultivate flax, and manufacture linen.

HARP, *n. s.* & *v. n.* } Sax. þeapp; Fr. *harpe*.
HARP'ER, *n. s.* } It is used through both
HARP'SICHORD, *n. s.* } the Teutonic and Roman dialects, *Romanusq; lyrâ plaudat tibi, Barbarus* harpâ. Ven. Fort. An instrument commonly struck with the finger; a constellation; one who plays on the harp: to touch any passion; to dwell on a subject.

Things without life giving sound, whether pipe or *harp*, except they give a distinction in the sounds, how shall it be known what is piped or *harped*?
1 *Cor.*

I heard the voice of *harpers harping* with their *harps*. *Revelations.*

There herde I playing on an *harpe*
That ysounded bothe well and sharpe,
Hym Orpheus, full craftely
And on this side fast by,
Ysatte the *harper* Orion,
And Gaeides Chirion,
And other *harpers* many one,
And the British Gaskirion;
And small *harpers* with hir glees
Satte under hem in divers sees.
Chaucer. House of Fame.

Such as was Orpheus, that, when strife was growen
Amongst those famous ympes of Greece did take
His silver *harpe* in hand, and shortly friends them make. *Spenser's Faerie Queene.*

Arion, when through tempest's cruel wreck,
He forth was thrown into the greedy seas,
Through the sweet musick which his *harp* did make,
Allured a dolphin him from death to ease. *Id.*

Gracious duke,
Harp not on that, nor do not banish reason
For inequality; but let your reason serve
To make the truth appear.
Shakspeare. Measure for Measure.

For thy good caution, thanks:
Thou'st *harped* my fear aright. *Id. Macbeth.*

He seems
Proud and disdainful, *harping* on what I am,
Not what he knew I was.
Id. Antony and Cleopatra.

Never will I trust to speeches penned,
Nor to the motion of a schoolboy's tongue:
Nor woo in rhime, like a blind *harper's* song.
Shakspeare.

Next shines the *harp*, and through the liquid skies
The shell, as lightest, first begins to rise;
This when sweet Orpheus struck, to list'ning rocks
He senses gave, and ears to withered oaks. *Creech.*

The helmed cherubim,
And sworded seraphim,
Are seen in glittering ranks with wings displayed,
Harping in loud and solemn quire,
With unexpressive notes to heaven's new-born heir.
Milton.

They touched their golden *harps*, and hymning praised
God and his works. *Id.*

Nor wanted tuneful *harp*, nor vocal quire;
The muses sung, Apollo touched the lyre.
Dryden.

You *harp* a little too much upon one string.
Collier.

I'm the god of the *harp*: stop my fairest:—in vain;
Nor the *harp*, nor the *harper*, could fetch her again.
Tickell.

The HARP is of a triangular figure, and held upright between the legs of the performer. The harp was the favorite musical instrument of the Britons and other northern nations in the middle ages; as is evident from their laws, and various passages in their history. By the laws of Wales, a harp was one of the three things that were necessary to constitute a gentleman, or a freeman: and none could pretend to that character who had not one of these favorite instruments, or could not play upon it. To prevent slaves from pretending to be gentlemen, it was expressly forbidden to teach, or to permit, them to play upon the harp; and none but the king, the king's musicians, and gentlemen, were allowed to have harps in their possession. A gentleman's harp was not liable to be seized for debt; because the want of it would have degraded him from his rank, and reduced him to that of a slave. The harp was in no less estimation and universal use among the Saxons and Danes. Those who played upon this instrument were declared gentlemen by law; their persons were esteemed inviolable, and secured from injuries by very severe penalties; they were readily admitted into the highest company, and treated with distinguished marks of respect wherever they appeared. King David is usually painted with a harp, but we have no testimony in all antiquity that the Hebrew harp, which they called chinnor, was any thing like ours. On a Hebrew medal of Simon Maccabæus we see two sorts of musical instruments; but they are both very different from our harp, and consist of only three or four strings. All authors agree, that our harp is very different from the lyra, cithara, or barbiton, used among the Romans. Fortunatus, lib. vii. carm. 8. Romanusque lyrâ plaudat tibi, Barbarus harpâ, mentions it as an instrument of the barbarians.

HARPS, ANCIENT:—Fig. 1. Plate HARPS, is a well authenticated representation of a Greek harp or lyre. Fig. 2. represents a trigonum or triangular harp, taken from an ancient painting in the museum of the king of Naples, in which it is placed on the shoulder of a little dancing Cupid, who supports the instrument with his left hand, and plays upon it with his right. The trigonum is mentioned by Athenæus, lib. iv. and by Julius Pollux, lib. iv. cap. 9. According to Athenæus, Sophocles calls it a Phrygian instrument; and one of his dipnosophists tells us, that a certain musician, named Alexander Alexandrinus, was such an admirable performer upon it, and had given such proofs of his abilities at Rome, that he made the inhabitants μησομανιεν, 'musically mad.' Fig. 3 is a variety of the same instrument. Fig. 4 is the Theban harp, according to a drawing made from an ancient painting in one of the sepulchral grottos of the first kings of Thebes, and communicated by Mr. Bruce to Dr. Burney. The performer is clad in a habit made like a shirt, such as the women still wear in Abyssinia, and the men in Nubia. It reaches down to his ancles; his feet are without sandals, and bare; his neck and arms are also bare; his loose white sleeves are gathered above his elbows; and his head is closely shaved. His left hand seems employed in the upper part of the instrument, among the notes in alto, as if in an arpeggio; while, stooping forwards, he seems with his right hand to be beginning with the lowest string and promising to ascend with the most rapid execution: this action, so obviously represented by an indifferent artist, shows that it was a common one in his time; or, in other words, that great hands were then frequent, and consequently that music was well understood and diligently followed.

HARP, THE BELL, a musical instrument of the string kind, thus called from the players on it swinging it about, as a bell on its basis. It is about three feet long; its strings, which are of no determinate number, are of brass or steel wire, fixed at one end, and stretched across the sound-board by screws fixed at the other. It takes in four octaves, according to the number of the strings, which are struck only with the thumbs, the right hand playing the treble, and the left hand the bass: and, in order to draw the sound the clearer, the thumbs are armed with a little wire pin. See Plate HARPS, fig. 5.

HARP, THE IRISH, represents the harp of Brian Boiromh, king of Ireland, slain in battle with the Danes, A. D. 1014, at Clontarf. His son Donagh having murdered his brother Teig, A. D. 1023, and being deposed by his nephew, retired to Rome, and carried with him the crown, harp, and other regalia of his father, which he presented to the pope in order to obtain absolution. Adrian IV. alleged this as one of his principal titles to this kingdom, in his bull transferring it to Henry II. These regalia were kept in the Vatican till the pope sent the harp to Henry VIII. with the title of Defender of the Faith; but kept the crown, which was of massive gold. Henry gave the harp to the first earl of Clanricard; in whose family it remained till the beginning of the eighteenth century, when it came by a lady of the De Burgh family into that of M'Mahon of Clenagh in the county of Clare, after whose death it passed into the possession of commissioner M'Namara of Limerick. In 1782 it was presented to the right honorable William Conyngham, who deposited it in Trinity College library. It is thirty-two inches high, and of extraordinary good workmanship; the sounding board is of oak, the arms of red sallow; the extremity of the uppermost arm in part is capped with silver, extremely well wrought and chiseled. It contains a large crystal set in silver, and under it was another stone now lost. The buttons or ornamental knobs at the sides of this arm are of silver. On the front arm are the arms, chased in silver, of the O'Brien family, the bloody hand supported by lions. On the sides of the front arm, within two circles, are two Irish wolf dogs cut in the wood. The holes of the sounding board, where the strings entered, are neatly ornamented with escutcheons of brass carved and gilt; the larger sounding holes have been orna-

mented, probably with silver, as they have been the object of theft. This harp has twenty-eight keys, and as many string holes, consequently there were as many strings. The foot-piece or rest is broken off, and the parts round which it was joined are very rotten. The whole bears evidence of an expert artist.

HARP, THE WELSH, or the TRIPLE HARP, has ninety-seven strings or chords in three rows, extending from C in the tenor cliff to double G in alt, which make five octaves: the middle row is for the semitones, and the two outside rows are perfect unisons. On the bass side, which is played with the right hand, there are thirty-six strings; on the treble side, twenty-six; and in the middle row, thirty-five strings. There are two rows of pins or screws on the right side, serving to keep the strings tight in their holes, which are fastened at the other end to three rows of pins on the upper side. The harp, within the last sixty years, has been in some degree improved by the addition of eight strings to the unison, viz. from E to double F in alt. This instrument is struck with the finger and thumb of both hands. Its music is much like that of the spinet, all its strings going from semitone to semitone; whence some call it an inverted spinet. It is capable of a much greater degree of perfection than the lute.

HARPAGINES, Αρπαγες, in antiquity, were hooks of iron, hanging on the top of a pole, which, being secured with chains to the masts of ships, and then let down with great velocity into the enemy's vessels, caught them up into the air. By way of defence against these machines, they covered their ships with hides, which broke and blunted the force of the iron. The harpagines were invented by Anacharsis the Scythian philosopher.

HARPAGIUS, the preserver of Cyrus, according to Herodotus, and afterwards one of his generals, who subdued Asia Minor. See PERSIA.

HARPALUS, a Greek astronomer, who flourished about A. A. C. 480, corrected the cycle of eight years invented by Cleostratus; and proposed a new one of nine years, in which he imagined the sun and moon returned to the same point. But Harpalus's cycle was afterwards altered by Meton, who added ten full years to it. See CHRONOLOGY.

HARPALYCE, in fabulous history, the daughter of Lycurgus king of Thrace, and queen of the Amazons, who by her valor set her father at liberty, after he had been taken prisoner by the Getes.

HARPASA, a town of Caria, on the Harpasus, famous for an immense rocking stone, which was moveable by the finger, but could not be displaced by any force.

HARPATH, a river of the United States, in Tennessee, which runs into the Cumberland, fourteen miles south-east of Clarksville.

HARPE (Jean François de la) was born at Paris on the 20th of November, 1739. He lost his father, who was captain of artillery, when he was very young, and was left in a state of extreme poverty. By some accident he was introduced to M. Asselin, principal of the college of Harcourt, who, hearing him recite some French verses with an elegance and taste superior to his years, received him amongst his pupils, and shortly after obtained a pension for him. The patronage of his benevolent friend was happily bestowed, and no care was omitted in the completion of his studies. La Harpe commenced his public career in letters by poems called Heroides, which were then much in vogue. The Epistle of Barnevelt to Traman his friend, by Dorat; and that of a monk of La Trappe to the Abbé de Rance, by La Harpe, were very popular. These trifles were but the prelude to nobler success. To a young man who had destined himself to a literary life, two paths were open,—the honors of the academy and those of the theatre. A prize obtained at the French academy, or a successful drama, would remove the first difficulties, admit him into the higher circles, and procure him elevated protectors. La Harpe almost in the same moment attempted both, and his first efforts in each were successful. In the Eulogy on Fenelon the writer seems to be clothed with the mantle of that illustrious prelate, to speak worthily of his talents and virtues. To the intrinsic merit of this eulogy, one of the finest composed by La Harpe, was joined the extraneous and accidental interest of being proscribed by the minister, and the work was from that but the more eagerly sought for. The true chef d'œuvre of M. de la Harpe, however, in these compositions, is the Eulogy on Racine, a subject entirely his own choice. There is nothing to censure in it but an excess of severity in speaking of the great Corneille. The year 1775 was celebrated in our author's life, he having obtained in it both the prize of eloquence and that of poetry. The subject of the oration was an Eulogy on Catinat. It was difficult that an orator, absolutely a stranger to the military art, should succeed in depicting the exploits of one of the greatest generals. M. de la Harpe had also, as a competitor, a man of merit, protected at court, not unsuccessful in letters, and who had made tactics a particular study. The orator was not moved by any of these obstacles. The academy sometimes proposed particular questions, and in 1767 the prize for the following was gained by La Harpe—'Of the Miseries of War, and the Advantages of Peace.' This discourse was marked by the purity and elegance of its diction. So many triumphs opened at length the doors of the academy to our author, and he succeeded to Colardeau.

Not to interrupt the history of our author's academic success, we have forborne till now to speak of his tragedies. Long before he had obtained so many honors, he had made himself known by a tragedy entitled Warwick, which was represented before he was twenty-four years of age, and gave proofs of distinguished talents. His other pieces, though written with much art, and finely conceived, are far from having that original and bold color belonging to the former. Coriolanus is a character consonant to our author's feelings; and Philoctetes offered to him another of the same kind. The other tragedies of M. de la Harpe are inferior to those we have noticed; yet they are read with pleasure, being written in

an elegant style, and possessing that sweetness which results from a due observance of the rules of composition.

We now quit the poetical productions of M. de la Harpe, to consider another great feature of his literary character. 'Let us suppose him stripped,' says M. Gaillard, 'of his other works, his tragedies, his poetry of various kinds, his academical discourses; let him no longer be deemed a poet or orator; let us now view alone the critic:—How great will the space be, how splendid the fame he will yet enjoy in literature! How has he graced and ennobled that function of journalist, which so many before and after him have degraded!' The correspondence of M. de la Harpe with the grand duke of Russia gives a just and animated picture of the authors who flourished at the period of the correspondence. It abounds with curious details respecting their works, talents, and manners; and contains a variety of anecdotes of literature, and of the arts and sciences. We are now come to the work which places the seal on the literary reputation of M. de la Harpe, his Cours de Litterature, Ancienne et Moderne, which justly entitles him, in the beginning of the nineteenth century, to the honorable apellation of the French Quintilian.

After the first crash of the revolutionary earthquake had overturned the ancient monarchy of France, and thrown up in its stead but the tyranny of Robespierre, M. de la Harpe attempted to expose to his deluded countrymen the miserable state to which they were reduced. His efforts were, however, unsuccessful: but they procured for himself a dungeon. He had, however, the happiness to be forgotten in his confinement, from which he was liberated shortly after the 9th Thermidor. He re-appeared at the Lyceum, where it was observed that misfortune had added new energy to his eloquence; and it was in the midst of a numerous audience that he boldly and ingenuously renounced his errors! A new storm arose, and M. de la Harpe was driven to seek an asylum in a spot impenetrable to all but a faithful friendship. He was deprived of exercise; and the effect on his health was perceptible when he again appeared in public. His health henceforth sensibly declined, and he expired November, An 11. On the evening preceding his death M. Fontanes called to see him: he was listening to the prayers for the sick; and, as soon as they were concluded, he stretched forth his hand to M. Fontanes, and said, 'I am grateful to divine mercy for having left me sufficient recollection to feel how consoling these prayers are to the dying.'

Harpe, in mythology, a crooked sword wherewith Mercury cut off Argus's head, and Perseus that of Medusa.

Harp'ing-iron, *n. s.* } Fr. *harponeur*; Lat. *harpago*. A barbed dart, with which whales are struck and caught: one who throws the harpoon.
Harpoon', *n. s.* }
Harpoon'er, *n. s.* }

Harpings, *n. s.* the fore parts of the wales which encompass the bow of a ship, and are fastened to the stem, being thicker than the after part of the wales, in order to strengthen the ship in this place, where she sustains the greatest shock of resistance in plunging into the sea, or dividing it, under a great pressure of sail.

Harpocrates, in mythology, the son of Isis and Osiris; an Egyptian deity, represented with his fingers applied to his mouth, denoting that he is the god of silence. His statue was fixed in the entrance of most of the Egyptian temples, and he was commonly exhibited under the figure of a young man naked, crowned with an Egyptian mitre, holding in one hand a cornucopia, and in the other the flower of lotus, and sometimes bearing a quiver.

Harpocration (Valerius), a celebrated ancient rhetorician of Alexandria, who wrote an excellent Lexicon of the ten orators of Greece. Aldus first published this lexicon in Greek at Venice in 1603. Many learned men have labored upon it; but the best edition was given by James Gronovius at Leyden in 1696.

Harponully, or Harponhelly, a district of South Hindostan, bounded on the north by the Toombuddra River, and situated in about the fifteenth degree of north latitude. It is not so hilly as adjacent districts, but there are some strong positions, the principal of which is Oochinadroog. The villages are numerous and well populated.

In 1774 this territory was conquered by Hyder, and added to his dominions. In 1786 Tippoo completely subdued it, and sent the rajah prisoner to Seringapatam; on the fall of which the heir took possession of Harponully, which is now tributary to the East India Company. The rights of the Nizam to this district were ceded to the Company in 1800. It has since much improved, and now forms part of the Bellary collectorship under the Madras presidency.

Harponully, the capital of the above district, is 170 miles north by west from Seringapatam.

The Harpoon, or Harping Iron, is a spear or javelin used to strike the whales in the Greenland fishery. It is furnished with a long staff, having at one end a broad and flat triangular head, sharpened at both edges, so as to penetrate the whale with facility: to the head of this weapon is fastened a long cord, called the whale line, which lies carefully coiled in the boat, in such a manner as to run out without being interrupted or entangled. See Whale-Fishery. The gun harpoon is a kind of fire-arm for discharging harpoons at whales, and thereby killing them more easily and expeditiously than formerly, when the harpoons were thrown by the hand. In the Transactions of the Society for Encouraging Arts for 1786, we have an account of the first fish struck in this manner in 1784. The gun was of the blunderbuss construction, loaded with four common tobacco pipes full of glazed powder; the fish was shot at the distance of ten fathoms, the harpoon going into her back up to the ring; and she was killed in about an hour. In 1785 three whales were killed in this manner; four in 1786, and three in 1787. In the Philosophical Transactions for 1789 we have accounts of a number of whales killed in this manner. The instrument appears to be

extremely useful in calm weather, as the whale, though a timorous creature, will frequently allow a boat to approach it within twenty, fifteen, or even ten fathoms, all of which distances are within reach of the gun harpoon, though not within reach of that thrown by the hand. It is now however seldom used; the continual damp of the northern regions often preventing the powder from firing, and the Greenlanders hating all innovations on their ancient customs.

HARPY, *n. s.* Lat. *harpyia.* The harpies were a kind of birds which had the faces of women, and foul long claws; very filthy creatures: figuratively, a ravenous wretch; an extortioner.

When fell Oppression in his *harpy* fangs,
From Want's weak grasp the last sad morsel bears,
Can ye allay the heart-wrung parent's pangs,
Whose famished child craves help with fruitless tears?
Beattie.

HARPYIÆ, the Harpies (ΑΡΠΥΙΑΙ), in mythology, were a rapacious impure sort of monsters, with wings and ears like bears, bodies like vultures, faces like women, and feet and hands hooked like the talons of birds of prey. The ancients believed the harpies to be genii or demons. Some make them the daughters of Oceanus and Terra; whence Servius says, that they inhabited an island, half on land, and half in water. Valerius Flaccus makes them the daughters of Typhon. There were three harpies, Aëllo, Ocypete, and Celœno, which last Homer calls Podarge. Hesiod in his Theogony, ver. 267, only reckons two, Aëllo and Ocypete, and makes them the daughters of Thaumas and Electra, affirming that they had wings, and went with the rapidity of the wind. Pherecydes relates, that the Boreades expelled them from the Ægean and Sicilian Seas, and pursued them as far as the islands which he calls Plotæ, and Homer Calynæ; since called Strophades. Vossius (De Idolo, lib. iii. cap. 99, p. 63), thinks that the ancients, by the harpies, could mean nothing else but the winds; and that it was on this account they were made daughters of Electra, the daughter of Oceanus. Such is the opinion of the scholiasts of Apollonius, Hesiod, and Eustathius. Mr. Bryant supposes that they were priests in Bithynia, who, on account of their repeated acts of violence and cruelty, were driven out of the country; their temple was called Arpi, and the environs Arpiai, and he observes that Harpya, Αρπνια, was of old the name of a place.

HAR'QUEBUSS, *n. s.* } Ital. *archibuso.* A
HARQUEBUSSIER', *n. s.* } hand-gun: one armed with a harquebuss.

Twenty thousand nimble *harquebussiers* were ranged in length, and but five in a rank. *Knolles.*

A HARQUEBUSS is of the length of a musket, usually cocked with a wheel. It carries a ball weighing 1⅛ oz. There was also a larger sort, called the great harquebuss, used for the defence of strong places, which carried a ball of about 3½ ozs. They are now little used except in some old castles and garrisons.

HARRADI. See HARADI.

HARRIDAN, *n. s.* Corrupted from haridelle, a worn-out worthless horse. A decayed strumpet.

She just endured the winter she began,
And in four months a battered *harridan.*
Swift.

HARRINGTON (James), an eminent English writer in the seventeenth century. He was born at Upton and educated at Oxford; and, after travelling for some years on the continent, he was admitted one of the privy chamber extraordinary to Charles I. Though democratic in his principles, he served the king with great fidelity, and found means to attend him on the scaffold, when he received a token of his majesty's affection. After the death of king Charles, he wrote his Oceana; a kind of political romance, in imitation of Plato's Commonwealth, which he dedicated to Oliver Cromwell. It is said, that when Oliver perused it, he declared that 'the gentleman had written very well, but must not think to cheat him out of his power and authority; for that what he had won by the sword, he would not suffer himself to be scribbled out of.' This work was attacked by several writers, against whom he defended it. Besides writing to promote republican principles, he instituted a nightly club in the New Palace-Yard, Westminster; which was called the Rota, and continued till the secluded members of parliament were restored by general Monk. In 1661 he was committed to the Tower for treasonable practices, but the charge was never verified. He was conveyed to St. Nicholas's Island, and thence to Plymouth, where he fell into frenzy, owing, it is said, to having drunk great quantities of guaiacum. Having obtained his liberty by means of the earl of Bath, he was carried to London and died in 1677. He published several other works, which were first collected by Toland, in 1 vol. folio, in 1700; but a more complete edition was published in 1737, by the Rev. Dr. Birch.

HARRINGTON (Sir John), an ingenious English poet, the son of John Harrington, esq., who was committed to the Tower by queen Mary, for holding a correspondence with her sister Elizabeth; who, when she came to the crown, stood sponsor to this son, and afterwards knighted him. Before he was thirty, he published a translation of Ariosto's Orlando Furioso. A collection of his works has been printed, entitled Nugæ Antiquæ. He was created a knight of the Bath by James I., and in 1603 a baron, by the title of lord Harrington. He attended the princess Elizabeth, after her marriage with the elector palatine, to Heidelburg, in April, 1613, and died at Worms, August the 24th, 1613, aged fifty-one.

HARRIOT (Thomas), an eminent algebraist, born at Oxford in 1560, where he took the degree of B. A. in 1579. Being distinguished for his mathematical learning, he was recommended to Sir Walter Raleigh, who, in 1585, sent him with the colony, under Sir Richard Grenville, to Virginia. After having remained there about a year, he published a topographical description of it. About 1588 he was introduced by his patron, Sir Walter Raleigh, to Henry earl of Northumberland, who allowed him a pension of £120 per annum. He spent many years in Sion College; where he died in July 1621, of a can-

cer in his lip, and was buried in the church of St. Christopher, where a handsome monument was erected to his memory. He was one of the first mathematicians of the age in which he lived, and will always be remembered as the inventor of the present improved method of algebraical calculation; which was adopted by Des Cartes, and for a considerable time imposed upon the French nation as his own invention; but the theft was at last detected by Dr. Wallis, in his History of Algebra, where our author's invention is accurately specified. His works are, 1. A brief and true Report of the New found Land of Virginia; of the commodities there found, and to be raised, &c. 2. Artis analyticæ praxis ad æquationes algebraicas nova expedita, et generali methodo resolvendas, e posthumis Thomæ Harrioti, &c. 3. Ephemeris Chyrometrica; MS. in the library of Sion College. He left several other MSS., which were inspected by Dr. Zach, astronomer to the duke of Saxe Gotha, in 1784, at Petworth, in Sussex, the seat of the earl of Evremont, a descendant of Henry earl of Northumberland. Dr. Zach published an account of them in the Astronomical Ephemeris for 1788: from which it appears that Harriot had made great discoveries in astronomy; particularly that he had observed the spots in the sun so early as December the 8th, 1610; which was eighteen months earlier than Galileo's first published observations respecting them; and that he had also discovered the satellites of Jupiter, and made drawings of their positions, and calculations of their revolutions, in January 1610, the same month when Galileo discovered them. Dr. Zach adds, that Harriot's observations of the comet of 1607 are still of use. The following was the inscription upon his monument:—

Siste, Viator, leviter preme.
Jacet hic juxta quod mortale fuit
C. V.
THOMÆ HARRIOTI.
Hic fuit doctissimus ille Harriotus
De Syon ad flumen Thamesin,
Patriâ et Educatione
Oxoniensis.
Qui omnes scientias calluit, et in omnibus excelluit;
Mathematicis, Philosophicis, Theologicis.
Veritatis Indagator Studiosissimus.
Dei Triniunius cultor piissimus.
Sexagenarius aut eò circiter
Mortalitati valedixit, non Vitæ,
An. Christi MDCXXI. 2. Julij.

HARRIS (William), a protestant dissenting minister of eminent abilities, who resided at Honiton, in Devonshire. On September the 20th, 1765, the degree of D. D. was unanimously conferred on him by the university of Glasgow. He published an Historical and Critical Account of the Lives of James I., Charles I., and Oliver Cromwell, in 5 vols. 8vo. after the manner of Bayle. He was preparing a similar account of James II. He also wrote the life of Hugh Peters; besides many fugitive pieces occasionally, for the public prints, in support of liberty and virtue. Dr. Harris died at Honiton, February the 4th, 1770.

Harris (John), as the first compiler of a dictionary of arts and sciences, in this country, certainly deserves notice in an *encyclopædia*. He was born about the year 1670, and received his education at St. John's College, in the university of Cambridge, where he took the degree of B. A. in 1687, and that of M. A. in 1691. Having taken orders in the church, he obtained considerable preferments. He was first instituted into the rectory of Barming, which he resigned for St. Mildred, Bread Street, London; he held also the perpetual curacy of Stroud, near Rochester, in Kent, and he was prebendary of Rochester cathedral. He was a fellow, secretary, and vice-president to the Royal Society. In 1698 he preached the course of Boyle's Lectures, which was published; and in the next year he took the degree of D. D. Dr. Harris also published several single sermons; and a Collection of Voyages and Travels, with a number of Engravings; a Treatise on the Theory of the Earth, in 1697; a Treatise on Algebra, in 1702; a translation of Pardie's Geometry into English, a seventh edition of which in 12mo. was printed in 1734; Astronomical Dialogues, the third edition of which appeared in 1795; but the work for which he was most eminently distinguished was his Lexicon Technicum, or A Universal Dictionary of Arts and Sciences, in 2 vols. folio, published in 1708; from which originated all the other dictionaries of science and cyclopædias that have since appeared. He died September the 7th, 1719, leaving unfinished the History of Kent, which was published in folio very soon after his death.

Harris (James), a writer on philology, was born at Salisbury in 1709, and was nephew to Shaftesbury the author of the Characteristics. Having entered as a gentleman commoner of Wadham College, Oxford, at the age of sixteen, he afterwards became a probationer at Lincoln's Inn. On the death of his father, at the age of twenty-three, he came into possession of an independent fortune, and retired to his native place to dedicate his time to literature. In 1744 he published a volume containing Essays on Art, on Music and Painting, and on Happiness; a prelude to his Hermes, or a Philosophical Enquiry concerning Universal Grammar, displaying much ingenuity, and an extensive acquaintance with the Greek writers, both poets and philosophers; but his ignorance of the northern dialects is very conspicuous. See our article Grammar. In 1761 he was chosen M. P. for the borough of Christ Church; and next year was appointed one of the lords of the admiralty, which office he exchanged in 1763 for that of a lord of the treasury. He returned to the ministry in 1765; but was made secretary and comptroller to the queen in 1774. His philological Enquiries was a posthumous work. He died in 1780.

Harris (Gael Na Heradh, or Hardubb, i. e. the heights), a peninsula and parish of Scotland, in Invernesshire, forty-eight miles long, and from six to twenty-four broad; consisting of seven large inhabited islands, viz. Berneray, Pabby, Calligray and Ensay, on the south; and Taransay, Scalpay and Scarp on the north; besides the peninsula, and above thirty smaller

isles uninhabited. Of these islands some produce good crops of oats, barley, and potatoes, and all of them pasture; but the soil in general is poor, and the greater part not arable. The population in 1793, stated by the Rev. John M'Leod, in his report to Sir J. Sinclair, was 2536. The number of sheep (which range unheeded through the mountains and commons), was about 11,000; that of goats 250; of horses 1000; of black cattle 2460; and of deer 800. All these animals are small in size; but the beef and mutton are delicious, and the wool is extremely fine. About 350 persons are employed in making from 400 to 500 tons of kelp annually. The population has rapidly increased of late.

HARRIS, the peninsula of the Hebrides in the above parish, forming with Lewis one of the Western Islands of Scotland. See LEWIS. Harris is twenty miles long and ten broad. Upon the east side it is mostly rock; but on the west there are some tolerable farms, and the number of people amounts to 2000. It has Lewis on the north, and North Uist on the south, from which it is separated by the sound. Harris abounds on the east side in excellent bays, and its shores on both sides form one continued fishery.

HARRIS, SOUND OF, a navigable channel, between a peninsula of the Hebrides bearing the same name and North Uist, nine miles broad, and nine long. It is the only passage, between the Butt of Lewis and Barra, for vessels of burden passing to and from the west side of Long Island. It requires a skilful pilot, being greatly encumbered with rocks and islands. The fish on this coast are more numerous, and of larger dimensions, than those of the opposite continent; on which account two royal fishing stations were begun in the reign of Charles I., one in Loch Maddie, and the other in the Sound of Harris. A phenomenon is remarked by the Rev. Mr. M'Leod, in the tides of this Sound:—'From the autumnal to the vernal equinox, the current in neap tides passes all day from east to west, and all night in the contrary direction. Immediately after the vernal equinox it changes this course, going all day from west to east, and the contrary at night. In spring tides the current corresponds nearly to the common course.'

HARRISBURGH, the present metropolis of Pennsylvania, United States, in Dauphin county, is on the north-east bank of the Susquehanna; sixteen miles east of Carlisle, thirty-six W.N.W. of Lancaster, ninety-eight west of Philadelphia. It contains a court-house, a jail, two market houses, a bank, and three houses of public worship; one for Lutherans, one for Presbyterians, and one for German Presbyterians. It is very pleasantly situated, regularly laid out, a great part of the houses are handsomely built of brick, and the town makes a very fine appearance. Two wings of a state house have been erected on a delightful elevation at a little distance from the river. Here is a very elegant covered bridge across the Susquehanna.

HARRISON (John), one of the regicide judges who sat upon the trial of king Charles I., and one of the ten who were executed for that act, after the Restoration. See ENGLAND. He was the son of a butcher, and had been raised to the rank of colonel, and afterwards of general, in the army of the parliament. Dr. Goldsmith gives the following account of his behaviour at his trial and execution:—'General Harrison, who was first brought to his trial, pleaded his cause with that undaunted firmness which he had shown through life. What he had done, he said, was from the impulse of the Spirit of God. He would not, for any benefit to himself, hurt a hair of the poorest man or woman upon earth; and during the usurpation of Cromwell, when all acknowledged his right, or bowed down to his power, he had boldly upbraided the usurper to his face; and all the terrors of imprisonment, and allurements of ambition, had not been able to bend him to a compliance to that deceitful tyrant. Harrison's death was marked with the same admirable constancy which he showed at his trial.—Some circumstances of scandalous barbarity attended the execution. Harrison's entrails were torn out and thrown into the fire, before he expired. His head was fixed on the sledge that drew Coke and Peters to the place of execution, with the face turned towards them.'

HARRISON (John), the inventor of the celebrated time-keeper for ascertaining the longitude at sea; and also of the compound, or, as it is commonly called, the gridiron pendulum; was born at Foulby, near Pontefract, in Yorkshire, in 1693. The vigor of his natural abilities, if not strengthened by want of education, which confined his attention to few objects, at least amply compensated for it; as appeared from the astonishing progress he made in that branch of mechanics to which he devoted himself. His father was a carpenter, and occasionally surveyed land, and repaired clocks and watches. In 1700 he removed to Barrow, in Lincolnshire; where the son eagerly improved every incident from which he might collect information; frequently employing great part of his nights in writing or drawing: and he always acknowledged his obligations to a clergyman who lent him a MS. copy of professor Saunderson's Lectures; which he carefully transcribed, with all the diagrams. In 1726 he had constructed two clocks, mostly of wood, in which he applied the escapement and compound pendulum of his own invention: these surpassed every thing then made, scarcely erring a second in a month. In 1728 he came up to London with the drawings of a machine for determining the longitude at sea, in expectation of being enabled to execute one by the Board of Longitude. Upon application to Dr. Halley he referred him to Mr. George Graham; who advised him to make his machine before he applied to the board. He returned home to perform this task; and in 1735 came to London with his first machine, with which he was sent to Lisbon the next year, for trial. In this short voyage he corrected the dead reckoning about a degree and a half; which success procured him both public and private encouragement. About 1739 he completed his second machine, of a construction much more simple than the former, and which

answered much better: this, though not sent to sea, recommended him still more to patronage. His third machine, in 1749, was still less complicated than the second, and superior in accuracy, erring only three or four seconds in a week. This he conceived to be the ne plus ultra of his attempts; but, in an endeavour to improve pocket watches, the principles he applied surpassed his expectations so much as to encourage him to make his fourth time-keeper, which is in the form of a pocket watch, about six inches in diameter. With this time-keeper his son made two voyages; the one to Jamaica, and the other to Barbadoes: in both which experiments it corrected the longitude within the nearest limits required by the act of the 12th of queen Anne; and the inventor therefore, at different times, though not without great trouble, received the proposed reward of £20,000. These four machines were given up to the board of longitude. The three former were now of no use, as all their advantages were comprehended in the last; they were worthy, however, of being carefully preserved as mechanical curiosities, in which might be traced the gradations of ingenuity executed with the most delicate workmanship. They are kept in the royal observatory at Greenwich. The fourth machine, emphatically called the time-keeper, was copied by the ingenious Mr. Kendal; and that duplicate, during a three years' circumnavigation of the globe in the southern hemisphere by captain Cook, answered as well as the original. The latter part of Mr. Harrison's life was employed in making a fifth improved time-keeper on the same principles with the preceding one; which at the end of a ten weeks' trial, in 1772, at the king's private observatory at Richmond, erred only four seconds and a half. Within a few years of his death he had frequent fits of the gout, a disorder that never attacked him before his seventy-seventh year: he died at his house in Red Lion Square in 1776, aged eighty-three. His recluse manner of life, in the unremitted pursuit of his favorite object, was not calculated to qualify him as a man of the world; and the many discouragements he encountered, in soliciting the legal reward of his labors, still less disposed him to accommodate himself to the humors of mankind. In conversing on his profession he was clear, distinct, and modest; but found a difficulty in explaining his meaning by writing; in which he adhered to a peculiar and uncouth phraseology. This was evident in his Description concerning such Mechanism as will afford a nice or true Mensuration of Time, &c., 8vo., 1775; in which he obstinately refused to accept of any assistance whatever. This work contains also an account of his new musical scale, or mechanical division of the octave, according to the proportion which the radius and diameter of a circle have respectively to the circumference. He had in his youth been the leader of a distinguished band of church singers; had a very delicate ear for music; and his experiments on sound, with a most curious monochord of his own improvement, are reported to have been no less accurate than those in which he was engaged for the mensuration of time.

Harrison (William), a writer much patronised by the literati of his time. He was fellow of New College, Oxford; and was some time tutor to the duke of Queensberry's son. Dr. Swift, by his interest with Mr. St. John, obtained for him the employment of secretary to lord Raby, ambassador at the Hague, and afterwards earl of Strafford. A letter of his, dated Utrecht, December 16th 1712, is printed in the dean's works. Mr. Harrison did not long enjoy his rising fortune. He was sent to London with the Barrier treaty, and died February 14th, 1712-13. Dr. Swift laments his loss in his Journal to Stella. Mr. Tickel mentions him with respect in his Prospect of Peace; and Dr. Young, in the close of an epistle to lord Lansdowne, bewails his loss. Dr. Birch, who has given a curious note on Harrison's Letter to Swift, has confounded him with Thomas Harrison, M. A., of Queen's College. In Nichols's select Collection are some pleasing specimens of his poetry; which, with Woodstock Park, in Dodsley's Collection, and an Ode to the Duke of Marlborough 1707, in Duncombe's Horace, are all the poetical writings that are known of this young man; who figured both as a humorist and a politician in the fifth volume of the Tatler, of which (under the patronage of Bolingbroke, Henley, and Swift) he was professedly the editor.

Harrison, a county of the state of Ohio, United States, bounded on the south by Belmont, east by Jefferson, north by Columbia and Stark, and west by Tuscarawa. Its surface is hilly, and abounds with coal mines, freestone, limestone, and a fine white soft tenacious clay. It is watered by the Stillwater, and other branches of the Tuscarawa, and by the creeks running into the Ohio.

Harrison, a county of the United States, in Kentucky. Cyntheana is the chief town.

Harrison, a county of the state of Indiana, in the United States, bounded east by Clark county, south by the Ohio, west by the new county of Perry, and north by Washington.

Harrison, a county of the United States, in the western part of Virginia, bounded north by Ohio county, north-east by Monongalia, south by Greenbriar, and south-west by Kenhaway. It is about 120 miles in length, and eighty in breadth. The chief town is Clarksburg.

HARROGATE, or Harrowgate, a village in the West Riding of Yorkshire, in the parish of Knaresborough, remarkable for three medicinal springs, all different in their qualities, notwithstanding their vicinity: viz. 1. The Tewet Water, or Sweet Spa, a vitriolic spring of a sort of milky taste, discovered by Mr. Slingsby in 1638. 2. The Sulphur Spring, useful in dropsical, scorbutic, and gouty cases. It rises in the town, and is received in four basins under four different buildings: at one it is drunk; at the others used for hot or cold baths. It is perfectly clear, and very salt; but the taste and smell resemble those of a mixture of rotten eggs, sulphur, and sea-water. Bathing is the most general mode of using it. It is the strongest sulphur-water in Great Britain; and does not lose the sulphureous smell even when exposed to almost a boiling heat. In distilling it, when three pints

had been taken off from a gallon of it, the last was as strong as the first. It is discutient and attenuating, and a warm bath of it is of great benefit in pains, strains and lameness; dissolving hard swellings, curing old ulcers and scrofulous complaints, and cleansing the stomach and bowels. 3. St. Mungo's Well, is so called from St. Mungo or St. Kentigern, a Scotch saint. See KENTIGERN. Harrogate lies three miles west of Knaresborough, and 208 north of London.

HAR'ROW, *n. s.*, *v. a.* & *interj.* } Fr. *charrue*, *hercer*; German, *harcke*, a rake. A frame of timbers crossing each other, and set with teeth, drawn over sowed ground to break the clods, and throw the earth over the seed. The verb is often used in a figurative sense to pillage; strip; lay waste; to invade; to disturb, or put in commotion, as with a dreadful tale. Harrow, the interjection, is an exclamation of distress and now out of use. Harry, in Scotland, signifies to rob; plunder; or oppress; as, one harried a nest; that is, he took the young away: as also, he harried me out of house and home; that is, he robbed me of my goods, and turned me out of doors.

HAR'ROWER, *n. s.*
HAR'RY, *v. a.*

Canst thou bind the unicorn with his band in the furrow? or will he *harrow* the valleys after thee? *Job.*

And, when the mele is sacked and ybound,
This John goth out, and fint his horse away,
And gan to crie: *Harrow* and wala wa!
Our hors is lost. *Chaucer. The Reves Tale.*
They crieden, Out *harrow* and wala wa.
Id. The Nonnes Preestes Tale.

Friend, *harrow* in time, by some manner of means,
Not only thy person, but also thy beans. *Tusser.*

Most glorious Lord of life, that on this day
Did'st make thy triumph over death and sin;
And having *harrowed* hell, didst bring away
Captivity thence captive, us to win. *Spenser.*

And, he that *harrowed* hell with heavy stowre,
The faulty souls from thence brought to his heavenly bowre. *Id. Faerie Queene.*

Harrow now out and weal away, he cried;
What dismal day hath sent this cursed light,
To see my lord so deadly damnifyed? *Spenser.*

I could a tale unfold, whose lightest word
Would *harrow* up thy soul, freeze thy young blood,
Make thy two eyes, like stars, start from their spheres.
Shakspeare.

Thou must not take my former sharpness ill.
—I repent me much
That I so *harry'd* him. *Id.*
Let the Volscians
Plow Rome, and *harrow* Italy. *Id.*
Most like: it *harrows* me with fear and wonder.
Id.

As the king did excel in good commonwealth laws, so he had in secret a design to make use of them, as well for collecting of treasure as for correcting of manners; and so meaning thereby to *harrow* his people, did accumulate them the rather. *Bacon.*

Amazed I stood, *harrowed* with grief and care.
Milton.

The land with daily care
Is exercised, and with an iron war
Of rakes and *harrows*. *Dryden.*

Two small *harrows*, that clap on each side of the ridge, *harrow* it right up and down. *Mortimer.*

Imagine you behold me bound and scourged,
My aged muscles *harrowed* up with whips;
Or hear me groaning on the rending rack. *Rowe.*

HARROW ON THE HILL, a town of Middlesex, with a church and lofty spire, seated on the top of the highest hill in the county, ten miles W. N. W. of London. It is noted for a free school, founded in the reign of queen Elizabeth.

HARSH, *adj.*
HARSH'LY, *adv.*
HARSH'NESS, *n. s.* } Germ. *hervische*.—Skinner. Rough or rugged; grating to the ear; discordant: figuratively, severe; crabbed; morose: violence, as opposed to gentleness,

My wife is in a wayward mood to-day,
I tell you, 'twould sound *harshly* in her ears.
Shakspeare.

Get from him why he puts on this confusion,
Grating so *harshly* all his days of quiet
With turbulent and dangerous lunacy. *Id.*
A name unmusical to Volscian ears,
And *harsh* in sound to thine. *Id.*

Take an apple and roll it upon a table hard: the rolling doth soften and sweeten the fruit, which is nothing but the smooth distribution of the spirits into the parts; for the unequal distribution of the spirits maketh the *harshness*. *Bacon.*

He was a wise man and an eloquent; but in his nature *harsh* and haughty. *Id.*

Harshness and ruggedness of bodies is unpleasant to the touch. *Id.*

Bear patiently the *harsh* words of thy enemies, as knowing that the anger of an enemy admonishes us of our duty. *Taylor.*

Our nature here is not unlike our wine;
Some sorts, when old, continue brisk and fine:
So age's gravity may seem severe,
But nothing *harsh* or bitter ought t' appear.
Denham.

'Till like ripe fruit thou drop
Into thy mother's lap; or be with ease
Gathered, not *harshly* plucked. *Milton.*

Black feels as if you were feeling needles points, or some *harsh* sand; and red feels very smooth.
Boyle.

Neither can the natural *harshness* of the French, or the perpetual ill accent, be ever refined into perfect harmony like the Italian. *Dryden.*

Cannot I admire the height of Milton's invention, and the strength of his expressions, without defending his antiquated words, and the perpetual *harshness* of their sound? *Id.*

Age might, what nature never gives the young,
Have taught the smoothness of thy native tongue;
But satire needs not that, and wit will shine
Through the *harsh* cadence of a rugged line. *Id.*

The unnecessary consonants made their spelling tedious, and their pronunciation *harsh*. *Id.*

Thy lord commands thee now
With a *harsh* voice, and supercilious brow,
To servile duties. *Id.*

With eloquence innate his tongue was armed;
Though *harsh* the precept, yet the preacher charmed.
Id.

The rings of iron that on the doors were hung,
Sent out a jarring sound, and *harshly* rung. *Id.*

Thy tender hefted nature shall not give
Thee o'er to *harshness*: her eyes are fierce, but thine
Do comfort and not burn. *Id.*

Sweet, bitter, sour, *harsh*, and salt, are all the epithets we have to denominate that numberless variety of relishes. *Locke.*

I would rather he was a man of a rough temper, that would treat me *harshly*, than of an effeminate nature. *Addison.*

No *harsh* reflection let remembrance raise;
Forbear to mention what thou can'st not praise.
Prior.

Tho' Fortune yield the captive ne'er despair,
But seek the constable's considerate ear;
He will reverse the watchman's *harsh* decree,
Moved by the rhetoric of a silver fee. *Gay.*

A certain quickness of apprehension inclined him to kindle into the first motions of anger; but, for a long time before he died, no one heard an intemperate or *harsh* word proceed from him. *Atterbury.*

'Tis not enough no *harshness* gives offence;
The sound must seem an echo to the sense. *Pope.*

The same defect of heat which gives a fierceness to our natures, may contribute to that roughness of our language, which bears some analogy to the *harsh* fruit of colder countries. *Swift.*

Whose delegated cruelty surpasses
The worst acts of one energetic master,
However *harsh* and hard in his own bearing.
Byron.

HART, *n. s.*
HARTS'HORN, *n. s.*
HART'ROYAL, *n. s.*
HARTS'TONGUE, *n. s.*
HART'WORT, *n. s.*
} Sax. þeoꝼt. A he-deer; the male of the roe. Hartshorn, the name of a drug; an herb. The others are plants.

And to the launde he rideth him full right,
Ther wos the *hart* ywont to have his flight;—
And over a brook and soforth on his way
And this duk wol have a couxs at him or twey
With houndes, swiche as him lust to commaunde.
Chaucer. The Knightes Tale.

That instant was I turned into a *hart*,
And my desires, like fell and cruel hounds,
E'er since pursue me. *Shakspeare.*

The deer
And fearful *harts* do wander every where
Amidst the dogs. *May's Virgil.*

Hartstongue is propagated by parting the roots, and also by seed. *Mortimer.*

Ramose concretions of the volatile salts are observable upon the glass of the receiver, whilst the spirits of vipers and *hartshorn* are drawn. *Woodward.*

Hartshorn is a drug that comes into use many ways, and under many forms. What is used here are the whole horns of the common male deer, which fall off every year. This species is the fallow-deer; but some tell us, that the medicinal *hartshorn* should be that of the true hart or stag. The salt of *hartshorn* is a great sudorifick, and the spirit has all the virtues of volatile alkalies: it is used to bring people out of faintings by its pungency, holding it under the nose, and pouring down some drops of it in water. *Hill.*

HART, a stag, or male deer, in the sixth year. See CERVUS.

HARTS, HORNS OF, the horns of the male deer. The scrapings or raspings of these are medicinal, and used in decoctions, ptisans, &c. The horns of harts yield by distillation a very penetrating volatile spirit called volatile alkali; which is also procured in equal perfection from the horns, bones, &c., of other animals. See ALKALI, CHEMISTRY, and HARTSHORN.

HARTE (Walter), an English poet and divine, the son of a non-juring clergyman. He was born about 1697, and received his education at Marlborough, whence he was removed to St. Mary's Hall, Oxford, where he took his degree of M.A. in 1720. In 1727 he published a volume of poems, dedicated to the earl of Peterborough. In the same year he also published his Essay on Satire; and in 1735 an Essay on Reason, in which he was assisted by Pope. He subsequently became vice-principal of St. Mary's Hall; and was recommended by lord Lyttleton to the earl of Chesterfield, as a travelling and private preceptor to his natural son, with whom he made the tour of Europe, from 1746 to 1750. On his return the last nobleman procured him a canonry of Windsor. In 1759 he published his History of Gustavus Adolphus. His last work was a collection of poems entitled The Amaranth, which appeared in 1763. He died in 1774, at St. Austle in Cornwall, of which place he was vicar. Besides the above works, Mr. Harte was author of Essays on Husbandry.

HARTFORD, a county in the north part of Connecticut, United States. Population 44,733.

HARTFORD, a city, the metropolis of Connecticut, in a county of the same name, United States, on the west bank of Connecticut River, fifty miles above its mouth; fourteen miles north of Middletown, thirty-four N.N.E. of Newhaven, forty-two north-west of New London, sixty-eight west of Providence, ninety-four south-east of Albany, 100 W.S.W. of Boston, and 338 of Washington. Population 3955; and including the township 6003. It is pleasantly situated, at the head of a sloop navigation, and contains a state-house, two market-houses, two banks, two insurance offices, a state arsenal, an academy, a library of 2500 volumes, and four houses of public worship; two for Congregationalists, one for Episcopalians, and one for Baptists. The state-house is a handsome edifice, built of brick and stone. One of the congregational meeting-houses is very large and elegant. A small stream, called Little River, divides the town into two parts, which are connected by a bridge. The city is a generally well built, and makes a handsome appearance. It is regularly laid out, the streets intersecting each other at right angles. It is situated in a pleasant and fertile tract of country, and is considerable both for its trade and manufactures.

Hartford contains three distilleries, a cotton manufactory, a woollen manufactory, and ten printing offices, from four of which are issued weekly newspapers. It has also extensive manufactures of coaches, saddlery, and brass work. The public offices of the state are kept here. The elections and spring sessions of the legislature are held at Hartford, and the autumn sessions at New-Haven.—Within the township there is a parish, called West Hartford, with another congregational meeting-house, three miles from the city.

On the 15th of April, 1817, an institution, styled the 'Connecticut Asylum, for the education of the Deaf and Dumb, was opened in this city with twenty-one pupils. The number of pupils in May, 1818, was forty-one; under the instruction of a principal and four assistants. The success of this benevolent institution has hitherto been highly gratifying to the friends of humanity, and the improvement of the pupils has equalled the most sanguine expectations of

their friends. Each person applying for admission must not be under nine, or over thirty years of age; and no pupil is received for a less term than two years. The whole annual charge to each pupil, for board, washing, fuel, instruction, stationary, &c., is 200 dollars.

The asylum is under the management of ten directors, chosen annually, together with the directors for life. A president, and eight vice-presidents, who are also, ex officiis, directors, are chosen annually. The payment of 100 dollars constitutes a person a director for life, and of 200 dollars, a vice-president for life. The annual meeting of the society is held at Hartford on the first Saturday after the second Thursday in May. A house situated about half a mile west of the city has been recently purchased for the accommodation of the institution.

HARTFORD, EAST, a post-town of Hartford county, on the east side of the Connecticut, opposite Hartford, with which it is connected by an elegant bridge. Population 3240. A small river which flows through this town, into Connecticut, affords many fine mill seats. Here are five paper mills, several saw mills and fulling mills, two large establishments for the manufacture of powder, one manufactory of snuff, one cotton manufactory, two glass houses, and three houses of public worship; two for Congregationalists, and one for Methodists.

HARTFORD, a post-town of Washington county, New York, fifty-four miles N.N.E. of Albany. Population 2389. It is a wealthy town, and contains three houses of public worship; two for Baptists, and one for Congregationalists.

HARTLEPOOL, a sea-port town in Durham, seated on a promontory, and almost encompassed by the sea. It is an ancient corporation, governed by a mayor and aldermen, with other subordinate officers. In the reign of Edward III. it furnished five ships to the navy. It depends chiefly on the fishing trade; and its harbour is much frequented by colliers passing to and from Newcastle. It is twelve miles north of Stockton, and 258 west of London.

HARTLEY (David), an English physician, and metaphysical writer, was the son of a clergyman of Armley, near Leeds in Yorkshire, where he was born in 1705. At fifteen he was sent to Jesus College, Cambridge, of which he became a fellow; and was intended for the clerical profession, but, having doubts of the truth of the thirty-nine articles, he engaged in the study of medicine, and commenced practice as a physician at Newark in Nottinghamshire. Hence he removed to Bury in Suffolk, and subsequently to London. When Mrs. Stephens professed to have found out a specific for the stone, Dr. Hartley contributed greatly towards her obtaining the grant of £5000 from parliament for her discovery; and published Observations made on ten Persons, who have taken the Medicament of Mrs. Stephens, 8vo. He himself, after having taken as much of it as contained 200 lbs. weight of soap is said to have fallen a sacrifice to the disease for which it was recommended. Dr. Hartley spent the latter part of his life at Bath, and died there August 28th, 1757. His reputation as a philosopher depends on his work entitled Observations on Man, his Frame, his Duty, and his Expectations, in two parts, 1749, 2 vols. 8vo. His doctrine of association has been published by Dr. Priestley in a detached form, under the title of the Theory of the Human Mind, 8vo.; and the second part of the Observations, relating to morals and religion, has been commented on by Pistorius, a German divine, whose remarks are included in the edition of Dr. Hartley's book published in 4to. 1791, and in 3 vols. 8vo.

HARTLEY (David), M.P., was a son of the foregoing. His opposition to the war with the American colonies led to his being appointed one of the plenipotentiaries to treat with Dr. Franklin for peace; and some of his letters on that occasion are published in the correspondence of that statesman. In the house of commons Hartley was one of the first promoters of the abolition of the slave trade. His scientific knowledge was also exhibited in many useful inventions, and particularly in a method of guarding buildings from fire. He died at Bath, December 19th, 1813, aged eighty-four.

HARTMANN (John Adolphus), a learned divine and historian, born at Munster in 1680. After being a Jesuit for several years, he became a Calvinist at Cassel, in 1715; and soon after was made professor of philosophy and poetry, and in 1722 professor of history and eloquence, at Marpurg, where he died in 1744. The most esteemed of his works are—1. The State of the Sciences at Hesse; in German. 2. Historia Hassiaca, 3 vols. 3. Præcepta Eloquentiæ Rationalis, &c.

HARTSHORN, CALCINED, or coal of hartshorn, a very white earth, procured by calcining the horns of harts in a long continued and strong fire. This earth is employed in medicine as an absorbent; and, when levigated, is the basis of Sydenham's white decoction, which is commonly prescribed in dysenteries.

HARTSHORN JELLY is nutritive and strengthening, and is sometimes given in diarrhœas; but a decoction of burnt hartshorn in water is more frequently used for this purpose, and is called hartshorn drink.

HARTSHORN PLANTAIN. See PLANTAGO.

HARTSHORN, SALT and SPIRIT OF. See ALKALI, and CHEMISTRY.

HARTSOEKER (Nicholas), a Dutch philosopher, born at Gouda, in 1656. He received a liberal education from his father, who was a minister among the Remonstrants, and became so eminent in natural philosophy and mathematics, that Peter the Great invited him to Moscow; but he declined the honor. He became professor of philosophy at Heidelburg, and mathematician to the elector palatine. He wrote a course of Natural Philosophy, in 4to., with some other works; and died in 1725.

HARTY, ISLE OF, a small island on the south-eastern extremity of the Isle of Sheppy, from which it is divided by a narrow channel, almost filled up. It is separated from Kent by the Swale, and is entirely pasture land, maintaining about 4000 sheep.

HARTZ, or HARZ, a mountain tract in the interior of Germany and south of Hanover, extending from the territory of Goslar to Harz-

gerode, in Anhalt. It is about seventy miles in length, and twenty in breadth, and is a part of the region called Sylva Hercynia by the ancients. Forests, consisting of one-third of hard and two-thirds of soft timber, cover its surface: but of late years, great ravages have been committed among the resinous trees, by a coleopterous insect, which multiplies with amazing rapidity. The mines of the Hartz are still more valuable. See HANOVER. Its green, blue, and white vitriol are found in veins generally imbedded in grey-wade or clay-slate, of which the greater number of the rocks are composed. The population of this district is about 50,000; differently characterised in their manners by a primitive simplicity, and early marriages. Their children are beautifully fair, and soon able to assist their parents. Particular spots are under corn culture; but pasture and very good hay are the chief agricultural produce. The inhabitants are chiefly employed as miners. Their favorite enjoyment is in music; and their itinerant bards and minstrels are numerous. The Hartz is exempt both from taxes and from military service; but a tenth of the produce of the mines belongs to government. Those of iron are the most productive, and yield a revenue of about £115,000 sterling, made good by 'Undertakers of the mines.' The workmen are divided into companies, and commonly wear a sort of uniform of black and red; part of their wages are paid in kind. Gold and silver are coined here.

The district abounds in natural curiosities, of which the most interesting are the Scharzfeld and Baumann caverns; the former remarkable for its fossile bones, the latter for its stalactites, its harmonic column emitting a pleasant sound when struck by the drops of water that fall from the roof, and its extent consisting of fourteen successive vaults. Here the Man of the Mountains is seen either morning or evening, when the spectator at the top of the mountain happens to be placed in a right line between the sun and a cloud hovering in the atmosphere at a small distance, and is merely the magnified image of the spectator reflected from the cloud as from a mirror.

HA'RVEST, *n. s.*
HAR'VEST-HOME, *n. s.*
HAR'VEST-LORD, *n. s.*
HAR'VESTER, *n. s.*
HAR'VESTMAN, *n. s.*

Sax. ꞃæꞃꞅꞅꞇ; Bel. *herfst*, contraction of *ek erf-oogst*, says Minsheu; *ab erf hereditas* et *oogst*, Augusti mensis. Mr. Thomson thinks from Sax. ȝeaꞃ, a year, and *vest*, vegetable food. The season of reaping and gathering corn; the song which the reapers sing at the feast made at the gathering in of the harvest. Harvest-lord, the head reaper. Harvester and harvestman, one who works at the harvest. Harvest is used figuratively for the opportunity of gathering treasure; the product of labor.

Grant *harvest-lord* more by a penny or two,
To call on his fellows the better to do. *Tusser.*

As it ebbs, the seedsman
Upon the slime and ooze scatters his grain,
And shortly comes to *harvest*. *Shakspeare.*

His wife I will use as the key of the cuckoldy rogue's coffer; and there's my *harvest-home*.
Id. Merry Wives of Windsor.

From Ireland came I with my strength,
And reap the *harvest* which that rascal sowed.
Shakspeare.

Like to a *harvest-man* that's tasked to mow
Or all, or lose his hire. *Id.*

Anon, his fruitfull showres, and pleasing dewes,
Commixt with cheerfull rayes, he sendeth downe;
And then the barren-earth her crop renewes,
Which with *harvests*, hills, and vallies crowne.
G. Withers.

When the father is too fondly kind,
Such seed he sows, such *harvest* shall he find.
Dryden

At *harvest-home*, and on the shearing-day,
When he should thanks to Pan and Pales pay.
Id.

Your hay it is mowed, and your corn is reaped;
Your barns will be full, and your hovels heaped;
Come, my boys, come,
Come, my boys, come,
And merrily roar out *harvest-home*. *Id.*

With *harvest* work he is worse than in spring.
L'Estrange.

——— Attempered suns arise
Sweet-beamed, and shedding oft through lucid clouds
A pleasing calm, while broad and brown below,
Extensive *harvests* hang the heavy head.
Thomson's Autumn.

HARVEST FLY, in zoology, a large four-winged fly of the cicada kind, very common in Italy, and erroneously supposed to be the grasshopper. See CICADA.

HARVESTING, in agriculture, the act of cutting down and securing different sorts of crops. There are various modes of effecting this kind of business: indeed peculiarities are found attached to almost every different county in the manner of executing it. But, in whatever mode the work of harvesting is managed, it is clear that, as bad weather must greatly affect the profits of the cultivator, especially where wheat-crops are concerned, it is proper that the farmer should be constantly on his guard to have a sufficient number of hands at work, in order that the most may be made of the fine season; for, without this, much loss must be sustained, and the title of afternoon farmer will be applied to him.

With regard to the cutting of crops, it is necessary to observe, that most sorts of grain, except that of barley, should be cut or reaped before they become over-ripe. But, where barley is cut in an unripe condition, it is apt to shrivel. It is, however, a practice with some farmers to leave the corn standing such a length of time, that it is ripe enough to cut and carry, as they term it, or until the sheaves are capable of being carted home, on being bound up. This method can, however, only be pursued where the crops are quite clean and free from weeds.

In the Report of East Lothian, in Scotland, it is stated, that the harvesting with winter-sown wheat is sometimes earlier than for other kinds of grain, only excepting Dutch oats. Spring-wheat is later, and, unless in favourable seasons, is cut with other grains. It is, however, suggested, that there seems to be some diversity of opinion among the farmers of this district, concerning the marks of ripeness in wheat, or the exact degrees of it that are requisite to constitute a perfect sample: some assert that cutting quick or early is the surest mode of having the grain

perfect; but others, on the contrary, are of opinion that it should be dead ripe; or, in other words, that the circulation in the straw, as well as the corn, should be over before it is cut down. It is probable that the truth is to be found in the middle between these extremes.

It is advised that such wheat as is much infested with weeds should be cut three or even four days earlier than is usual, in order that the weeds may have time to wither before the corn becomes too ripe; for, if it should not be cut before the grains are fully ripe, it will be liable to sustain considerable injury by shedding, loss of color, and damage from rain, while it continues exposed for the purpose of the weeds being rendered dry. A single shower, or even a day's gentle rain, while it lies in swath, is, indeed, thought by some to be rather beneficial to the grain, by causing it to feel dry and slippery in the hand, and thresh out the better; but every possible care should at the same time be taken to guard against its being wetted too much in the field. When however, through any unavoidable accident, it is laid up in too moist a condition, though it may not take any great harm in the mow, it will sweat and adhere together after being laid in a heap, when threshed out, and have a perfectly white appearance from mouldiness, as if dredged over with flour. As corn, in this state, is not capable of being kept, it should constantly be sent to the market, and disposed of as soon as possible.

It is the practice in most parts of the kingdom to cut the rye and wheat crops with the sickle or reaping-hook, a tool which would appear to have been employed for the purpose from the most early periods of the art of husbandry. But, in some cases, this tool is employed in a toothed state, while in others it has simply a cutting edge. The work is commonly done equally well which ever is made use of for the purpose. The business of reaping is performed differently, in respect to height and other circumstances, according as the custom of the district may prevail. It is usual in some of the midland counties, and in many of those on the south-east coast, to cut the wheat crops at the height of twelve or fifteen, and sometimes eighteen inches from the ground; the handfuls, as they are reaped, being laid on bands formed from some of the reeds of the crop twisted or knotted together near to the ear part. These different parcels, being bound up into what are termed sheaves, are either suffered to lie upon the stubble for a few days previously to their being carried, or they are set up on their bottoms in double rows, the head of the one sheaf inclining against that of the other opposite to it, so as to form a sort of irregular triangle if the base be included. But in some other cases the sheaves are set up into a kind of stool without being hooded. In most of these cases, as soon as the crop is carted off the land, the stubble is mown by means of a scythe, and, after being raked into large heaps, is conveyed away to the farm-yard, where it is used, either for thatching buildings, and corn and hay ricks, or as litter for the stock.

In almost the whole of the southern parts of the country, the crops of both oats and barley, as well as of peas and beans, are mown by means of a stiff sort of scythe, and either repeatedly turned over in the swaths, or formed into small cocks, in which states they continue until they are ready for being conveyed to the barns or stack-yards. As soon as they are in this condition, the carts or waggons are set to work, and the whole of the hands that can be spared employed in raking the ground after them. In short, the business is managed pretty nearly in the same manner as that in which hay-making is performed. The mowing and harvesting grain in swath or in cocks, if practices that can in any climate or situation be admitted as beneficial, can only, it is imagined, be considered so where the harvests are early, and where the climate is extremely mild, favorable, and steady. This being the case, it is not probable that such methods can ever become generally established in this country. For it is believed, that the benefits derived from harvesting the above different sorts of crops in the sheaf are extremely numerous, in comparison to those of the practices that have been just noticed.

It has been suggested, by an old writer, that it is material in hilly districts not to bind the grips of wheat into sheaves, at too early a period in th course of the day, as in such situations they have taken such a damp by having lain upon the surface of the ground, that though the straw and chaffy ears may appear dry as soon as the dew is first dissipated, and the sun has shone a few hours upon them, there will still remain an inward dampness in the straw and grain, which will be injurious in the stack or mow. The afternoon should of course be chosen for the purpose of gripping and binding the grain into sheaves in such places, the work being finished before the approach of night. It is best, however, to lay the bands in the morning, as they will then twist better and be less brittle than after the sun has shone some time on the corn. They should always be made strong and well twisted together, in order that they may contain the corn without giving way. But though the modes advised above may be practised with propriety in some instances, and for some kinds of corn, they should not be much employed for wheat crops, as it is found that the less they are exposed to wet and heat the better. On this principle, the practice of covering the shocks of wheat, with cloths and mats, is in use in some places in the county of Kent, as between Sandwich and Dover. The mats are found the best, and are the most commonly employed. By this means it is supposed that the sample of the grain is so much improved, that the bakers at Dover give a decided preference to such as is treated in this manner. The expense of mats for this use is about sevenpence each, which, if properly taken care of, will last many years.

In places where the harvests are late and rainy, the preservation of grain crops is mostly arduous and difficult. Consequently, other methods besides those commonly employed, and which have been already detailed, are had recourse to occasionally, such as what are termed gaiting and hutting. These modes are, however, only practised in such cases as where, from the precarious state of the weather, the crops would be in great

danger of being spoiled, without some unusual exertion. These methods are made use of in several of the more northern counties of England, as well as in some parts more towards the north in Scotland, and do not appear bad methods of harvesting grain crops in late unfavorable seasons. The work is executed in this manner: the sheaf, instead of being bound tight towards the butt-end, as is commonly the case, is tied slackly, and the band moved up until it reach some of the ears. The binder then sets the sheaf in a rather forcible manner on its bottom, so as to give it a sort of base to stand upon. And, where the corn is gaited by those who are experienced in the business, the bands are constantly pushed down the middle of the sheaves, after they have been set on end, and the bottoms spread out, the middles being left hollow, and care taken to form small openings towards the south, by which contrivance the air as well as the sun have the greatest possible influence in preserving the crops, and rendering them fit for being carried and stacked up. In cases where grain crops are cut in a wet state, as not unfrequently happens towards the end of a late harvest, this is in all probability the best plan that can possibly be devised for preventing the threatening mischief. The mode of hutting in the field, in order to save grain in bad harvest seasons, is also a practice often had recourse to with success, in the north-western parts of Scotland, especially when put up in a tolerable state of dryness. The huts are made upon the field immediately after the crops are reaped, and bound up into sheaves. They are, in general, only formed of such a size, that a man is capable of building them in standing upon the ground; and consist in common of from twelve to twenty stooks, in proportion as the straw is more or less bulky. If these huts be properly formed, and a sheaf or two carefully spread over their tops, somewhat in the umbrella method, scarcely any weather, however bad, or of whatever continuance, will affect the grain in any material degree. Upon taking one of these huts down, after it had stood five or six weeks, or probably longer, under the most severe rains that had happened during any harvest for a great length of time, it was found that, except a few of the top-sheaves, the whole was in a surprising state of preservation. And this was the more remarkable, as the crops in some of the adjacent fields where this precaution had been neglected, though carefully stooked and hooded, were grown and matted together in such a way that every stook formed a united mass, not only of vegetable, but vegetating matters. In places where the harvests occur at a late period, where the weather is unfavorable, and where the approach of winter is apprehended, the practice of hutting grain in the field may be safely advised as a beneficial plan: and where the weather continues long rainy, and there is reason to apprehend the springing of the grain in the ear, or that heavy falls of snow may take place, as occasionally happen, the most proper method is to reap and gait as expeditiously as possible.

With regard to the business of carrying the crops from the fields, notwithstanding there is much diversity in the size, shape, and construction of the carts and waggons that are employed for the purpose, as well as in the strength of the teams by which they are drawn, there is but little variation in the general mode of conducting the work. The grain crops, in whatever mode they may be harvested, are put upon the carriages by persons stationed in the fields expressly for the purpose, and on being drawn to the rick-yard are forked by the carters to the stacks.

It has been lately suggested, that, where the number of teams is sufficient, in carting the wheat crops, three waggons should be employed somewhat in this manner, one of them loading in the field, one unloading, and one upon the road going in different directions. For this, five or six horses are quite sufficient, with two men to pitch, the same number to load, one to drive, and two to manage the business of unloading; in the whole seven, which make great despatch. But the use of single horse carts is far superior, whatever the number of horses employed in the work may be. Let each of these be in a well formed cart, and a great deal more ground will be cleared than can be effected by the waggons.

In instances where the grain crops are harvested from the swaths, a number of persons are employed in the business of stacking, an operation which is conducted in the same way as for hay; but, where the grain is bound up into sheaves, one person only is necessary in forming the stack, unless where it is of more than ordinary dimensions; in which case the assistance of a boy is commonly required, who receives the sheaves from the carter, and hands them to the man who is employed in building the stack.

HARVEY (William), M. D., an eminent English physician of the seventeenth century, took his degree of M. D. at Cambridge; was afterwards admitted into the college of physicians in London, and was appointed lecturer of anatomy and chirurgery in that college. In these lectures he opened his discovery relating to the circulation of the blood; which, after a variety of experiments, he communicated to the world in his Exercitatio Anatomica de motu Cordis et Sanguinis. He was physician to king James I. and to king Charles I., and adhered to the royal cause. In 1651 he published his Exercitationes de generatione Animalium, a very curious work. His papers were destroyed during the civil wars. In 1654 he was chosen president of the college of physicians in his absence; but, as he could not discharge the duties of that office, he desired them to choose Dr. Pringle. As he had no children, he settled his paternal estate upon the college. In 1653 he built a library and a museum; and in 1656 he brought the deeds of his estate and presented them to the college. He was then present at the first feast, instituted by himself, together with a commemoration speech in Latin, to be spoken on the 18th of October, annually, in honor of the benefactors to the college: and he appointed a handsome stipend for the orator, and also for the keeper of the library and museum, which are still called by his name. He died in 1657. This great physician had the happiness, in his life-time, to find the clamors of ignorance, envy, and prejudice against his doc-

trine totally silenced, and to see it universally established.

HARVEY (Gideon), M. D., an English physician, born in Surrey. He studied at Leyden, and was admitted fellow of Exeter College, in 1655. He was physician to Charles II. during his exile, and to the English army in Flanders. After the Restoration he was made physician of the Tower. He wrote several works on medicine; but of no importance. He died about 1700.

HARVEY'S ISLE, a low island of the Pacific, or rather three or four small islands, united together by rocks and often covered by the sea; the whole being about twenty miles in circumference, and discovered by captain Cook in 1773. Long. 158° 54′ W., lat. 19° 18′ S.

HARVIE (Alexander), a native of Scotland, who merits to be commemorated in a Dictionary of Arts, for having, at the imminent risk of his life, first introduced the inkle manufacture into Great Britain. He went over to Holland about 1732, and in spite of the care which the Dutch took to conceal their methods of manufacturing, brought over from Harlem two of their inkle looms, and one of their workmen; by whose assistance he established the first inkle manufactory at Glasgow, which was afterwards copied at Manchester, &c.

HARUSA ISLAND, the third in size of five large islands between Bergen and Drontheim, on the coast of Norway, to the northward of Broad Sound. It has a high hill in the middle.

HARUSPICES, or ARUSPICES. See ARUSPICES.

HARUSPICY, the art of foretelling future events by attending to various appearances of the victims offered for the purpose. 1. It was an ill omen if the victim needed to be dragged to the altar, if it broke its rope, fled away, avoided the stroke, struggled much after it, made a great bellowing, was long a-dying, or bled but little. 2. Presages were drawn from inspecting the noble parts, as the heart, lungs, spleen, and especially the liver. If all these were sound, if the top of the liver was large and well made, and if its fibres were strong, it presaged well. 3. They were also drawn from the manner in which the fire consumed the victim. If the flame brightened immediately, was pure and clear, rose out till the victim was consumed, these were happy signs. 4. The smoke also was considered, whether it whirled about in curls, or spread itself to the right or the left, or gave a smell different from the common one of broiled meat. 5. It was a lucky omen if the incense they burned melted all at once, and gave a most agreeable smell. See DIVINATION.

HARUTSH, an eastern range of mountains in Fezzan, North Africa, bordering on the Libyan Desert. Horneman was told that it extended seven days' journey from north to south, and five from east to west. It appears to be composed of basalt and limestone. The former predominates in the Black Harutsh, the most easterly part of the chain, and appears to have been the Mons Ater of the ancients. Horneman passed range after range, through narrow valleys, or rather ravines, often steep, and obstructed by loose stones; but it was nowhere of great altitude. On the western side occurs the White Harutsh, consisting of that species of limestone which is distinguished by the multitude of its shells and marine petrifactions. The district consists of a vast plain, interspersed with mounds, or isolated hills. The stones covering the surface, and even the rocks which rise above it, have the appearance of being glazed. Mr. Horneman was informed of black mountains on the road leading southwards to Bornou, whence the people of Fezzan got their iron.

HARWICH, Sax. harewic, a haven, an ancient sea-port, borough, and market town, of Essex, eleven miles and a half east from Manningtree, and seventy-two E. N. E. from London; where the rivers Stour and Orwell (both navigable twelve miles above the town) unite and form a large bay, falling afterwards into the German Ocean, by a strait nearly three miles wide, at high water. The east side of the bay is defended by Landguard-fort in Essex, standing on a point of land which, at high water, has the appearance of an island. The fortifications were here first erected by James I. Harwich was also fortified on the land side; but the works were destroyed in the reign of Charles I. and a battery erected, instead of them, by the water. The harbour, which is independent of the bay, is safe, convenient, and of great extent, being capable of receiving the largest ships of war.

The church, which is a neat building, was formerly a chapel of ease to that of Dover-court, two miles distant. The town, in general, is well built, and consists of three good principal streets, where are a town-hall, a gaol, a free-school, and a custom-house. The town is walled in, and the streets paved with a kind of clay from the neighbourhood, which soon becomes hard as stone. Here is a good dock-yard, furnished with storehouses and other conveniences, in which third rate, and other large ships are built, and two hot and two cold salt-water baths, of elegant structure, with commodious dressing rooms. The buildings stand in a large reservoir, containing many hundred tons of water, renewed every tide; from this the baths are continually supplied with pure running sea-water, in a manner exactly resembling a natural spring. Here are also vapor baths, and a machine to throw the sea-water, either hot or cold, on any part of the body. The town was made a free borough in the reign of Edward II. The corporation consists of a mayor, eight aldermen, twenty-four burgesses, a recorder, &c. It sends two members to parliament, the mayor being the returning officer, who has also the power to hold admiralty courts. It has a neat, clean, commodious, and enclosed market place, well supplied with all kinds of provisions, and particularly with fish. Several fish machines run from Harwich, in a very expeditious manner, to supply the London market. High water, at the full and change of the moon, at half past eleven o'clock. Fairs, 1st of May and 18th of October, for three days each. The post-office packets sail hence, and return twice a week to and from Holland and Germany. Upwards of 3000 tons of shipping are employed in the North-Sea fishery, besides other vessels engaged in the London and coasting trade. Two light-houses

have been erected on the Harwich side of the harbour, to facilitate the entrance by night.

HARWOOD, (Edward), D. D., a learned dissenting clergyman, born in Lancashire, in 1729. He was pastor of a congregation at Bristol, whence he was obliged, partly on account of gross immorality, and partly because of his zeal in the Arian controversy, to remove to London; where he taught the classics. He published a Translation of the New Testament; a view of the various editions of the Greek and Roman classics; and many other books and pamphlets. He died at London of a paralytic complaint, which had confined him to the house for fourteen years, and deprived him of the use of his left side, January 14th, 1794, aged sixty-five.

Harwood, a small but neat town in the North Riding of Yorkshire, with a costly stone bridge of eleven arches over the Wherfe, which runs in a bed of stone, and is as clear as rock water. Near it are the ruins of an ancient castle, built soon after the conquest; and which was a neat strong building in Camden's time. It had a variety of masters; one of whom, in the reign of king John, obtained a grant for a market and fair here. In the reign of Edward III. it was valued at 400 marks a year. This castle was ruined in the civil wars; before which it covered nearly an acre of ground. In the church are some ancient monuments, particularly that of lord chief justice Gascoigne.

HASE (James and Theodore), two learned German writers of the eighteenth century, brethren, and authors of Dissertations, and other classical works. Theodore was professor of Hebrew at Bremen, and died in 1731, aged forty-nine. James died in 1723.

HASH, *v. a.* Fr. *hacher*. To mince; to chop small and mingle.

He raised his arm
Above his head, and rained a storm
Of blows so terrible and thick,
As if he meant to *hash* her quick. *Hudibras.*

What have they to complain of but too great variety, though some of the dishes be not served in the exactest order, and politeness; but *hashed* up in haste? *Garth.*

HASK, *n. s.* Teut. *hals* (collum).—Minsheu. Probably from its shape; a case made of rushes or flags. Obsolete.

Phœbus, weary of his yearly task,
Established hath his steeds in lowly lay,
And taken up his inn in fishes *hask*. *Spenser.*

HASLEMERE, a borough and market town of Surrey, on the edge of the county, next Hampshire, forty-two miles from London. It is an ancient place, and was once destroyed by the Danes. It is a borough by prescription, and has sent two members to parliament, since the reign of Edward IV. chosen by a bailiff, and burgageteeners, about sixty in number, under the influence of the marquis of Lonsdale It is said to have had seven parish churches formerly, though now but one.

HASLINGDEN, a market town in the county of Lancaster, on the river Swinnel, and on the road from Bury to Blackburn. It has a canal navigation to Manchester on the one hand, and to Leeds and Liverpool on the other. Here are flourishing woollen and cotton manufactures. The houses are built of stone; and, besides a neat church, there are two chapels for dissenters. Population upwards of 5000. Market on Wednesday. Seventeen miles north of Manchester, and 203 north-west of London.

HASP, *n. s.* & *v. n.* Sax. þæpp; Isl. *hassa* is to hold. In some provinces it is yet called hapse. A clasp folded over a staple, and fastened on with a padlock; to shut with a hasp.

——And to the chambre dore he gan him dresse,
His knave wos a strong carl for the nones,
And by the *haspe* he haf it of, at ones;
Into the floor the dore fell anon.
Chaucer. The Milleres Tale.

Have doors to open and shut at pleasure with *hasps* to them. *Mortimer.*

HASSAN Pacha, an African of modern times, who became grand vizier of Turkey. He served when young in the Algerine navy, and, being taken by the Spaniards, was sent prisoner to Naples. Having obtained his liberty he entered into the service of the grand seignor, and was at the battle of Tschemé fought against the Russians. He was soon after appointed capitan pacha, or high admiral; in which post he maintained himself some years. He vanquished the Egyptian insurgents; re-established order and tranquillity at Smyrna, in 1775; took Gaza, Jaffa, and Acre; and beheaded the famous Daher, sheik of the latter city, who had for years rebelled against the Ottoman empire. Hassan returned to Constantinople loaded with treasures and with high renown: but, the beys having again revolted, he returned to Egypt in 1786, and gained a signal victory over the rebels. In 1788 war was renewed between the Turks and Russians, and the chief command of the forces by sea and land was entrusted to the capitan pacha. But the season was unfavorable for operations, and bloody battles were fought without any decisive advantage. Okzakow was at length taken by the Russians, and this misfortune occasioned the dismissal of our commander: he was sent to Ismail with the rank of a pacha of three tails. Defeat still attending the Ottoman arms he was recalled and made grand vizier in 1789: but he was worn out, and died in March, 1790, at the age of eighty-seven.

HASSELQUIST (Frederick), M. D. an eminent Swedish naturalist, born at Tournalla, in East Gothland, in 1722, and educated at Upsal, under the great Linné. By the advice of that eminent botanist, with the assistance of the University of Upsal, who granted him a salary for the purpose, he set out upon a voyage to Palestine, in summer 1749, with the view of investigating the natural history of that country, and thereby illustrating eastern philology, and elucidating many passages in the Old Testament. In this enterprise he also received much pecuniary aid, by private subscriptions. By the interest of counsellor Lagerstroem he obtained a free passage, in a Swedish East Indiaman, to Smyrna; where he arrived in December 1749, and was most hospitably received by M. A. Rydel, the Swedish consul. In January, 1750, he set out for Egypt, and spent nine months at Cairo whence he transmitted to Linnæus some specimens of his discoveries, which were published

with great approbation. A collection of 10,000 dollars was then made to enable him to continue his travels and researches. In spring, 1751, he passed through Jaffa to Jerusalem, Jericho, &c., returning through Rhodes and Scio, to Smyrna. Thus he completed the object of his mission, but unfortunately fell a sacrifice to the heat of the climate, which, in his travels through Arabia, had affected his lungs so severely, that he died at Smyrna, February 9th, 1752, aged thirty. The Turks, with their usual rapacity, having seized his collections, were prevented from selling them by the Swedish consul, who wrote home an account of his death and circumstances; whereupon queen Louisa Ulrica generously sent 14,000 dollars to redeem them; and the whole collection, consisting of numerous antiques, shells, birds, insects, serpents, Arabian MSS. &c., arrived in good preservation at Stockholm, and was lodged in the cabinets at Ulrichsdale, and Drottningholm; duplicates of many of them being also sent to Linné at Upsal, who published an account of his deceased friend's voyage and observations.

HASSELQUISTIA, in botany, a genus of the digynia order, and pentandria class of plants: natural order forty-fifth, umbellatæ. The fruits are quite smooth; the seeds of the radius oval, plane, marginated, and convex in the middle; those in the disk hemispherical and urceolated, or bladder-shaped.

HASSER, Aseer, or Asootahma, a hilly district in the province of Khandeish, Mahratta territories, between 21° and 22° N. lat. The country contains many strong positions, on which the chiefs have erected fortifications. The land is fertile, and tolerably well watered by the Tuptee and Poornah; the chief towns are Boorhanpore, Hasser or Aseer, and Chandah.

Hasser, properly Aseerghur, a town and fortress of Hindostan, once the capital of Khandeish. In the year 1803 it surrendered, after a slight resistance, to a division of the Madras army under colonel Stephenson. The town, which stands at the foot of a mountain, is extensive; but, on the removal of the seat of government to Boorhanpore, it fell into decay. It was restored to the Mahrattas, at the conclusion of peace. Long. 76° 21′ E., lat. 21° 32′ N.

HA'SSOCK, *n. s.* German *haseck*.—Skinner. A thick mat on which men kneel at church. In Scotland it is applied to any thing made of rushes or privet, on which a person may sit.

He found his parishioners very irregular; and in order to make them kneel, and join in the responses, he gave every one of them a *hassock* and common prayer-book. *Addison.*

HAST, the second person singular of have.

HASTATI, in the Roman armies were veteran spearmen who wore a complete suit of armour, and carried a convex buckler of four feet six inches in length, and two feet and a half in breadth. The hastati likewise wore a sword, which they carried at their right thigh, and which was called the Spanish sword. This weapon was calculated both to cut and thrust, the blade being very broad, thick, and pointed. They had each, moreover, two pikes, a brass helmet, and half boots. One of the pikes was thick, and the other of a middling size. See Battle.

HASTE, *n. s., v. n.* & *v. a.*
Hasten, *v. n.* & *v. a.*
Has'tener, *n. s.*
Has'tily, *adv.*
Has'tiness, *n. s.*
Has'tings, *n. s.*
Has'ty, *adj.*
Hasty-pudding, *n. s.*

French, *haste, haster*; Dutch, *haerte, hasten*; Goth. *haust, hast.* The primary idea is rapidity; speed; precipitation; passion; vehemence: to move eagerly; to urge, or drive on apace. Hastings, peas that come early. Hasty-pudding, a pudding made of milk and flour boiled together, and stirred quickly to prevent burning to the sides of the vessel.

I said in my *haste* all men are liars. *Psalms.*
They were troubled and *hasted* away. *Id.*
Seest thou a man that is *hasty* in his words? there is more hope of a fool than of him. *Proverbs.*
He that is slow to wrath is of great understanding; but he that is *hasty* of spirit exalteth folly. *Id.*
Be not rash with thy mouth, and let not thine heart be *hasty* to utter any thing before God. *Eccles.* v. 2.
Beauty shall be a fading flower, and as the *hasty* fruit before the Summer. *Isaiah.*
I have not *hastened* from being a pastor to follow thee. *Jeremiah.*
All those things are passed away like a shadow, and as a post that *hasted* by. *Wisdom.*
In alle *haste* come to me; he saide.
Chaucer. The Nonnes Preestes Tale.
The second condition of veray confession is that it be *hastily* don, for, certes, if a man hadde a dedly wound, ever the lenger that he taried to warishe himself, the more wold it corrupt and *hasten* him to his deth, and also the wound wold be the werse for to hele. *Id. The Persones Tale.*
Thus as she her recomforted, she spyde
Where far away one, all in armour bright,
With *hasty* gallop towards her did ryde.
Spenser. Faerie Queene.
A voice that called loud and clear,
Come hither, hither, O come *hastily*! *Id.*
Is this the counsel that we two have shared,
The sisters vows, the hours that we have spent,
When we have chid the *hasty* footed time
For parting us? *Shakspeare.*
Let it be so *hasted*, that supper be ready at the farthest by five of the clock. *Id.*
'Tis Cinna, I do know him by his gait;
He is a friend. Cinna, where *haste* you so?
Id.
There is most just cause to fear, lest our *hastiness* to embrace a thing of so perilous consequence, should cause posterity to feel those evils. *Hooker.*
Spare him, death!
But O, thou wilt not, can'st not spare!
Haste hath never time to hear. *Crashaw.*
Hasting to pay his tribute to the sea,
Like mortal life to meet eternity. *Denham.*
The sun
Declined was *hasting* now with prone career
To th' ocean isles, and in th' ascending scale
Of heaven the stars that usher evening rose.
Milton.
A fellow being out of breath, or seeming to be for *haste*, with humble *hastiness* told Basilius. *Sidney.*
If your grace incline that we should live,
You must not, sir, too *hastily* forgive. *Waller.*
Our lines reformed, and not composed in *haste*,
Polished like marble, would like marble last;

But as the present, so the last age writ;
In both we find like negligence and wit. *Id.*

The turns of his verse, his breakings, his propriety, his numbers, and his gravity, I have as far imitated as the poverty of our language, and the *hastiness* of my performance, would allow. *Dryden.*

The wretched father running to their aid
With pious *haste*, but vain, they next invade.
Id.

The next to danger, hot pursued by fate,
Half clothed, half naked, *hastily* retire. *Id.*

These rites performed, the prince, without delay,
Hastes to the nether world, his destined way. *Id.*

Sure *hasty-pudding* is thy chiefest dish,
With bullock's liver, or some stinking fish.
Dorset.

The large white and green *hastings* are not to be set till the cold is over. *Mortimer.*

Soon as the sun awakes, the sprightly court
Leave their repose, and *hasten* to the sport.
Prior.

To distant Sparta, and the spacious waste
Of sandy Pyle, the royal youth shall *haste*.
Pope.

Without considering consequences, we *hastily* engaged in a war which hath cost us sixty millions.
Swift.

On—on he *hastened*—and he drew
My gaze of wonder as he flew.
Byron. The Giaour.

HASTED (Edward), a modern historian of Kent, was the only son of Edward Hasted, esq., of Hawley, descended from the noble family of Clifford. He was born in 1732, and possessed at one time a competent landed property. But he fell into difficulties and litigation in regard to it, and lived obscurely for some time in the neighbourhood of London. A few years before his death he removed to the hospital at Corsham, Wilts, to the mastership of which he had been presented by the earl of Radnor; and soon after recovered his estates by a decree in Chancery. His History of Kent, 4 vols. folio, employed his attention for upwards of forty years. He died 14th of January 1812.

HASTING PEAR, a name given by the gardeners to a species of pear, called also by some the green chisel pear. This is a moderately large pear, and is longish towards the pedicle; its skin is thin, and of a whitish green; the pulp is melting, and of a sugary flavor. It ripens in July. See PYRUS.

HASTINGS, a town of Sussex, and one of the cinque ports. It was formerly obliged to find twenty-one ships, within forty days after the king's summons, well furnished and armed for service, and to maintain the crews a fortnight at its own charge. It is said to have been named from Hastings, a famous Danish pirate. In king Athelstan's reign it had a mint. It had charters from Edward the Confessor, Willlam I. and II., Henry II., Richard I., Henry III., Edward I., and Charles II., exempting it from toll, and empowering it to hold courts of judicature on life and death. It has about 600 handsome houses, and 3000 inhabitants; but frequent storms have rendered the harbour indifferent, though a vast sum of money has been laid out upon it. Hastings has sent members to parliament ever since Edward III. About 1377 this town was burnt by the French; and, after it was rebuilt, it was divided into two parishes. It had formerly a priory, and was a barony in the Huntingdon family. Hastings is remarkable for a battle fought in its neighbourhood, between Harold II. king of England, and William duke of Normandy, on the 15th of October 1066, in which the former was defeated and killed; and by his death William became king of England. The town has of late received a new impulse as a watering place; and from the beauty of the situation, the mildness of the air, and the excellence of the beach, it rivals many of the others on the southern coast. On approaching the town, by the London road, a beautiful and extensive prospect opens of the town and ocean, and the distant coast and hills. The environs also abound with picturesque scenery. A walk, called the Marine Parade, has been formed on the west, and close by it stand the bathing machines on a fine sandy beach, sloping gently to the sea. Convenient warm baths have been established, a library furnished with newspapers, &c., a billiard-room; and an assembly held twice a-week. The town itself is well paved, and consists of two parallel streets running north and south, and divided by a rivulet called the Bourne. The public buildings are, two very ancient churches; the town-hall, built in 1700, with the market place under it; the custom-house, which employs twelve riding officers; two excellent free schools; and a barrack for foot soldiers. The remains of an ancient castle are to be seen on a rocky cliff to the west of the town, and still farther on those of a priory of black canons. Two miles from the town is the stone on which William is said to have dined when he landed here, and still called the Conqueror's stone. Hastings sends two members to parliament. Markets on Wednesday and Saturday. It is thirty-six miles south-east of Tunbridge, and sixty-four south-east of London.

HASTINGS (Warren), esq., was born in 1732 at the village of Churchill, in Oxfordshire, where his father was a clergyman. He was educated at Westminster, and went in 1750 to Bengal, as a writer in the East India Company's service. He returned to England in 1765 with a moderate fortune. In 1768 he received the appointment of second in council at Madras; and was removed in 1771 to Bengal, to the presidency of which he was raised in 1772. The following year he was appointed governor-general of India. In 1778, the commission by which he held his office expiring, it was renewed first for a single year, and in 1781 for ten years longer: lord North, who had endeavoured to remove him in 1776, thinking it afterwards desirable to retain him in that post. During the celebrated coalition between Mr. Fox and lord North, the censures of the ministerial party were cast on Mr. Hastings, for his conduct in his government, and especially for his treatment of the native princes of India. Mr. Hastings returned from his government in 1786 to meet an impeachment. After proceedings protracted through a period of nine years he was acquitted, and retired, with the wreck of his fortune and an annuity from the Company, to Daylesford in Worcestershire. He was made a member of the privy council; but devoted the

evening of his life to literary pursuits, and died 22nd of August 1818. He published various Speeches and Papers on Indian Affairs, and a volume of poetry.

HAT, *n. s.* } Sax. þæt; Germ. *hatt;*
HAT'BAND, *n. s.* } Teut. *hut.* A cover for the
HAT-'CASE, *n. s.* } head: a band, or string tied
HAT'TER, *n. s.* } round the hat, generally applied to silk or crape bands used at funerals. Hat-case, a slight box for a hat. Hatter, one who makes and sells hats.

Upon an ambler esily she sat,
Ywimpled wel; and on hire hede an *hat*,
As brode as is a bokeler or a targe.
Chaucer. Prologue to Cant. Tales.

She's as big as he is; and there's her thrum *hat*, and her muffler too. *Shakspeare.*

Out of mere ambition you have made
Your holy *hat* be stampt on the king's coin.
Id.

They had *hats* of blue velvet, with fine plumes of divers colours, set round like *hatbands*. *Bacon.*

His *hat* was like a helmet, or Spanish montero.
Id.

Hermes o'er his head in air appeared,
And with soft words his drooping spirits cheered;
His *hat* adorned with wings disclosed the god,
And in his hand he bore the sleep-compelling rod.
Dryden.

Room for the noble gladiator: see
His coat and *hatband* shew his quality. *Id.*

I might mention a *hatcase*, which I would not exchange for all the beavers in Great Britain.
Addison.

A *hatter* sells a dozen of *hats* for five shillings a-piece. *Swift.*

HATS. This important article of modern commerce and personal convenience is of recent adoption in Europe. Hats are said to have been first used by men at the beginning of the fifteenth century. But the hatters have a tradition among them, that while St. Clement, the fourth bishop of Rome, was fleeing from his persecutors, his feet became blistered, and, to afford him relief, he was induced to put wool between his sandals and the soles of his feet. On continuing his journey, the wool, by the perspiration, motion, and pressure of the feet, assumed a uniformly compact substance, which has since been denominated felt. When he afterwards settled at Rome, it is said he improved the discovery; and from this circumstance has been dated the origin of felting. Hatters in Ireland, and several Catholic countries, still hold their festival on St. Clement's day. Hats, however, are first spoken of in history at the period when Charles VII. made his triumphant entry into Rouen, in the year 1449. In F. Daniel's account of that entry, that prince, he says, astonished the whole city by appearing in a hat lined with red silk, and surmounted by a plume of feathers: from this entry their general use is dated. In process of time the clergy also assumed this part of the habit of the laity, but it was looked on as a great abuse, and several regulations were published, forbidding any priest, or religious person, to appear abroad in a hat without coronets, and enjoining them to keep to the use of chaperoons, made of black cloth, with decent coronets; if they were poor, they were at least to have coronets fastened to their hats; and this upon penalty of suspension and excommunication. The use of hats, indeed, is said to have been of longer standing among the ecclesiastics of Brittany, by 200 years, and especially among the canons; but these were, in fact, a kind of caps; whence arose the square caps worn in colleges, &c. By the statute of 13 Eliz. every person above the age of seven years, and under a certain degree, was obliged on Sundays and holidays to wear a woollen cap, made in England, and finished by some of the fraternity of cappers, under the penalty of 3*s.* 4*d.* for every day's neglect. This statute was repealed 39 Eliz. From Stow's Chronicle we learn, that about the beginning of Henry VIII. began the making of Spanish felts in England, by Spaniards and Dutchmen. In the second year of James I. the felt-makers of London obtained a corporation, and hired a hall near Christ Church, the king granting them various privileges and liberties for their support.

Hats are at present made in different countries on the continent, and in America; but, except in France and our own country, they have not been much attended to as an article of commerce. From France they were exported in large quantities, to Engiand, Spain, Italy, and Germany; the quantity now made there is inconsiderable; England has, in its turn, become the grand mart for the manufacture; and hence the article is exported to different parts of the continent, America, and various other parts of the globe.

Felt hat-making consists in a method of working up wool or hair into a species of cloth, independently of either spinning or weaving; and giving it a convenient form, with a degree of stiffening sufficient to preserve its figure, and to answer the purposes of wearing. The mechanism of felting is curious and interesting; it depends on the conformation of all animal hairs and wool, which disposes them to unite with each other in such a manner as to produce a firm and compact substance.

On examining hairs, or filaments of wool, with the naked eye, or even by a low magnifying power of the microscope, they appear perfectly smooth and even. Their surface, notwithstanding, is by no means smooth; but composed of lamellæ, covering each other from the root to the point, in a manner resembling that by which the scales of a fish cover the animal from the head downwards. This disposition of the lamellæ on the surface of hairs is discoverable by holding a hair with one hand, and drawing it between two fingers of the other, in the different directions from the root to the point, and from the point to the root. In the former case no sensible friction takes place, nor is any roughness discoverable; in the latter we discover a very sensible resistance, which is most readily discerned by moistening the fingers. The following experiment is still more decisive. By holding a hair between the fore-finger and thumb, and rubbing it in the longitudinal direction, a progressive motion takes place, and this motion is invariably towards the root, or with the root of the hair foremost. For example: if the hair be held in a perpendicular direction with the

root upwards, by rubbing the finger and thumb together, it will be found to assume a motion by which the extremity of the hair, pointing upwards, will rise still higher; but if the hair is turned, so that the extremity farthest from the root be placed upwards, its rising motion is discontinued, and it immediately recedes downwards.

This conformation of the surface of hairs and wool, which appear to be composed of hard lamellæ or asperities, placed over each other like tiles from the root to the point, lays the foundation of felting. In a layer of the material, by the operation it undergoes, the hairs are brought into close contact by their progressive and uniform motion towards the root; and, meeting in various directions, they become twisted together, the lamellæ of the different hairs fixing themselves to others directed in a contrary way, at the same time preserving the whole in a close and compact substance.

The materials in general use are, lambs' wool, rabbits' and hares' fur, beaver, seal wool, monkey stuff, or neuter wool, camels' hair, goats' hair, or estridge, silk, and cotton. Moles' fur, and otter wool, are likewise sometimes made use of. The foreign lambs' wool generally used is the Italian, Spanish, and Peruvian, or Vicuna wool, commonly known among hatters by the name of red wool. Our native wools are of various qualities: those in most esteem are the Herefordshire, or Ross wool, Southdown, Wye-side, Wiltshire, Somerset, and Hampshire. There is likewise wool sheared from Spanish lambs bred in England, known by the name of merino. Cod-wool is the wool plucked from lambs who die in the birth; long cod-wool is that plucked from lambs who die in early life. The best fur is from the backs of the different animals, and it decreases in value as it approaches the belly. Rabbits' fur, including the backs, and the best part of the sides mixed together, is known in the market by the name of best stuff; the fur from the bellies and worst part of the sides, seconds; that from odd bits of skins, &c., clippings; and the fur taken from rabbit-skins, when they are out of season, is denominated quarter-wool. The fur from unseasoned hare-skins is called stage hare-wool: with this is mixed also the inferior fur from seasoned skins. The best fur from the beaver is ruffing; the next in value cheek-napping; and the inferior sorts are black-wooms, brown-wooms, white-wooms, brown-stage, and white-stage. Old-coat is taken from the beaver-skins that have been worn by the savages; but little of this article is now imported.

The wools are washed and carded, and, when very long, cut to a moderate length with a chopping knife, or hatchet, on a wooden block. White Russia, best-stuff, and hares' wool, and the most inferior stuffs, as clippings, tail-wool, &c., are improved by the operation of carroting. For this purpose a layer of the stuff is placed in a box, or any suitable vessel not of metal, and sprinkled over with a mixture of about one part nitrous, or nitrous and sulphuric acid, and six parts water by means of a brush. A second layer is then placed in the vessel, which is again sprinkled with the acid mixture; this is repeated till it is full. To prevent the liquor running down into the bottom of the vessel, without equally wetting all the stuff, its position is frequently changed in the course of the day; it is then kept in the digesting heat of a stove all night. By this treatment the stuffs acquire a ruddy or reddish-yellow color, like the inner part of a carrot, from which it derives its name.

In felting any of these materials together, the first object of the workman is to obtain the most complete separation of the fibres, and to dispose a layer of them in every possible direction with regard to each other; this is effected by means of bowing. For this purpose a platform of wood, about four feet wide, is erected against the wall of a convenient shop, and divided by side partitions about the same width from each other, into distinct portions, for the convenience of different workmen, called hurdles, each of which is enlightened by a small window. To each hurdle is suspended a bow by means of a small cord fixed to the ceiling, or any other convenient place, consisting of a pole about seven feet long, generally made of deal-wood, to which are fixed two bridges of hard wood, the upper one nearest the window called the cock, and the lower one the breech. To the upper part of the pole, above the cock, is fastened a cat-gut line, or bow-string, of considerable length, and twisted round the pole, leaving only sufficient to bring over the cock and breech, and to fasten to the lower part of the pole; thus, when the string breaks, it is partly untwisted from the upper end of the bow, and the necessity of a new one is prevented. To preserve the wood from wearing, by the action of the bow-string, a strip of horse-skin, or vellum, is fastened to the edge of each bridge; and near the cord, by which the bow is suspended, is fastened a small strap to place the hand in, which enables the workman to hold it with firmness. The bow-pin is a small stick with a knob at each end for plucking the bow-string.

As the process of making is a little different in different kinds of hats, we shall first describe that of wool hats or *cordies*. A quantity of carded wool, of one or more sorts, sufficient for one hat, generally about seven or eight ounces, is laid on the hurdle towards the left. The workman then holding the bow horizontally in his left hand, under the strap, and the bow-pin in his right, placing the bow-string near the right hand edge of the material, gives it a pluck with the pin. The string immediately flies back nearer to the pole than its situation was when at rest, strikes into the wool, and, instantaneously returning to its original position, scatters a part before it to a distance proportioned to the force with which it was pulled. By repeated strokes the whole is thus worked, observing, after each stroke, to raise the string, by giving the bow a turn with the left hand. This breaking over, as it is termed, is repeated several times, more or less, in proportion to the difficulty with which the hairs are disunited; when all the fibres are completely separated, the material is again placed towards the left hand side of the hurdle, and the workman proceeds, with more order

than before, to scatter the wool to the right hand, so as to form a thin regular layer; which he effects by duly proportioning the force of his strokes, and the position of the bow. When about one-third part is thus bowed, it is formed by the hands into an oval figure, ending in acute angles at the extremities. This portion of the material, thus formed, is called a batt.

The *batt* is hardened by a slight pressure with the hands for a short time, so as to connect it together sufficiently to bear careful handling. Another batt is then formed of the same dimensions; and, with the remaining third part, two smaller batts are formed, which are separately united to the primary ones by a little pressure. This gives each of them a more uniform consistence than would be obtained by forming single batts only. It was formerly common to form six batts for each hat, but few are now willing to devote sufficient labor for the purpose. It is necessary to remark, that the batts are bowed thicker in that part which is designed to form the band of the intended hat; and, to give them a finish, the edges are torn round even by the right hand, while the pressure of the left prevents their being torn in too far.

It now remains to connect the parts together in some convenient form, and to proceed in the operation of felting For this purpose, a wet cloth is folded so as to form a triangle, and laid on one of the batts. The extremities of the batts, with a small portion of the upper part, is then folded over the cloth, and the edges meeting over each other form a conical cap. This cap is laid on the second batt with the joining downwards, which being also folded up in the same manner, their places of junction will be diametrically opposite each other. This is laid on a second wet cloth, which is closely folded over the whole, so as to preserve the triangular figure; it is then ready for *basoning*. The bason is a circular piece of iron, exactly the same as those commonly used in Wales for baking over the fire, called backstones. This is laid over a hole in a plank, underneath which is a small grating fitted to the plank for this purpose. The prepared cap is then laid on the warm iron, and the process of felting carried on by folding, pressing, and sprinkling it continually with water. The corners being folded over a little, the base is first turned up towards the tip; and in this state it is worked a short time by pressing with the hands, moving them backwards and forwards, and shifting them about in various directions. Each side is then folded over towards the other alternately, the tip part towards the base; and, in general, it may be folded in any or every direction, repeating the pressure and working of the wool, and sprinkling it successively after every fold. By this pressure, and working the wool in various directions, the points of contact are multiplied; and the agitation given to each hair causing a progressive motion towards the root, and a coalition with each other, it soon acquires some degree of firmness and contracts in its dimensions.

On taking off the cloth, and opening the hood or cap, it will be found that the edges, or original folds, will not have that even and uniform appearance with the rest of the surface, but small ridges will be formed by a small part of the sides felting together at the outward edges, which will be considerable if care has not been taken in the first place to fold the batt closely over the inlayer. It is found necessary, therefore, to alter the position of the original edges, by turning round the cap, to extend them a little with the finger so as to produce a uniform surface, and with the hood in this position to continue the basoning as before. It is afterwards turned inside outwards, and the same operation continued. The workman afterwards opens the hood, holds it up to the light and looks through it from the inside to discover any parts that may be unusually thin; and on any of these parts, which are deficient, a little wool is added from that which was torn off the edges of the batt; and by working that particular part on the bason it is made to unite. When this is done, the process of basoning is completed, which generally takes from about twenty minutes to half an hour.

The hood now consists of a soft spongy kind of stuff, and its texture is loose and imperfect. To produce a more intimate cohesion of the hairs with each other, and obtain the requisite degree of consistence, it must undergo a kind of fulling, and a more effectual mechanical operation. For this purpose, the hats are first boiled in an iron boiler, in a mixture of about one part urine to six parts soft water, from six to eight hours. To prevent their touching the boiler, they are enclosed in a cloth; a basket, or, more generally, a lining of straw is placed round the sides, and at the bottom of the boiler. The felting is completed by working or planking at a water bath.

For the convenience of any particular number of workmen, an apparatus, called a battery, is generally made use of for this part of the process, consisting of a proportionate number of wooden planks, joined together in the form of the frustum of a pyramid, supported by stone or brick-work, and meeting at the bottom in a kettle, under which is a fire-place. The number of planks is most commonly from five to seven; and, according to the number made use of, it is called a five, six, or seven-room battery, &c. Each plank is from two to three feet broad at the upper edge, and about two feet deep. The kettle is generally of cast-iron or lead, and kept full of soft water, as nearly boiling as the nature of the operation will admit. To facilitate the felting, it is found necessary to add some softening material to the bath: for this purpose, some spermaceti, a marrow-bone, or shreds of wash-leather, have been thrown in; but oatmeal is at present almost universally used; about a table-spoonful is thrown into the kettle, and occasionally repeated as fresh water is added, or as it may be found necessary. The more greasy substances will answer for the purpose of planking, but it prevents the hats from taking a good dye; leather-shreds answer very well, but are not always so easy of access as oatmeal.

The operation commences by dipping the article in the bath, and gently rolling it in various directions, observing a degree of regularity, as

in basoning, or its receiving more work in some parts than others will soon give it an irregular and shapeless appearance. It is necessary to be careful at first to turn the hood inside outwards, and to shift the position of its sides frequently to prevent their felting together, of which, in the subsequent stages of the process, there will be no danger. By working a short time in this way, the article will be found to have acquired a considerably firmer texture, and to have contracted very rapidly in its dimensions. The workman then applies leathern gloves, or flat pieces of stout leather, to the palms of his hands, to secure them in some degree from the heat of the water, and continues to dip it much oftener, and to roll it much harder than before, as it requires more labor, in this degree of felting, to obtain the firmness and consistence. In the first gentle rolling, an impulse, nearly equal, was given to the hairs in every direction, and hence it so readily contracted in its dimensions at the same time that it acquired a degree of firmness in substance. In rolling it harder the pressure is more particularly on the flat surface of the felt, and this acquires a more compact texture, without an equal contraction in the size. It is however necessary to prevent any contraction in size when it is sufficiently shrunk, and yet worked to any degree of consistency. For this purpose a small roller of wood, called a walking-pin, is made use of: over this the edges of the felt are turned, and the whole is rolled in various directions with the walking-pin enclosed by the surrounding felt; at the same time continuing to dip it often in the bath. This completes the working at plank; and on the labor thus given its service in wearing will principally depend.

The intended hat, after the preceding operation, still possesses the conical figure first given it, consisting of a soft flexible felt, capable, with a moderate degree of force, of being extended in every direction. The next thing to be done is to give it the required form. For this purpose the edge of the hood is turned up about one and a half or two inches: the point is then indented with the fingers, and the hood turned over, so as to produce a second inner fold about the same depth. From three to five folds are thus formed, and the whole has the appearance of a flat piece, consisting of a number of concentric circles, or wave-like undulations. This is laid upon the plank, and the workman, keeping it wet with clean warm water, extends the central point with the fingers of his right hand at the same time pressing it down with his left, and turning it round on the plank, till a flat portion is formed equal to the intended crown of the hat. The flat part is then placed in a block, and the remainder pulled down with the hands round its sides and a string tied tight round; it is forced down to the bottom of the block with a wooden or copper stamper, which forms the band. The brim will now have a curling inclination towards the crown, but is soon flattened by wetting and extending the edges. The water is afterwards pressed out of the hat with the blunt edge of the stamper, and the nap is raised by carding it in any direction with a small wired instrument called a raising card. The hat is then taken off the block and placed in a stove to dry, when it is ready for the subsequent operations of dyeing, stiffening, and finishing. These instructions for blocking refer particularly to the common round hat now generally worn; but from the nature of the felt it will be seen that any form may easily be given it by the skill of the workman, with a corresponding block.

The above account comprises the general principles of hat-making, and is the foundation of every variety in the art. Common wool hats, or plain cordies, are of one uniform contexture throughout; but ingenuity has contrived a method of making the most of the materials employed, by placing the best side outwards. This is done by laying on the body of the hat, when partly felted, a finer and more valuable material, in the same direction it has when on the back of the animal. For the purpose of covering wool hats, the articles made use of are cod-wool and camel's hair: the former of which, after washing and carding, is boiled about an hour and a half in one part urine to about twelve or fourteen parts of water. The hats covered in this manner are bowed, basoned, and boiled in the usual manner, the common materials being used only in less quantity, proportioned to the addition intended to be made. A thin layer of the prepared cod-wool, with or without the addition of hair, is then bowed for each side of the triangular hood, so as just to meet at the edges; and another piece to go all round on the inside to the depth of the intended brim. The pieces are laid on the principal stuff or body of the hat, and worked on by basoning in the manner already described: the hairs assuming a motion towards the root, uniformly fix themselves in that direction, leaving the extremities outward which constitute the required nap. After this addition of the nap, the planking takes place as before.

For obtaining a variety of cordies, of different value, they are partially as well as wholly covered with different proportions of napping, and on bodies of wool more or less valuable. Next to the plain hats succeed the tips: these have only a nap sufficient to cover the crown and reach a short way down the sides. To save the trouble of basoning the nap on this kind of hats, it is only laid on with the hands, the hood turned so that the nap may be inside, and a layer of some proper flexible substance, commonly long horse-hair, placed between the sides to prevent its uniting: in this manner it is taken immediately to the plank. The second class is tips and naps; these, as well as a cod-wool tip, have a nap of the same on the underside of the brim. And, lastly, succeed the covers. A good cover takes about two ounces of cod-wool, and a hair cover about half an ounce of hair in addition to the cod-wool; these are commonly bowed together; and the former is scarcely ever used for a nap without the addition of the latter.

Stuff hats appear to have been originally made throughout of beaver; the instructions given in the old accounts of hat-making is, to mix three parts of old coat with two parts of castor; but hats made in this way would be much higher in price than any now in general use. The beaver at present is scarcely ever used except in the

outward nap, and the body of the hat is composed of various inferior stuffs in any proportion; commonly with the addition of a little Spanish or vicuna wool, and sometimes a small quantity of silk is added. A patent was granted Mr. James Burn, of Alnwick, Northumberland, for making superfine hats, which, contrary to general modern practice, appear to have been of one uniform consistence. The composition consists of three ounces and a half of moles' fur, two ounces and a half of beaver, and a quarter of an ounce of Aleppo wool; 'and, in order to subdue the obstinate nature of the mole fur,' says Mr. Burn, 'so that it may incorporate with other furs usually made into hats, I use a little aqua regia; but, as that process destroys the elastic quality of the fur, I correct it by a little sweet or Florence oil, which sheathes the pungent points of the aqua regia.'

Stuffs possess, in general, a greater tendency to felting than wool, and in consequence some small difference is observed in the manufacture. As the fibres are more easily separable, a slighter bow, with a finer bow-string, is used than that made use of in wool. When the stuffs are bowed in the usual way, the batts are formed and gently pressed down with a piece of osier work, called a gathering basket, consisting of open straight bars only interwoven sufficiently to connect it together, and preserve it in form; it is from eighteen to twenty inches square. This is constantly kept on the hurdle, for the purpose of shifting the stuff as well as for forming the batts. Sometimes one or two of these baskets are placed under the stuff to separate any impurities that may pass through. To obtain this end more effectually, in the metropolis and several places in the north of England, a fine movable wire frame is placed on the hurdle on which the stuff is broken over, which is again removed, and the impurities swept off the hurdle for forming the batts.

These have their first degree of compactness given them by laying on a hardening skin of smooth leather, or sailcloth; and gently pressing with the hands, which are at the same time slightly moved backwards and forwards, to cause the entangling of the fibres. The cap is formed in the same manner as wool hats, only the inlayer for stuff is a piece of wetted paper instead of cloth. When folded up in a wet cloth, it is worked on the hurdle in the same manner that other hats are on the bason, but without any heat except what is imparted by the hands or any subsequent sprinkling. After being thus basoned, without any boiling, they are immediately taken to the battery to undergo the operation of planking. In consequence of the superior smoothness of furs over wool, any softening material in the kettle is unnecessary: but it is indispensable that some substitute be made use of which will have an effect equivalent to boiling in the former case. For this purpose, wine lees were formerly in general use, but this has given place to sulphuric acid, which, from the smallness of the quantity made use of, is cheaper, and more easily obtained. About a wine-glassful of the acid is added to the kettle of water; in pouring in which great care is necessary to prevent its sprinkling over the operator: it is afterwards added in small quantities as it is found necessary. Into this bath the hat is first dipped, and then suffered to lie on the plank till cold again. This is called soaking, which is unnecessary in hats that are previously boiled.

It appears that the acid in caroting, boiling, and working at the plank must act as a chemical agent on the substance of the hairs, but in what way it does so is not understood: practical hatters seldom give themselves the trouble to think on the subject. M. Chaussier conjectures that it may produce, either by softening or swelling the hairs, a certain alteration which is necessary to bring about the cohesion of the different fibres. It is said that acid of any kind, by taking out the greasy substances on each pile of hair, allows the roughness on the surface of each to operate with their full effect, and thus facilitates the mechanical action of felting. The action of felting being promoted, however, by greasy substances, renders this last solution a little doubtful. Perhaps some kind of mucilaginous substance may be on the surface of the hairs, as conjectured by Mr. Nicholson, which is disengaged by the action of the acid.

Plated hats are an article of modern date: they are said to have been invented in the north of England within the last fifty years; and Lancashire and Cheshire are at present the principal seat of their manufacture. These are a middle class between cordies and stuffs, designed as a substitute for the latter at a more reasonable expense. To effect this purpose the different kinds of stuff are plated on wool bodies. But, in consequence of the looser texture and thicker substance of this kind of felt, a nap of much finer materials could not be laid on in the usual manner so as to appear to advantage: it is found requisite therefore to have recourse to another expedient. The wool body, after it is boiled in about one part urine to three parts water, and has been worked sufficiently to complete the felting, is laid over a hair-cloth on the plank: the nap is then laid on the surface, sprinkled with a brush, and patted down. A layer of old stuff, or stuff which has its properties of felting destroyed, and carded cotton, or either of these separately, is bowed and laid on in the same manner, commonly mixed with a small portion of napping; and sometimes another layer is added. It is then slightly rolled a short time in the hair-cloth; but as the nap, by the process of rolling, would soon be lost by penetrating too deeply into the felt, it is discontinued, and the nap is fixed on by the operation of shaking and patting with the stopping-brush. The workman dips the article in the bath, and holding it by one of its edges between the forefinger and the thumb of each hand, strikes it down on the hair-cloth, at the same time depressing his hands in such a manner that the most distant edge may have an inclination given it to turn upwards, and thus after striking upon the cloth it is immediately raised off. This shaking is continued by repeated strokes in quick succession, frequently changing its position, and continuing the dipping, and patting it frequently with the brush. By this process the hairs are just fixed in by the roots,

without sinking too deeply, and a long flowing nap is obtained. The cotton and old stuff during the operation, sticking on the body of the hat by means of the hot liquor, preserve the nap from flying off; at the same time, by enabling it to hold a greater body of the fluid, the work is facilitated, and the nap is also preserved from the continued action of the brush. When the nap is completely fastened, which will be in about half an hour, the cotton and old stuff are loosened by striking with a flat stick, and continuing the shaking. In a short time they will appear in a loose flake over the surface, which is taken off with the fingers whilst the nap remains fixed by the roots in the substance of the felt: the cotton and old stuff are dried and preserved for future use. In plating, as the bodies are first boiled, and as the nap laid on is of a soft, smooth, nature, nothing is made use of in the kettle but clean water. Best stuff, hares' wool, neuter wool, seal wool, or a mixture of any of the stuffs, are made use of according to the intended quality. Neuter wool has a short, neat appearance as a nap; seal-wool naps are much esteemed, and wear remarkably well: for the best plates, some beaver is added to the other stuffs made use of.

It has lately become a practice to unite the common method of napping with that of plating in stuff hats, which have the name of shake-offs given them. After a slight nap is first rolled on, a second, and principal nap, is shaken on in the same manner as in plated hats. A shorter fur may in this manner be applied to advantage, or one of the usual length will produce a more showy nap.

Hats have been worn of various colors, but those most in use at present are black, drab, and white. The white hats, which are only intended for ladies and children, have a nap of rabbits' fur, selected from the white skins. Drab hats are also made of stuffs of the natural color, assorted for that purpose. In dyeing black, the articles now in general use are logwood, of which Campeachy was the best, copperas, and verdigris. French verdigris is far superior to the English. For dyeing common cordie hats, the general proportions for twelve dozen are about twenty-four pounds of logwood, seven of copperas, and a quarter of a pound of verdigris. The logwood is chipped, and left in the boiler to soak the preceding night; part of the copperas and verdigris is then added and boiled with the logwood. The hats are each fastened on a block with a string tied round the band and boiled in the liquor, sometimes turning those nearest the surface, and placing a weight upon them to keep them under the liquor. After boiling about an hour they are taken out and exposed to the air, while a fresh quantity is boiled in the kettle the same time as before. This boiling and airing is repeated several times according to the strength of the dye, the perfection required, or the nature of the materials to be dyed, as experience has shown that the action of the atmospheric air, or the oxygen it contains, very much contributes to improve the dye; the remainder of the copperas and verdigris is added in a decreased proportion to each suit. Common hats that are easily dyed have now generally two suits only; best hats from three to four. On account of the high price of verdigris, sulphate of copper or blue vitriol is frequently made use of in dyeing common hats in a larger proportion, or a mixture of about equal parts of each. But those dyed with verdigris only have the brightest appearance after finishing. After dyeing, the hats are well washed in clean water.

After hats are dried, the next operation they undergo is that of stiffening. For the common purposes of stiffening, glue and vinegar dregs, beer grounds, or dregs from the distilleries are the articles made use of. The hat, for this purpose, is put into the crown of another large one, called the stiffening-hat, which is only felted and blocked, and has its crown slit open to admit the hat to be stiffened, of any depth the more readily. These are placed in the hole of a plank on which the brims are supported. The dregs are then first applied warm, with a brush similar to a large painting-brush, on the inside of the crown only; this is done by holding the brush in the right-hand, while the left-hand, holding the brim of the stiffening-hat, continually turns it round, that the enclosed may be uniformly covered with the dregs. The dregs are made use of as they are the cheapest mucilage, and give a degree of firmness to the hat, at the same time preventing the glue from penetrating through to the surface. After this is dry, the glue is applied to the crown in the same manner, which is made in the proportion of about one pound of glue to three pints of water. After it is laid on with the brush, it is well rubbed round with the hand; for which purpose it is found expedient to employ a second person in the business, who receives the hat of the first person as fast as the glue is laid on with the brush. It was remarked that, in the first formation of the hat, the part designed for the band was laid thicker than any other; as this part has the most wear—as the wet is most likely to penetrate here—and as the general firmness of the hat depends on the strength of the band, it is likewise necessary to attend particularly to this part in the stiffening.

In stiffening a quantity of hats, the crowns only are thus attended to in the first place. In common hats, the grounds are frequently mixed with the glue, and laid on at the same time. The brims are next stiffened with a common soft brush, and glue only, which is applied to the underside. This is well worked into the body of the felt with the hand, and the hats are placed in a stove to dry. When dry, the nap on the underside of the brim will be glued down to the felt; this is removed from the surface by scouring it with a brush and a quantity of warm soap-suds, which are pressed out of the nap by the blunt edge of a wooden or copper stamper. Ladies' light hats, and some of the children's fancies, are stiffened with the application of starch, or common flour paste only.

In France the composition of gum arabic, common gum of that country, and Flanders' glue, are employed for the purpose of stiffening. The brittleness of gum arabic has been found an

inconvenience, and a substitute has been sought for in some simple preparation from their indigenous plants. M. Chaussier observes, that mucilage is found in great quantity in many plants; it may easily be extracted by boiling; and a factitious gum, which is both supple and tenacious, may be formed by evaporation. These considerations led him to recommend, for the purpose of stiffening, a solution of glue in a strong and mucilaginous decoction of linseed. This preparation has been long used in the manufactory of the Cote d'or; and is both more economical, and more conducive to the beauty of the work. Since that time, M. Margeron having communicated to him some observations respecting the mucilage which may be extracted from the leaves of the horse-chestnut tree, and having ascertained how great a quantity of mucilaginous and glutinous matter these leaves furnish, especially when the foliation is in full vigor, a solution of glue, in a strong decoction of them, has been used with great success. Perhaps this mucilage from the leaves of the horse-chestnut might be worthy the attention of the English hatmaker.

As glue is subject to the action of moisture, hats, stiffened with that material alone, are not perfectly water-proof. Several expedients have been devised to obviate this inconvenience: one of the methods, perhaps, most generally known, is that of balling. A ball is formed by melting about three parts resin, four parts bees-wax, and two parts mutton suet. This is frequently rubbed over the inside part of the hat while planking, particularly over that part which is to form the band. After balling, the hats are stiffened with glue in the usual manner.

In 1802 Messrs. Ovey and Jepsin, of London, obtained a patent for a method of water-proof stiffening. This was done by preparing a double hat; the under one was made of coarse materials, stiffened, and covered with a cement made of one pound and three quarters of flour, three quarts of water, one ounce of alum, and two ounces of resin; the latter was finely pulverised, and added while the rest was boiling; stirring it together until dissolved. The under part of the finer outside casing was also covered with the same, and then placed over the other, and united together by pressing with a cool iron. Water-proof stiffening, particularly for best hats, has lately been much attended to, and various are the methods employed by different manufacturers; but nothing appears to have so completely answered the purpose, and, at the same time to have been so advantageous in wearing, as that of stiffening with a solution of caoutchouc, or gum elastic. The exact method of the process is, at present, confined to a few hands, and industriously concealed from publicity.

The dry hat, after stiffening, is very rigid, and of an irregular figure; preparatory to finishing, therefore, it is fresh blocked. For this purpose it is necessary to soften the glue, which is done by the operation of steam. A hot iron is placed within a circular wooden frame, on which a wet cloth is thrown; the crown of the hat is then laid over the rising steam, whilst the brim rests on the frame; and thus it is soon rendered sufficiently soft to receive the impression of a block of the intended size and shape. By the use of a hot iron, generally from twenty to twenty-five pounds in weight, a small card, brushes, &c., with the addition of water, the nap has the requisite direction given it, and receives its smoothness, and polish. Minute directions here are unnecessary; the judgment of the workman must be his principal director. It may not be useless to remark, that in watering the hats, which is done by a soft wetting brush for that purpose, the giving them plenty of water, and quickly passing a pretty hot iron over them, gives the glue a firmness and smartness, in which it will be deficient by more cautious wetting and more dilatory operations. If a little glue is accidentally drawn through the hat, by the heat of the iron, a wetted brush is laid on the iron a little to heat it sufficiently; and by the application of the warm, moist brush, and carding, it is soon extracted. Instead of water, oil was formerly used in finishing all descriptions of hats, and, for the coarsest sort of wool-hats, the practice has prevailed till very lately.

The instrument generally made use of for cutting the brims of round hats is merely a small worn-out card. At the outer edge a number of notches is cut for the purpose of inserting the point of a knife. The inner edge of the card, and the handle, is placed close to the crown of the hat, while on the block; and by placing the point of a knife in the proper notch, and drawing it round with the card, still keeping it close to the crown, the brim is evenly cut to any required dimensions. The hat is put in shape by curling the edges with the iron over a small rope for that purpose, stretching the hat out in an oval form by placing a screw or common stick across, and forming the brim with the hands while it is warm. The coarse hairs are picked out of the fine hats with a pair of steel pickers, and then given to be lined and bound; after which it receives the last finish, and is ready for the wearer.

Some years ago Mr. Hance, of Tooley Street Southwark, obtained a patent for a method of rendering beaver and other hats water-proof, which is thus described:—He takes a thin shell made of wool, hair, and fine beaver, to form the crown of the hat, and another shell, or plate, of the same materials for the brim. These parts are to be dyed black, and finished without glue or other stiffening, in order that they may not be injured by the rain, which, in other beaver hats, after being exposed to a heavy shower, draws out the glue and sticks down the nap, and makes it appear old and greasy. The shell may be made in one piece only, in the shape of the hat, blocked deep enough to admit of the brim being cut from the crown; the under side of the shell and the inside of the crown must then be made water-proof, by first laying on a coat of size or thin paste, strong enough to bear a coat of copal varnish, and, when thoroughly dry, another coat of boiled linseed oil. When dry, the crown must be put on a block, and a willow or cotton body or shape, woven on purpose, put into the inside of the crown and cemented in it. When dry, it

must be finished with a hot iron, and the crown is done. The brim must, in like manner, be cemented to a substance or body made with willow, or other fit material, sufficiently thick to make the inside of the brim. The brim and body are now to be pressed together, after which the under side of the brim may be covered with another shell of beaver or silk shag. The crown and brim are now to be sewed together: the edge of the brim must be oiled and varnished with copal-varnish and boiled linseed oil, to prevent any rain getting in. The cement used for sticking the parts together may be made with one pound of gum Senegal, one pound of starch, one pound of glue, and one ounce of bees'-wax, to be boiled in a quart of water. Hats made in this way, require only to be wiped dry after they have been exposed to the heaviest rain.

Hats are likewise made, for women's wear, of chips, straw, or cane, by platting, and sewing the plats together, beginning with the centre of the crown, and working round till the whole is finished. Hats, for the same purpose, are also woven, and made of horse-hair, silk, and other substances. See Silk and Satin Hats, and Straw.

HATCH, *v. a.*, *v. n.* & *n. s.* } Saxon, œcan;
Hatch'way, *n. s.* } Germ. *hecken*, as Skinner thinks, from Sax. heghen, eghen, œg, egg. To produce young from eggs by incubation: to form, contrive, or bring to perfection; to disclose (from *hacher*, to cut); to shade lines in drawing: hatch, a brood excluded from the egg; a discovery, a preparation, from Sax. hæca; Dut. *hecke*, a bolt. A half door; a door with opening over it: perhaps from *hacher*, to cut, as a hatch is part of a door cut in two: also, in the plural, the doors or openings by which they descend from one deck or floor of a ship to another: hatches also signify floodgates.

Which thing they very well knew, and I doubt not will easily confess, who live both to their great toil, and grief, where the blasphemies of Arians are renewed by them; who, to *hatch* their heresy, have chosen those churches as fittest nests where Athanasius's creed is not heard. *Hooker.*

There she's hid;
The mariners all under *hatches* stowed.
Shakspeare.

Such as Agamemnon and the hand of Greece
Should hold up high in brass! and such again
As venerable Nestor, *hatched* in silver,
Should with a bond of air, strong as the axle-tree
On which heaven rides, knit all the Grecian ears
To his experienced tongue. *Id.*

Something about, a little from the right,
In at the window, or else o'er the *hatch*. *Id.*

Something's in his soul,
O'er which his melancholy sits on brood:
And, I do doubt, the *hatch* and the disclose
Will be some danger. *Id. Hamlet.*

To the king's ship, invisible as thou art,
There shalt thou find the mariners asleep
Under the *hatches*. *Id. Tempest.*

He was a man harmless and faithful, and one who never *hatched* any hopes prejudicial to the king, but always intended his safety and honour. *Hayward.*

Who first shall wound, through others arms, his blood appearing fresh,
Shall win this sword, silvered and *hatcht*. *Chapman.*

He kindly spreads his spacious wing,
And *hatches* plenty for the ensuing Spring.
Denham.

The tepid caves, and fens and shores,
Their brood as numerous *hatch* from th' eggs, that soon
Bursting with kindly rapture, forth disclosed
Their callow young. *Milton.*

He observed circumstances in eggs, whilst they were *hatching*, which varied. *Boyle.*

Those tender hairs, and those *hatching* strokes of the pencil, which make a kind of minced meat in painting, are never able to deceive the sight. *Dryden.*

So seas, impelled by winds with added power,
Assault the sides, and o'er the *hatches* tower. *Id.*

A ship was fastened to the shore;
The plank was ready laid for safe ascent,
For shelter there the trembling shadow bent,
And skipped, and skulked, and under *hatches* went. *Id.*

He assures us how this fatherhood continued its course, 'till the captivity in Egypt, and then the poor fatherhood was under *hatches*. *Locke.*

When they have laid such a number of eggs as they can conveniently cover and *hatch*, they give over, and begin to sit. *Ray.*

Others *hatch* their eggs, and tend the birth, 'till it is able to shift for itself. *Addison.*

Hatch, or Hatchway, a square or oblong opening in the deck of a ship, of which there are several, forming the passages from one deck to another, and into the hold or lower apartments.

HATCHEL, *v. a.* & *v. n.* } Germ. *hachelen.*
Hatch'eller, *n. s.* } See Hackle. To beat flax, so as to separate the fibrous from the brittle part: the instrument with which it is done, and the person who performs the operation.

The asbestos, mentioned by Kircher in his description of China, put into water, moulders like clay, and is a fibrous small excrescence, like hairs growing upon the stones; and for the *hatchelling*, spinning, and weaving it, he refers to his Mundus Subterraneus. *Woodward.*

HAT'CHET, *n. s.* } Fr. *hache*, *hachetée*;
Hat'chet-face, *n. s.* } Lat. *ascia*. A small axe. Hatchet-face, an ugly face, such perhaps as might be hewn out of a block by a hatchet; it is sometimes also used for a thin, sharp physiognomy.

His harmful *hatchet* he hent in his hand,
And to the field he speedeth. *Spenser.*

Ye shall have a hempen caudle then, and the help of a *hatchet*. *Shakspeare. Henry VI.*

Nails, hammers, *hatchets* sharp, and halters strong. *Crashaw.*

Tyrrheus, the foster-father of the beast,
Then clenched a *hatchet* in his horny fist. *Dryden.*

An ape his own dear image will embrace:
An ugly beau adores a *hatchet-face*. *Id.*

The *hatchet* is to hew the irregularities of stuff. *Moxon.*

Our countryman presented him with a curious *hatchet*, and, asking him whether it had a good edge, tried it upon the donor. *Addison.*

HATCH'MENT, *n. s.* Corrupted from achievement. See Achievement. Armorial escutcheon placed over a door at a funeral.

His means of death, his obscure funeral,
No trophy, sword, nor *hatchment* o'er his bones,
No noble rites nor formal ostentation,
Cry to be heard. *Shakspeare.*

HATE, *v. a.* & *n. s.*
HATE'FUL, *adj.*
HATE'FULLY, *adv.*
HATE'FULNESS, *n. s.*
HA'TER, *n. s.*
HA'TRED, *n. s.*

Sax. þaðian; Goth. *hata;* Swed. *hat.* To detest; to abhor; to abominate. These words are all expressive of a feeling contrary to love, and implying abhorrence, detestation, malignity, ill-will. Hateful is applicable either to the object or agent.

Those old inhabitants of thy holy land thou *hatest* for doing most odious works. *Wisdom* xii. 4.

You are, I think, assured I love you not.
— Your majesty hath no just cause to *hate* me. *Shakspeare.*

My name's Macbeth.
— The devil himself could not pronounce a title
More *hateful* to mine ear. *Id.*

Whilst he stood up and spoke,
He was my master, and I wore my life
To spend upon his *haters.* *Id.*

Do all men kill the thing they do not love?
— *Hates* any man the thing he would not kill?
— Every offence is not a *hate* at first. *Id.*

I wish I had a cause to seek him there,
To oppose his *hatred* fully. *Id.*

I of her understood of that most noble constancy, which whosoever loves not, shows himself to be a *hater* of virtue, and unworthy to live in the society of mankind. *Sidney.*

All their hearts stood *hatefully* appald
Long since. *Chapman.*

What owe I to his commands
Who *hates* me, and hath hither thrust me down,
To sit in *hateful* office here confined,
Inhabitant of heaven, and heavenly born? *Milton.*

I hear the tread
Of *hateful* steps; I must be viewless now. *Id.*

The only righteous in a world perverse
And therefore *hated.* *Id. Paradise Lost.*

An enemy to God, and a *hater* of all good. *Browne.*

Palamon, compelled
No more to try the fortune of the field;
And, worse than death, to view with *hateful* eyes
His rival's conquest. *Dryden.*

Hate to Mezentius, armed five hundred more. *Id.*

But whatsoever our jarring fortunes prove,
Though our lords *hate,* methinks we two may love. *Id.*

Hatreds are often begotten from slight and almost innocent occasions, and quarrels propagated in the world. *Locke.*

Hatred is the thought of the pain which any thing present or absent is apt to produce in us. *Id.*

Hatred is the passion of defiance, and there is a kind of aversation and hostility included in its very essence; but then, if there could have been *hatred* in the world when there was scarce any thing odious, it would have acted within the compass of its proper object. *South.*

They never wanted so much knowledge as to inform and convince them of the unlawfulness of a man's being a murderer, an *hater* of God, and a covenant-breaker. *Id.*

Hatred has in it the guilt of murder, and lust the guilt of adultery. *Sherlock.*

Retain no malice nor *hatred* against any: be ready to do them all the kindness you are able. *Wake.*

But Umbriel, *hateful* gnome! forbears not so;
He breaks the phial whence the sorrows flow. *Pope.*

She is a Presbyterian of the most rank and virulent kind, and consequently has an inveterate *hatred* to the church. *Swift.*

Nausicaa teaches, that the afflicted are not always the objects of divine *hate.* *Broome's Notes on the Odyssey.*

Why dost thou shun the salt? that sacred pledge,
Which, once partaken, blunts the sabre's edge,
Makes even contending tribes in peace unite,
And *hated* hosts seem brethren to the sight. *Byron. Corsair.*

HATFIELD, or BISHOP'S HATFIELD, a market town of Hertfordshire, nineteen miles and a half north of London. It was called Bishop's Hatfield, because it belonged to the Bishop of Ely. Theodore, archbishop of Canterbury, held a synod in it, A.D. 681, against the Eutychian heresy. It had once a royal palace, wherein prince William, son of Edward III., was born, and whence Edward VI. and queen Elizabeth were conducted to the throne. King James I. exchanged the manor with Sir Robert Cecil, afterwards lord Salisbury, for Theobalds; and the lordship still remains in that noble family, who have a fine seat here. The rectory is reckoned worth £800 a-year. Here are two charity schools, and a market on Thursdays, with fairs in April and October. Hatfield is seven miles W.S.W. of Hertford.

HATFIELD BROAD OAK, HATFIELD REGIS, or KING'S HATFIELD, a town of Essex, seated on a branch of the Lea, twenty-nine miles N. N. E. of London; so called from its tenure by king William the Conqueror and his successors, and from a broad oak growing in the town. The church is an ancient Gothic structure, having a curious monument and cross-legged effigy to the memory of Robert Vere, the first earl of Oxford, lord high chamberlain of England. A priory of black canons was founded here by his ancestors. It formerly had a market on Saturday. It lies eight miles south-west of Dunmow.

HATHAZ, a town of Hungary, in the county of Szabolcs, belonging to the tribe of Haiduks, and containing 4000 inhabitants, chiefly Calvinists. Eleven miles north of Debreczin.

HATHERLEIGH, a town of Devonshire, near the conflux of the Towridge and Ock. It has a considerable woollen manufacture, and markets on Tuesday and Friday. It is twenty-eight miles W. N. W. of Exeter, and 201 west of London.

HATTEMISTS, in ecclesiastical history, a modern Dutch sect, so called from Pontian Van Hattem, a minister in Zealand, towards the close of the seventeenth century, who, being addicted to the sentiments of Spinoza, was degraded from his pastoral office. The Verschorists and Hattemists resemble each other in their religious systems, though they never formed one communion. The founders of these sects deduced from the doctrine of absolute decrees a system of uncontrollable necessity; they denied the difference between moral good and evil, and the corruption of human nature: whence they concluded, that mankind were under no obligation to correct their manners, improve their minds, or

obey the divine laws; that the whole of religion consisted not in acting, but in suffering; and that all the precepts of Jesus Christ are reducible to this one, that we bear with cheerfulness and patience the events that happen to us through the divine will, and make it our constant and only study to maintain a permanent tranquillity of mind. Thus far they agreed; but the Hattemists farther affirmed, that Christ made no expiation for the sins of men by his death, but had only suggested to us by his mediation, that there was nothing in us that could offend the Deity; this, they say, was Christ's manner of justifying his servants, and presenting them blameless before the tribunal of God. It was one of their distinguishing tenets, that God does not punish men for their sins, but by their sins. These two sects, says Mosheim, still subsist, though they no longer bear the names of their founders.

HATTER, *v. a.* Perhaps corrupted from batter. To harass; to weary; to wear out with fatigue.

He's *hattered* out with penance. *Dryden.*

HATTERAS Cape, one of the most dangerous and most remarkable capes on the coast of the United States, North America: it is the salient point of the sand-bank that encloses Pamlico Sound, North Carolina, in N. lat. 35° 15′. Off the cape is a cluster of shoals, at the distance of five leagues, with channels within them. In bad weather the combined forces of the gulf stream, and the winds, produce the most tremendous breakers on these shoals; but in fair weather they may be sailed over by vessels of eight or nine feet. Their seaward, or exterior edge, goes off perpendicularly from ten fathoms to no soundings, and by a comparison of the old and modern charts they seem to have greatly decreased. A little north of Cape Hatteras, with the wind off shore, a boat may land and procure fresh water by digging a foot or two deep in the sand of the beach.

HATTIA Isle, a low island of Bengal, formed by the mud of the great rivers Brahmapootra and Ganges, at their junction with the ocean in Bengal Bay. In length it is about fourteen miles, by ten the average breadth. At spring tides, during the rains, it is nearly submerged. Salt of an excellent quality is manufactured here for the company.

HAVANNAH, a city of the West Indies, the capital of the Island of Cuba, is situated on the north coast, at the mouth of the Lagida. Its port is capable of containing 1000 ships in perfect shelter; the depth generally six fathoms. The entrance is by a passage one mile and a half long, and very narrow, and three large ships have been sunk in it to render it more difficult. It is defended by the Morro Castle on the east, and by the fort of Punta on the west. The Morro is situated on an elevation that renders it impossible to cannonade it from shipping; it consists of two bastions towards the sea, and two towards the land, with a covered way and deep ditch cut in the rock, and can bring many guns to bear on the entrance of the harbour. Punta fort is situated on a low point, and forms a square, with casemates, and a ditch cut in the rock. The other fortifications are numerous and formidable. The city is on the west side of the port. When old Spain preserved the command of her colonies, the annual fleet sailed from the Havannah in September, and, besides merchandise, it usually conveyed 30,000,000 of piastres in coin. A packet sailed from Corunna to the Havannah and Porto Rico every month. The city contains eleven churches, two hospitals, a dock-yard, lazaretto, and numerous public buildings; an aqueduct supplies the shipping with water, and turns the saw-mills in the dock-yard. The houses, which are elegant, are mostly of stone. There are several convents; and the great square is a fine ornament to the place. The churches are magnificently ornamented with gold and silver lamps, images, &c. The manners of the inhabitants are said to be polished, and they have societies for the encouragement of the arts and sciences. The importance of this city and harbour has caused it to be repeatedly attacked. In 1536 it was taken by a French pirate, but ransomed for 700 dollars; it was again taken by the English, and by the French, and by the Buccaneers; but the most memorable attack was that by the British in 1762. Admiral Sir George Pococke and lord Albemarle conducted a fleet and troops to the Havannah; and after a determined resistance of two months and eight days, on the 14th of August, the Moro Castle and place surrendered, as well as a district of 180 miles to the west of the town. The victors captured nine sail of the line; three more were sunk by the Spaniards; two on the stocks were burnt; and a great many merchant vessels completed the spoil. The merchandise and specie found in the place was supposed to amount in value to £3,000,000 sterling. This city was restored to Spain at the peace of 1763; since which the government has been often employed in increasing its strength and resources. The trade is computed to amount, by importations (the exportations being chiefly in sugar, wax, and coffee), to £20,000,000 of piastres. Population 25,000.

HAU'BERK, *n. s.* Old Fr. *hauberg*. A coat of mail; a breast-plate.

——— ——— and at the last
The statue of Mars began his *hauberke* ring;
And with that soun he heard a murmuring
Full low and dim, that sayde thus Victorie,
For which he yaf to Mars honour and glorie.
Chaucer. The Knightes Tale.

And over that a fin *hauberk*
Was all ywrought of jewes work,
Ful strong it wos of plate.
Id. The Rime of Sire Thopas.

Him on the *hauberk* struck the princess sore,
That quite disparted all the linked frame,
And pierced to the skin. *Faerie Queene.*

Hauberks and helms are hewed with many a wound;
The mighty maces with such haste descend,
They break the bones, and make the solid armour bend. *Dryden.*

HAVE, *v. a.* in the present I *have*, thou *hast*, he *hath*; we, ye, they *have*; pret. and part. pass. *had*. Sax. ꝑabban; Fr. *avoir*; Ital. *avere*; Goth. *haban*; Dut. *hebben*. In the Mæso-Goth. we have *haba* and *habaith*; whose progress *a aga, aha, ha, hava*, says Mr. Thomson, was easily traced to the Latin *habeo*.

Not to be without.

I have brought him before you, that after examination had, I might *have* something to write. *Acts* xxv. 26.

To carry; to wear.

Upon the mast they saw a young man, who sat as on horseback, *having* nothing upon him. *Sidney.*

To make use of.

I *have* no Levite to my priest. *Judges.*

To possess.

He that gathered much *had* nothing over, and he that gathered little *had* no lack. *Exod.* xvi. 18.

He that his hand wol put in this mitaine,
He shal *have* multiplying of his graine.
Chaucer. The Pardoneres Tale.

To obtain; to enjoy; to possess.

Now, O Father, glorify me with thine own self, with the glory which I *had* with thee before the world was. *John* xvii. 5.

To take; to receive.

A secret happiness in Petronius is called curiosa felicitas, and which I suppose he *had* from the felicita audere of Horace. *Dryden.*

To be in any state; to be attended with or united to as accident or concomitant.

Have I need of madmen, that ye have brought this fellow? 1 *Sam.* xxi. 15.

To put; to take.

That done, go and cart it, and *have* it away. *Tusser.*

To procure; to find.

I would *have* any one name to me that tongue, that one can speak as he should do, by the rules of grammar. *Locke.*

Not to neglect; not to omit.

Have mercie on our woe and our distresse
Some drope of pitee thurgh thy gentillesse
Upon us wretched wimmen let now falle.
Chaucer. The Knightes Tale.

I cannot speak, if my heart be not ready to burst. —Well, sweet Jack, *have* a care of thyself. *Shakspeare.*

Your plea is good; but still I say beware:
Laws are explained by men; so *have* a care. *Pope.*

To hold; to regard.

Of the maid servants shall I be *had* in honour. 2 *Sam.*

The proud *have had* me greatly in derision. *Psalms.*

To maintain; to hold opinion.

Sometimes they will *have* them to be natural heat, whereas some of them are crude and cold; and sometimes they will *have* them to be qualities of the tangible parts, whereas they are things by themselves. *Bacon.*

To contain.

You have of these pedlars that *have* more in them than you think, sister. *Shakspeare.*

I will never trust a man again for keeping his sword clean; nor believe he can *have* every thing in him by wearing his apparel neatly. *Id.*

To require; to claim.

What would these madmen *have*?
First they would bribe us without pence,
Deceive us without common sense,
And without power enslave. *Dryden.*

To be a husband or wife to another.

If I had been married to him, for all he was in woman's apparel, I would not have *had* him. *Shakspeare.*

To be engaged, as in a task or employment.

If we maintain things that are established, we *have* to strive with a number of heavy prejudices, deeply rooted in the hearts of men. *Hooker.*

The Spaniard's captain never *hath* to meddle with his soldiers' pay. *Spenser on Ireland.*

Of the evils which hindered the peace and good ordering of that land, the inconvenience of the laws was the first which you *had* in hand. *Spenser.*

Kings *have* to deal with their neighbours, their wives, their children, their prelates or clergy, their nobles, their merchants, and their commons. *Bacon.*

To wish; to desire; in a lax sense.

I *had* rather be a door-keeper in the house of my God, than to dwell in the tents of wickedness. *Psalms.*

I would *have* no man discouraged with that kind of life or series of actions, in which the choice of others, or his own necessities may have engaged him. *Addison.*

To buy.

If these trifles were rated only by art and artfulness, we should *have* them much cheaper. *Collier.*

It is most used in English, as in other European languages, as an auxiliary verb to make the tenses; have, hast, and hath, or has, the preterperfect; and had, and hadst, the preterpluperfect.

If there *had* been words enow between them to *have* expressed provocation, they *had* gone together by the ears. *Congreve.*

I *have* heard one of the greatest geniuses this age *has* produced, who *had* been trained up in all the polite studies of antiquity, assure me, upon his being obliged to search into records, that he at last took an incredible pleasure in it. *Addison.*

I *have* not here considered custom as it makes things easy, but as it renders them delightful; and, though others *have* made the same reflections, it is possible they may not *have* drawn those uses from it. *Id.*

That admirable precept which Pythagoras is said to *have* given to his disciples, and which that philosopher must *have* drawn from the observation I *have* enlarged upon. *Id.*

The gods *have* placed labour before virtue. *Id.*

This observation we *have* made on man. *Id.*

Evil spirits *have* contracted in the body habits of lust and sensuality, malice, and revenge. *Id.*

Their torments *have* already taken root in them. *Id.*

That excellent author *has* shown how every particular custom and habit of virtue will, in its own nature, produce the heaven, or a state of happiness, in him who shall hereafter practise it. *Id.*

Have at, or with, is an expression denoting resolution to make some attempt. They seem to be imperative expressions; have this at you; let this reach you; or take this; have with you; take this with you; but this will not explain have at it, or have at him, which must be considered as more elliptical; as, we will have a trial at it, or at him.

He that will caper with me for a thousand marks, let him lend me the money, and *have at* him. *Shakspeare.*

I can bear my part; 'tis my occupation: *have at* it with you. *Id.*

I never was out at a mad frolick, though this is the maddest I ever undertook; *have with* you lady mine; I take you at your word. *Dryden.*

HAVEL, a navigable river of the north of Germany, which rises in the duchy of Mecklenburg, near Klatzeberg, joins the Spree near Spandau, passes by Old and New Brandenburg, and falls into the Elbe below Havelberg. It flows through a number of lakes, and often overflows its banks.

HA'VEN, *n. s.* } Fr. *havre;* Dut. *haven.*
HA'VENER, *n. s* } A port; harbour; a station for ships; the overseer of a port; and figuratively a shelter or asylum.

Hardy he wos and wise, I undertake:
With many a tempest hadde his berd beshake,
He knew wel alle the *havens* as they were,
Fro Gotland to the Cape de Finistere,
And every creke in Bretagne and in Spain:
His barge ycleped wos the Magdelaine.
Chaucer. Prologue to Canterbury Tales.

Order for sea is given:
They have put forth the *haven.*
Shakspeare.

All places that the eye of heaven visits,
Are to a wise man ports and happy *havens.* *Id.*

After an hour and a half sailing, we entered into a good *haven*, being the port of a fair city. *Bacon.*

These earls and dukes appointed their special officers, as receiver, *havener*, and customer. *Carew.*

The queen beheld, as soon as day appeared,
The navy under sail, the *haven* cleared. *Denham.*

Love was threatened and promised to him, and his cousin, as both the tempest and *haven* of their best years. *Sidney.*

We may be shipwrecked by her breath:
Love, favoured once with that sweet gale,
Doubles his haste, and fills his sail,
'Till he arrives, where she must prove
The *haven*, or the rock of love. *Waller.*

HA'VER, *n. s.* From have. Possessor; holder.

Valour is the chiefest virtue, and
Most dignifies the *haver.* *Shakspeare.*

HA'VER is a common word in the northern countries for oats; as, haver bread for oaten bread; perhaps properly aven, from Latin *avena.*

When you would anneal, take a blue stone, such as they make *haver* or oat cakes upon, and lay it upon the cross bars of iron. *Peacham.*

HAVERCAMP (Sigibert), a celebrated Dutch scholar and critic, professor of history, eloquence, and Greek, at Leyden. He was the author of some esteemed works on medals; and published elegant editions of several Greek and Latin authors. He died at Leyden, in 1742, aged fifty-eight.

HAVERFORDWEST, a neat, well-built, and populous town of South Wales, in Pembrokeshire, on the side of the hill, which forms a part of the west bank of the Dongledye, 252 miles from London. It is an incorporated town and county of itself, governed by a mayor, sheriff, town-clerk, two bailiffs, and other officers. The mayor is admiral, coroner, escheater, and clerk of the markets. The people enjoy a good trade. The town enjoys several privileges, and has its own courts: and the county assizes are held in it. It has four churches, a commodious quay for ships of burden, a custom-house, and a fine stone bridge over the Dongledye, with a good free-school, a charity school, and an alms-house. It was formerly fortified with a rampart and castle, now demolished.

HAVERHILL, a post town of Massachusetts, in Essex county, on the north side of the Merrimack; over which is an elegant bridge with three arches, connecting it with Bradford, 650 feet long, and thirty-four broad. It contained 2408 inhabitants in 1795; and lies thirty-two miles north by west of Boston, and 380 from Philadelphia. Long. 3° 58′ E. of that city, lat. 42° 46′ N.

HAVERHILL, a town of New Hampshire, capital of Grafton county, on the east side of the Connecticut, opposite Newbury, thirty-two miles above Dartmouth College, and 496 north-east of Philadelphia. Long. 3° 5′ E., of that city, lat. 44° 6′ N.

HAVERHILL, a post town of Grafton county, New Hampshire, on the Connecticut, opposite Newbury, with which it is connected by a bridge; twenty-seven miles north of Dartmouth College, thirty-one N. N. W. of Plymouth, 119 north-west of Portsmouth, and 522 from Washington. In the south-west part of the town there are a court house, gaol, academy, and a congregational meeting-house: it is a place of considerable business. The courts for the county are held alternately here and at Plymouth.

HAVERHILL, a post town of Essex county, Massachusetts, at the head of a navigation on the north side of the Merrimack, eighteen miles from its mouth, opposite Bradford; fifteen miles W. S. W. of Newburyport, eighteen S. S. W. of Exeter, nineteen N. N. W. of Salem, thirty north of Boston. It is a pleasant, handsome, and flourishing town, and contains a bank, two cotton and woollen manufactories, two printing offices, from one of which a weekly paper is issued, a public library, and four houses of public worship, three for Congregationalists, and one for Baptists. The compact part of the town is built on the declivity of a hill, in two streets, the principal of which runs parallel with the river. A number of the houses are elegant; and it has considerable manufactures of leather, hats, plated ware, and shoes. Considerable ship-building business is done here. The river is navigable for vessels of 100 tons. Here is an elegant bridge across the Merrimack connecting Haverhill with Bradford, with three arches of 180 feet each, supported by three handsome stone piers, forty feet square.

HAVERILL, a town of England, partly in Essex, and partly in Suffolk. It has a considerable manufactory of checks, cottons, and fustians. It is twenty miles south-east of Cambridge, and fifty-nine N. N. E. of London.

HAUGHT, *adj.* } Fr. *haut, hautaine,*
HAUGHTILY, *adv.* } from Lat. *altus.* High;
HAUGHTINESS, *n. s.* } lofty; proud; imperi-
HAUGHTY, *adj.* } ous; insolent; bold; generally descriptive of carriage or behaviour.

There is no lady so *hauteine*
Duchesse, countesse, ne chastelaine,
That I n'olde holde her ungodely
For to refuse him utterly.
Chaucer. Romaunt of the Rose.

His courage *haught*.
Desired of foreign foemen to be known,
And far abroad for strange adventures sought.
Spenser.

Who now shall give me words and sound
Equal unto this *haughty* enterprize?
Or who shall lend me wings, with which from ground
My lowly verse may loftily arise? *Faerie Queene.*

The proud insulting queen,
With Clifford and the *haught* Northumberland,
Have wrought the easy melting king, like wax.
Shakspeare.

No lord of thine, thou *haught* insulting man;
Nor no man's lord. *Id.*

His wife being a woman of a *haughty* and imperious nature, and of a wit superior to his, quickly resented the disrespect she received from him. *Clarendon.*

Before the cloudy van
On the rough edge of battle ere it joined,
Satan with vast and *haughty* strides advanced,
Came towering armed in adamant and gold.
Milton.

I shall sing of battles, blood and rage,
And *haughty* souls, that, moved with mutual hate,
In fighting fields pursued and found their fate.
Dryden.

Her heavenly form too *haughtily* she prized;
His person hated, and his gifts despised. *Id.*

By the head we make known our supplications, our threatnings, our mildness, our *haughtiness*, our love, and our hatred. *Id.*

Our vanquished wills that pleasing force obey;
Her goodness takes our liberty away.
And *haughty* Britain yields to arbitrary sway.
Prior.

When mannakins with *haughty* step advance
And grasp the shield, and couch the quivering lance.
Beattie.

The crag is won—no more is seen
His Christian crest and *haughty* mien.
Byron. The Giaour.

Still one great clime in full and free defiance
Yet rears her crest; unconquered and sublime,
Above the far Atlantic!—She has taught
Her Esau brethren, that the *haughty* flag,
The floating fence of Albin's feeble crag,
May strike to those whose red right hands have bought
Rights cheaply earned with blood. *Byron.*

HA'VING, *n. s.* From have. Possession; estate; fortune.

My *having* is not much;
I'll make division of my present with you;
Hold, there's half my coffer. *Shakspeare.*

The act or state of possessing.

Of the one side was alledged the *having* a picture, which the other wanted; of the other side, the first striking the shield. *Sidney.*

Thou art not for the fashion of these times,
Where none will sweat but for promotion;
And *having* that, do choak their service up,
Even with the *having*.
Shakspeare. As You Like It.

Behaviour; regularity. This is still retained in the Scottish dialect. It may possibly be the meaning here.

The gentleman is of no *having*: he kept company with the wild prince and Poins: he is of too high a region: he knoweth too much. *Shakspeare.*

HA'VIOUR, *n. s.* For behaviour Conduct; manners. Not used.

Their ill *haviour* garres men missay
Both of their doctrines and their fay.
Spenser.

HAUKSBEE (F.), an English electrician of the last century, who first observed that a glass tube closed at one end and rendered electric by friction attracted from a certain distance metallic leaves, and again forcibly repelled them. He made many other experiments, the details of which are published in the Transactions of the Royal Society, and collected his discoveries in his Physico-mechanical Experiments, on various subjects, touching light and electricity, producible on the attraction of bodies: with an explanation of all the apparatus used in the experiments; London, 1709, 4to. republished in 1719, and translated into Italian and French. He also wrote Proposals for a Course of Chemical Experiments, London, 1731, 4to.; and An Essay for introducing a Portable Laboratory, 1731, 8vo. The time of his death is unknown.

HAUL, *v. a.* & *n. s.* Fr. *haler*. To pull; to draw; to drag by violence. A word which, applied to things, implies violence; and to persons, awkwardness or rudeness. This word is liberally exemplified in hale; etymology is regarded in hale, and pronunciation in haul.

Thy Dol, and Helen of thy noble thoughts,
Is in base durance and contagious prison,
Hauled thither by mechanick dirty hands.
Shakspeare.

The youth with songs and rhimes,
Some dance, some *haul* the rope. *Denham.*

Some the wheels prepare,
And fasten to the horses feet;
With cables *haul* along the' unwieldy beast.
Dryden.

Thither they bent, and *hauled* their ships to land;
The crooked keel divides the yellow sand. *Pope.*

In his grandeur he naturally chuses to *haul* up others after him whose accomplishments most resemble his own. *Swift.*

Romp-loving miss
Is *hauled* about in gallantry robust.
Thomson.

The leap, the slap, the *haul*. *Id.*

To HAUL, among seamen, implies to pull a single rope, without the assistance of blocks or other mechanical powers. When a rope is otherwise pulled, as by the application of tackles, or the connexion with blocks, &c., the term is changed into bowsing.

To HAUL THE WIND is to direct the ship's course nearer to that point of the compass from which the wind arises. Thus, supposing a ship to sail south-west with the wind northerly, and some particular occasion requires to haul the wind more westward; to perform this operation, it is necessary to arrange the sails more obliquely with her keel; to brace the yards more forward, by slackening the starboard and pulling in the larboard braces, and to haul the lower sheets further aft; and, finally, to put the helm a-port, i. e. over to the larboard side of the vessel. As soon as her head is turned directly to the westward, and her sails are trimmed accordingly, she is said to have hauled the wind four points; that is to say, from south-west to west. She may still go two points nearer to the direction of

the wind, by disposing her sails according to their greatest obliquity, or, in the sea phrase, by trimming all sharp; and in this situation she is said to be close hauled, as sailing W. N. W.

HAUM, Hame, or Halm, *n. s.* Sax. healm; Dut. and Dan. *halm*. Straw.

In champion countrie a pleasure they take
To mow up their *haume* for to brew and to bake:
The *haume* is the straw of the wheat or the rie,
Which once being reaped, they mow by and by.
Tusser.

Having stripped off the *haum* or binds from the poles, as you pick the hops, stack them up.
Mortimer.

HAUNCH, *n. s.* Fr. *hanche*; Dut. *hancke*; Ital. *anca*. The thigh; the hind hip; the rear; the hind part.

Hail, groom! didst thou not see a bleeding hind,
Whose right *haunch* earst my stedfast arrow strake?
Spenser.

Thou art a summer bird,
Which ever in the *haunch* of Winter sings
The lifting up of day. *Shakspeare.*

To make a man able to teach his horse to stop and turn quick, and to rest on his *haunches*, is of use to a gentleman both in peace and war. *Locke.*

The Haunches of a Horse are too long, if when standing in the stable he limps, with his hind legs farther back than he ought; and when the top of his tail is not in a perpendicular line to the tip of his hocks, as it always is in horses whose haunches are of a just length. Some horses, though they have too long haunches, yet commonly walk well: such are good to climb hills, but are not at all sure upon a descent; for they cannot ply their hams, and never gallop slowly, but always nearly upon a full speed. The art of riding has not a more necessary lesson than that of putting a horse upon his haunches; which is called coupling him well, or putting him well together, or compact. A horse that cannot bend or lower his haunches, throws himself too much upon his shoulder, and lies heavy upon the bridle.

HAUNT, *v. a.*, *v. n.* & *n. s.* } Fr. *hanter*. To
Haunter, *n. s.* } frequent or be much about any place or person, always used in a bad sense: a practice or habit; a place in which one is frequently found, for bad purposes or deeds; an unwelcome visitor: it is especially used with reference to spectres and apparitions.

A good wif was there of beside Bathe;
But she was som del defe, and that was scathe.
Of cloth making she had swiche an *haunt*,
She passed hem of Ipres, and of Gaunt.
Chaucer. Prologue to Canterbury Tales.

That other marchandise,—that men *haunten* with fraude, and trecherie, and deceit, with lesinges and false othes,—is right cursed.
Id. The Persones Tale.

There now he lives in everlasting ioy
With many of the gods in company,
Which thether *haunt*, and with the winged boy,
Sporting himselfe in safe felicity.
Spenser. Faerie Queene.

I've charged thee not to *haunt* about my doors:
In honest plainness thou hast heard me say,
My daughter's not for thee. *Shakspeare. Othello.*

Where they most breed and *haunt* I have observed
The air is delicate. *Id. Macbeth.*

Foul spirits *haunt* my resting place,
And ghastly visions break my sleep by night.
Fairfax.

The ancient Grecians were an ingenious people, of whom the vulgar sort, such as were *haunters* of theatres, took pleasure in the conceits of Aristophanes.
Wotton on Education.

Earth now
Secured like to heaven, a seat where gods might dwell,
Or wander with delight, and love to *haunt*
Her sacred shades. *Milton.*

A man who for his hospitality is so much *haunted*, that no news stir but come to his ears. *Sidney.*

Now we being brought known unto her, after once we were acquainted, and acquainted we were sooner than ourselves expected, she continually almost *haunted* us. *Id.*

She this dangerous forest *haunts*
And in sad accents utters her complaints.
Waller.

O goddess, *haunter* of the woodland green,
Queen of the nether skies! *Dryden.*

We set toils, nets, gins, snares, and traps, for beasts and birds in their own *haunts* and walks.
L'Estrange.

To me pertains not, she replies,
To know or care where Cupid flies;
What are his *haunts*, or which his way,
Where he would dwell, or whither stray. *Prior.*

The *haunt* you have got about the courts will one day or another bring your family to beggary.
Arbuthnot.

A scene where, if a god should cast his sight,
A god might gaze and wonder with delight!
Joy touched the messenger of heaven; he stayed,
Entranced, and all the blissful *haunts* surveyed.
Pope.

Celestial Venus *haunts* Idalia's groves;
Diana Cynthus, Ceres Hybla loves. *Id.*

All these the woes of Oedipus have known,
You fates, you furies, and your *haunted* town.
Id.

Oh, could I see my country seat!
There leaning near a gentle brook,
Sleep, or peruse some ancient book;
And there in sweet oblivion drown
Those cares that *haunt* the court and town.
Swift.

Through glades and glooms the mingled measure stole,
Or o'er some *haunted* stream with fond delay,
Round an holy calm diffusing,
Love of peace and lonely musing
In hollow murmurs died away. *Collins' Odes.*

Or when the setting Moon in crimson dyed
Hung o'er the dark and melancholy deep,
To *haunted* stream remote from man he hied,
Where fays of yore their revels wont to keep.
Beattie.

——— Ye, to whom the tops
Of mountains inaccessible are *haunts*,
And earth's and ocean's caves familiar things—
I call upon ye by the written charm which gives me power upon you—Rise! appear!
Byron. Manfred.

HAV'OCK, *n. s.*, *interj.* & *v. a.* Welsh, *hafog*; from Goth. *havega*, to destroy. Devastation, waste, and ruin: to lay waste or destroy. Havock, the interjection, is an old word of encouragement to slaughter.

Saul made *havock* of the church.
Acts viii. 3.

Having been never used to have any thing of their own, they make no spare of any thing, but *havock* and confusion of all they meet with. *Spenser.*

Whatsoever they leave, the soldier spoileth and *havocketh*; so that, between both, nothing is left. *Id.*

Why stand these royal fronts amazed thus?
Cry, *Havock*, kings! *Shakspeare.*

Ate by his side,
Cries, *Havock!* and lets loose the dogs of war. *Id.*

See, with what heat these dogs of hell advance,
To waste and *havock* yonder world, which I
So fair and good created! *Milton.*

The Rabbins, to express the great *havock* which has been made of the Jews, tell us, that there were such torrents of holy blood shed, as carried rocks of a hundred yards in circumference above three miles into the sea. *Addison.*

Ye gods! what *havock* does ambition make
Among your works! *Id. Cato.*

If it had either air or fuel, it must make a greater *havock* than any history mentions. *Cheyne.*

HAVRE DE GRACE, a commercial sea-port of France, is seated on the right bank of the Seine, one league from Cape La Heve. It is built on an acclivity between two hills; and is surrounded by high walls, with ditches and a citadel. Its harbour dries at low water: it has twelve feet in common tides, and twenty-five in high springs. It has also the singular advantage that the tide does not begin to fall until three hours after high water; the cause of which seems to be, that the current of the Seine, crossing the harbour's mouth with great force at the beginning of the ebb, confines the water in the harbour. It has 20,000 inhabitants, and is a maritime prefecture. The favorable situation of Havre, communicating with Paris by the Seine, renders it extremely commercial. Before the late war it had a considerable West India trade, and a number of vessels in the Greenland and Newfoundland fisheries. The passage from Southampton to Havre being much frequented, the latter is often the first French town that meets the eye of an Englishman; and, though not inferior to most places of its size, is confined and dirty in appearance. The streets are narrow, and formed of high wooden-framed houses: there are no public buildings of importance. As Normandy is a corn country there is a frequent export of that article, particularly to the southern provinces of France. The merchandise taken back by foreigners from Havre consists in colonial produce, woollen and linen, corn, cyder, and fruits. Havre is much frequented by French coasters from the west and south. The manufactures, which are on a small scale, are sail-cloth, cordage, tobacco, lace, and earthenware. That of tobacco is of old standing. Here are also several building docks, and a sugar refinery. Havre was put into a state of defence in the reign of Francis I.; but its fortifications were brought to their present perfection under Buonaparte. To his government it likewise owes several improvements in the harbour and docks, and the erection of two light-houses, on a perpendicular cliff about a league from the town. It was bombarded by the British in 1759, 1794, and 1795. It is forty-five miles west of Rouen, and 112 north-west of Paris.

HAURIANT, in heraldry, a term peculiar to fishes; signifying their standing upright, as if refreshing themselves by sucking in the air. See HERALDRY.

HAURUCA ISLE, one of the Amboyna Isles, a small island in the eastern seas, about twenty-five miles in circumference. Long. 128° 40′ E. lat. 3° 40′ S.

HAUSRUCKVIERTEL, i. e. the Quarter of Hausrude, a circle of Upper Austria, bounded by the Danube, the circle of the Traun, and Bavaria. It was formerly of more than double its present extent of about 733 square miles; for, after the disastrous campaign of 1809, the western part was ceded to Bavaria. This district is named after the Hausruck, a mountain and great forest within its circuit. The most remarkable circumstance here is a subterraneous bed of wood, impregnated with bituminous matter. Wood deposited in the shafts of the mines becomes speedily impregnated with bitumen. In the summer of 1817, part of the mountain having fallen in, its place was occupied by a lake: ten cottages on the verge of the mountain were destroyed, but no lives lost. Population 109,000. The capital is Lintz.

HA'UTBOY, *n. s.* Fr. *oboe*, or *haut* and *bois*. A wind instrument.

I told John of Gaunt he beat his own name; for you might have trussed him and all his apparel into an eel-skin: the case of a treble *hautboy* was a mansion for him. *Shakspeare.*

Now give the *hautboys* breath; he comes, he comes. *Dryden.*

The HAUTBOY is shaped much like the lute; only it spreads and widens towards the bottom, and is sounded through a reed. The treble is two feet long; the tenor goes a fifth lower when blown open: it has only eight holes; but the bass, which is five feet long, has eleven. The name is French, haut bois, q. d. high wood; and is given to this instrument because the tone of it is higher than that of the violin.

HAUTBOY STRAWBERRY. See FRAGARIA and STRAWBERRY.

HAUTE FEUILLE (John), an ingenious mechanic, born at Orleans in 1647. Though he was an ecclesiastic, and enjoyed several benefices, he applied almost his whole life to mechanics, in which he made a great progress. He had a particular taste for clock-work, and made several discoveries in it that were of singular use. He found out the secret of moderating the vibration of the balance by means of a small steel spring, which has since been made use of. This discovery he laid before the members of the Academy of Sciences, in 1674; and these watches are called pendulum watches, not that they have real pendulums, but because they nearly approach to the justness of pendulums. M. Huygens perfected this happy invention; but having declared himself the inventor, and obtained from Louis XIV. a patent for making watches with spiral springs, the abbé Feuille opposed the registering this privilege, and published a piece on the subject against M. Huygens. He wrote a great number of other pieces, most of which are small pamphlets consisting of a few pages, but very curious; as, 1. The Perpetual Pendulum; 4to.

2. New Inventions; 4to. 3. The Art of Breathing under Water, and the Means of preserving a Flame shut up in a small Place. 4. Reflections on Machines for raising Water. 5. On the different Sentiments of Malebranche and Regis, relating to the appearance of the Moon when seen in the Horizon. 6. The Magnetic Balance. 7. A Placet to the King on the Longitude. 8. Letter on the Secret of the Longitude. 9. A New System on the Flux and Reflux of the Sea. 10. The Means of making sensible Experiments that prove the Motion of the Earth; and many other pieces. He died in 1724.

HAUY (Rene Just, abbé), a French natural philosopher, eminent for his discoveries in crystallography, was the eldest son of a weaver in the town of St. Just, in the department of Oise, where he was born February 28th, 1743. He was brought up as a chorister in a church of the fauxbourg St. Antoine at Paris, and made considerable proficiency in music; but, being removed to the college of cardinal Lemoine, he contracted an acquaintance with the herbalist L'Hommond, and applied himself to the study of botany, and attended Daubenton's Lectures on mineralogy. The accidental fall of a specimen of calcareous spath, crystallised into prisms, led him to find in some of the fragments the form of the crystal rhomboides of the Iceland spath; and from this circumstance the whole of his theory respecting crystals, the means of admeasuring them, &c., is said to have taken its origin. Admitted a member of the Academy of Sciences, in 1783, he continued his researches in mineralogy until the Revolution; when, refusing to take the oath to the new ecclesiastical authorities, he was displaced. But he soon after was made commissary of weights and measures, and succeeded Daubenton as lecturer on his favorite science of mineralogy. A favorite with Napoeon, he now became professor of mineralogy at the Museum of Natural History, and of the faculty of sciences, at the academy of Paris. He died June 3d, 1822. His chief works are Essai sur la Theorie et la Structure des Cristaux, 1784; Traité de Minéralogie, 1801, 4 vols. 8vo.; Traité élémentaire de Physique, 1803, 2 vols. 8vo.; Tableau comparatif des résultats de la Cristallographie, 1809; Traité des Caractères Physiques des Pierres Précieuses, 1817; Traité de Cristallographie, 1822, 2 vols. 8vo., with an atlas. He also published papers in the Journal des Mines, periodical works.

HAW, *n. s.* Sax. þaȝ; Goth. *hag, haiga.* The berry and seed of the hawthorn. An excrescence in the eye. Sax. þaȝa; Dan. *haw*, a garden. A small piece of ground adjoining to a house. In Scotland they call it *haugh.*

> The seed of the bramble with kernel and *haw.*
> *Tusser.*
>
> Store of *haws* and hips portend cold Winters.
> *Bacon's Natural History.*

Upon the *haw* at Plymouth is cut out in the ground the portraiture of two men, with clubs in their hands, whom they term Gog and Magog. *Carew.*

His quarrel to the hedge was, that his thorns and his brambles did not bring forth raisins, rather than *haws* and blackberries. *L'Estrange.*

HAW, *v. n.* Perhaps corrupted from hawk or hack To speak slowly with frequent intermission and hesitation.

'Tis a great way; but yet, after a little humming and *hawing* upon't, he agreed to undertake the job.
L'Estrange.

HAWEIS (Thomas), an English Calvinistic divine, was born at Truro in Cornwall, in 1734. He was brought up an apothecary, but went to Christ Church College, Cambridge, and took the degree of B.A.: on taking orders he became assistant to Mr. Madan at the Lock Hospital, and obtained, on his recommendation, the living of Aldwinkle in Northamptonshire, on the condition that he should at a certain time resign it. This he however refused to perform, and much controversy ensued, until a compromise was effected by the interference of the countess of Huntingdon. Mr. Haweis was entrusted with the care of the chapels and seminary for students in divinity, founded by that lady; and late in life took the degree of M. D. He died in February 1820. His chief works are a volume of Sermons; A Commentary on the Bible, 2 vols. folio; History of the Church, 3 vols. 8vo.; Life of the Rev. William Romaine, 8vo.; State of Evangelical Religion throughout the World, 8vo.

HAWES (William), M.D., founder of the Royal Humane Society, was born at Islington, November 28th, 1736, and educated at St. Paul's school. Brought up to the profession of an apothecary, he practised in the Strand until 1780, when he took his diploma as a physician; and, in 1773, became popular by his exertions in the establishment of the Humane Society, to the benefit of which he dedicated the whole of his after life. In the first instance he paid the rewards for the recovery of drowning persons out of his own pocket; but was at length, by the assistance of Dr. Cogan, enabled to form the society. This benevolent physician died at Islington 5th of December, 1808. He wrote an Account of Dr. Goldsmith's last Illness (attributing his death to an improper administration of James's powders); An Address on Premature Death and Premature Interment; An Examination of the Rev. John Wesley's Primitive Physic; An Address to the Legislature on the importance of the Humane Society; An Address to the King and Parliament of Great Britain, with Observations on the general Bills of Mortality; and Transactions of the Royal Humane Society, from 1774 to 1784, dedicated by permission to the King.

HAWICK, a town in a parish of the same name in Roxburghshire, erected into a burgh of barony at a very early period, though its most ancient charters are lost. Queen Mary renewed its privileges, by a charter dated 1545. It is governed by two bailies, fifteen merchants, and fourteen trades' councillors. Its chief manufactures are carpets, serges, table-covers, rugs, narrow cloths, tapes, twists, hose, &c., and winnowing machines. Hawick is seated at the conflux of the Tiviot and the Slitbridge; and lies fifteen miles south-west of Kelso.

HAWK, *n. s.* & *v. n.* Sax. þapoc; Welsh, *habeg, hoch*; Lat. *accipiter*; Germ. *hock.*
HAW'KED, *adj.*
HAW'KER, *n. s.*
HAW'KWEED, *n. s.* This word has a variety

of significations, as, a bird of prey, anciently used in sport to catch birds: to fly hawks; to fly at or attack on the wing. Hawked, formed like a hawk's bill. Hawk, as derived from *hoch*, is to force up phlegm from the throat with a noise, from *hock*: to sell by proclaiming in the streets; and a hawker is one thus employed. Hawkweed is a plant. Of the birds there are several kinds, as goshawk, sparrowhawk, &c.

Gret was the sorwe for that *haukes* harme,
That Canace and all hire women made.
Chaucer. The Squieres Tale.

There was the tirant with his fethers don
And grene, I mene the *goshauke*, that doth pine
To birdes, for his outrayious ravine.
* * * * * * * *
* * *; the hardie *sperhauke*, eke
The quales foe. *Id. The Assemble of Foules.*

And in their tops the soring *hauke* did towre
Sitting like king of fowles in maiesty and powre.
Spenser. Faerie Queene.

Come, sit, sit, and a song.—Shall we clap into't roundly, without *hawking* or spitting, or saying we are hoarse, which are the only prologues to a bad voice? *Shakspeare.*

Ride unto St. Alban's,
Whereas the king and queen do mean to *hawk*.
Id.

Do'st thou love *hawking*? Thou hast *hawks* will soar
Above the morning lark. *Id.*

A faulcon tow'ring in her pride of place,
Was by a mousing owl *hawked* at and killed. *Id.*

A long-winged *hawk*, when he is first whisteled off the fist, mounts aloft, and for his pleasure fetcheth many a circuit in the ayr, still soaring higher and higher, till he be come to his full pitch, and in the end, when the game is sprung, comes down amain, and stoops upon the sudden.
Burton's Anatomy of Melancholy.

Hawking comes near to hunting, the one in the ayre as the other on the earth, a sport as much affected as the other, by some preferred. *Id.*

It can be no more disgrace to a great lord to draw a fair picture, than to cut his *hawk's* meat.
Peacham.

Blood, cast out of the throat or windpipe, is spit out with a *hawking* or small cough; that out of the gums is spit out without *hawking*, coughing, or vomiting. *Harvey.*

Flat noses seem comely unto the Moor, an aquiline or *hawked* one unto the Persian, a large and prominent nose unto the Roman. *Browne.*

Whether upward to the moon they go,
Or dream the Winter out in caves below,
Or *hawk* at flies elsewhere, concerns us not to know.
Dryden.

One followed study and knowledge, and another *hawking* and hunting. *Locke.*

He that *hawks* at larks and sparrows has no less sport, though a much less considerable quarry, than he that flies at nobler game. *Id.*

A falc'ner Henry is, when Emma *hawks*;
With her of tarsels and of lures he talks. *Prior.*

She complained of a stinking tough phlegm which she *hawked* up in the mornings. *Wiseman.*

To grace this honoured day the queen proclaims,
By herald *hawkers* high, heroick games:
She summons all her sons; an endless band
Pours forth, and leaves unpeopled half the land.
Pope.

I saw my labours, which had cost me so much thought, bawled about by common *hawkers*, which I once intended for the consideration of the greatest person. *Swift.*

His works were *hawked* in every street;
But seldom rose above a sheet. *Id.*

Whence borne on liquid wing
The sounding culver shoots; or where the *hawk*,
High in the beetling cliffs, his eyry builds.
Thomson.

HAWKE (Edward), lord Hawke, a brave British admiral, was the son of an eminent barrister, and entered into the navy at an early age. In 1734 he obtained the command of a man of war, and distinguished himself by his bravery in the famous engagement in 1744, wherein the British fleet was commanded by Matthews, Lestock, and Rowley. See ENGLAND. In 1747 he was made rear-admiral of the White, when he defeated a large French fleet, and captured five ships of the line; on which he was created a knight of the Bath. In 1759 he defeated admiral Conflans off Belleisle, and was rewarded with a pension of £2000 a-year. In 1765 he was appointed vice-admiral of Great Britain, and first lord of the admiralty. In 1776 he was created a British peer, and died in 1781.

HAWKERS were anciently persons who went from place to place buying and selling brass, pewter, and other merchandise, which ought to be uttered in open market. In this sense the word is mentioned, 25 Hen. VIII., cap. 6., and 33, cap. 4. The appellation seems to have arisen from their uncertain wandering, like those who, with hawks, seek their game where they can find it. The term is now used as synonymous with pedlar; a person who travels about the country selling wares. Every hawker must take out an annual license, for which he must pay £4; and if he travels with a horse, ass, or mule, for every one of them £8. If he travels without a license, or contrary to it, he forfeits for every offence, to the informer, and the poor of the parish where discovered, £10. The acts relating to hawkers do not extend to makers of goods or their agents; or to those who sell goods in fairs or markets; to the sellers of fish, fruit, or other victuals; nor to the venders of newspapers. But hawkers shall not, by virtue of such license, sell or offer to sale any tea or spirituous liquors, though with a permit, under the penalty of having the same seized, and imprisonment and prosecution of the offender.

HAWKESWORTH (John), LL.D. a celebrated English writer, born in 1715, and brought up to the profession of a watchmaker. He was a member of the Rev. Mr. Bradbury's church, from which he was expelled for irregularity. He afterwards devoted himself to literature, and became an author of considerable eminence. In the early part of his life his circumstances were rather confined. He resided some time at Bromley, in Kent, where his wife kept a boarding school. He afterwards became known to a lady who had great property and interest in the East India Company, and through her means was chosen a director of that body. His Adventurer is his principal work, and its merits procured him the degree of LL.D. through archbishop Herring. When the design of compiling a narrative of the discoveries in the South

Seas was on foot, he was recommended as a proper person to be employed on the occasion: but the performance did not answer the public expectation. Works of taste and elegance, where imagination and the passions were to be affected, were his province; not works of dry, cold, accurate narrative. However, he executed his task, and received for it the enormous sum of £6000. He died in 1773, some say of high living, others, of chagrin from the ill reception of his Narrative. On a handsome marble monument at Bromley, in Kent, is the following inscription, the latter part of which is taken from the last number of The Adventurer:—

To the memory of
JOHN HAWKESWORTH, LL. D.
Who died the 16th of November
MDCCLXXIII, aged 58 years.
That he lived ornamental and useful
To society, in an eminent degree,
Was among the boasted felicities
Of the present age;
That he labored for the benefit of society,
Let his own pathetic admonitions
Record and realise.

'The hour is hasting, in which whatever praise or censure I have acquired will be remembered with equal indifference. Time, who is impatient to date my last paper, will shortly moulder the hand which is now writing it in the dust, and still the breast that now throbs at the reflection. But let not this be read as something that relates only to another; for a few years only can divide the eye that is now reading from the hand that has written.'

HAWKING. See FALCONRY.

HAWKINS (Sir John), a brave English admiral under queen Elizabeth, born in Devonshire. He was rear-admiral of the fleet which she sent against the Spanish Armada, and had a great share in that glorious victory. He was afterwards made treasurer of the navy. But his memory is disgraced by his having been the first European who carried off slaves from the coast of Africa, and introduced that inhuman traffic into the West Indies. Queen Elizabeth herself, while she honored his bravery by knighthood, threatened him with the divine vengeance for this practice. He died in the West Indies in 1595.

HAWKINS (Sir John), a celebrated author, and a lineal descendant of the admiral, was born in London, March 30th, 1719. He was the youngest son of Mr. Hawkins, a house-carpenter and builder in London, and was bred to the law. Though deeply engaged in that study, in his younger years, and afterwards in the practice, he found leisure to exercise his genius by writing essays on various subjects, for the Gentleman's Magazine, Universal Spectator, and Westminster Journal; some of which attracted the attention of the public. He formed an early intimacy with Dr. Johnson, which continued through life. About 1741 he became a member of two Musical Societies, and in 1742 published six Cantatas, the poetry of five of which was written by himself, and the music composed by his friend Mr. Stanley. These having succeeded beyond expectation, he published other six soon after, which proved the means of making his fortune, by introducing him to the acquaintance of Peter Storer, esq., of Highgate, whose youngest daughter Sidney he married in 1753, and with her received a handsome fortune, as well as a very large addition to it, on the death of her brother in 1759. Having early entertained a fondness for angling, he now gave up business, and purchased a house at Twickenham, on the Thames, where he could enjoy his favorite amusement. In 1760 he published a new edition of Walton's Complete Angler, in 8vo. with notes; to which he prefixed a Life of Walton. In 1761 he was appointed a justice of the peace for Middlesex. In 1763 he published in 8vo. Observations on the State of the Highways, and on the laws for amending and keeping them in repair: to which he subjoined the draught of a bill, which was afterwards passed into a law. In 1764 he distinguished himself by opposing an enormous claim of the city of London, which, in a bill presented to Parliament, had proposed to subject the county of Middlesex to two-thirds of the expense of rebuilding the jail of Newgate, estimated at £40,000. Mr. Hawkins drew a petition against the bill with such success, that it was withdrawn by the city members. In 1765 he was elected chairman of the quarter session. In 1768 and 1769, during the riots at Brentford and Moorfields, he acted with so much spirit, activity, and propriety, that, in 1772, his majesty conferred on him the honor of knighthood. In 1773, and 1778, he enriched Dr. Johnson's and Mr. Stevens's edition of Shakspeare with those notes which bear his name. In 1776 he published his General History of the Science and Practice of Music; in 5 vols. 4to., dedicated to the king, and which he presented to him personally, at Buckingham House. The collecting of the materials for this work had cost him sixteen years labor. In 1784 he met with one of the severest losses a literary man can sustain, by the destruction of his valuable library, containing many rare books, by fire. In 1787 he published the Life and Works of Dr. Johnson, in 11 vols. 8vo. dedicated to the king. He died at Westminster of an apoplexy, on the 21st of May 1789: leaving the character of an active magistrate, an affectionate husband and parent, a firm friend, and a sincere Christian.

HAWKINS, a county of East Tennessee, United States. Rogersville is the chief town.

HAWKIN'S ISLAND, an island off the west coast of North America, in Prince William's Sound, about twenty miles long, and from one to four miles wide. Long. 214° 10′ to 214° 38′ E., lat. 60° 28′ to 60° 40′ N.

HAWKWEED. See CREPIS and HIERACIUM.

HAWKWOOD (Sir John), a famous English general, was the son of a tanner at Sible Hedingham in Essex, where he was born in the reign of Edward III. He was bound apprentice to a tailor in London; but, being pressed into the army, was sent abroad, where he signalised himself as a soldier in France and Italy, and particularly at Pisa and Florence. He commanded with great ability and success in the army of Galeacio duke of Milan; and was in such high

esteem with Barnabas, his brother, that he gave him Domitia his natural daughter in marriage, with an ample fortune. He died at Florence, full of years and military fame, in 1394.

HAWLBOWLING, a small island in Cork harbour, Ireland, nearly opposite to the town of Cove, on which there is a small fort; and which, during the late war, was fixed upon as a naval depôt.

HAWSE, or HAUSE, implies the situation of the cables before the ship's stem, when she is moored with two anchors out from forward, viz. one on the starboard and the other on the larboard bow. Hence it is usual to say, she has a clear hawse, or a foul hawse. It also denotes any small distance a-head of a ship, or between her head and the anchor employed to ride her, as, He has anchored in our hawse, The brig fell athwart our hawse, &c. A ship is said to ride with a clear hawse when the cables are directed to their anchors, without lying athwart the stem; or crossing, or being twisted round each other by the ship's winding about, according to the change of the wind, tide, or current. A foul hawse, on the contrary, implies that the cables lie across the stem, or bear upon each other, so as to be rubbed and chafed by the motion of the vessel. The hawse accordingly is foul, by having either a cross, an elbow, or a round turn. If the larboard cable, lying across the stem, points out on the starboard side, while the starboard cable at the same time grows out on the larboard side, there is a cross on the hawse. If, after this, the ship, without returning to her former position, continues to wind about the same way, so as to perform an entire revolution, each of the cables will be twisted round the other, and then directed out from the opposite bow, forming what is called a round turn. An elbow is produced when the ship stops in the middle of that revolution, after having had a cross: or, in other words, if she rides with her head northward with a clear hawse, and afterwards turns quite round, so as to direct her head northward again, she will have an elbow.

HAWSE-PIECES, the foremost timbers of a ship, whose lower ends rest on the knuckle timber, or the foremost of the cant timbers. They are generally parallel to the stem, having their upper ends sometimes terminated by the lower part of the beak-head, and otherwise by the top of the bow, particularly in small ships and merchantmen.

HAWSER, *n. s.* a large rope which holds the middle degree between the cable and tow-line, in any ship whereto it belongs, being a size smaller than the former, and as much larger than the latter.

HAW'THORN, *n. s.* } Sax. þæȝ ðopn. A
HAW'THORN-FLY, *n. s.* } species of medlar; the thorn that bears haws; the white-thorn. Hawthorn-fly, an insect.

Some in her hondes baren boughes shene,
Some of laurer, and some of okes bene,
Some of *hawthorne*, and some of wodebind,
And many mo which I have not in mind.
Chaucer. The Floure and the Leafe.

There is a man haunts the forest, that abuses our young plants with carving Rosalind on their barks; hangs odes upon *hawthorns*, and elegies upon brambles. *Shakspeare. As You Like It.*

The *hawthorn-fly* is all black and not big.
Walton.

Some in their hands, beside the lance and shield,
The boughs of woodbine or of *hawthorn* held.
Dryden.

Now *hawthorns* blossom, now the daisies spring.
Pope.

The *hawthorn* whitens. *Thomson.*

From the moist meadow to the withered hill,
Led by the breeze the vivid verdure runs
And swells and deepens; to the cherished eye
The *hawthorn* whitens. *Young's Night Thoughts.*

The use to which it is applied in England is to make hedges: there are two or three varieties of it about London; but that sort which produces the smallest leaves is preferable, because its branches always grow close together. *Miller.*

HAY, *n. s.* }
HAY-MAKER, *n, s.* } Sax, þıeȝ, þıȝ; French, *haie*, a hedge; Dutch,
HAY-COCK, *n. s.* } *hey*. Grass dried to fodder cattle in winter. Hay-maker, one employed in the process of making hay. Hay, as derived from haie, signifies a net which encloses the haunt of an animal. To dance the hay, is to dance in a ring, probably from dancing round a hay-cock.

This king of kinges was proud and elat;
He wend that God that sit in majestee
Ne might him nat bereve of his estat:
But sodenly he lost his dignitee,
And like a best him seemed for to be,
And ete *hay* as an oxe.
Chaucer. The Monkes Tale.

Make poor men's cattle break their necks;
Set fire on barns and *hay* stacks in the night,
And bid the owners quench them with their tears.
Shakspeare.

I will play on the tabor to the worthies
And let them *dance* the *hay*. *Id.*

Make *hay* while the sun shines.
Camden's Remains.

We have heats of dungs, and of *hays* and herbs laid up moist. *Bacon.*

This maids think on the hearth they see,
When fires well nigh consumed be,
There dancing *hays* by two and three,
Just as your fancy casts them. *Drayton.*

The gum and glistening, ————
Looks just as if that day
Snails there had crawled the *hay*. *Suckling.*

One while a scorching indignation burnes
The flowers and blossomes of our hopes away;
Which into scarsitie our plentie turnes,
And changeth unmowne-grasse to parched *hay*.
G. Withers.

Or if the earlier season lead
To the tanned *hay-cock* in the mead. *Milton.*

By some *hay-cock*; or some shady thorn,
He bids his beads both even song and morn.
Dryden.

Coneys are destroyed by *hays*, curs, spaniels, or tumblers, bred up for that purpose. *Mortimer.*

The best manure for meadows is the bottom of *hay* mows and *hay* stacks. *Id.*

Some turners turn long and slender sprigs of ivory, as small as an *hay* stalk. *Moxon.*

As to the return of his health and vigour, were you here, you might enquire of his *haymakers*.
Pope to Swift.

Hay **and oats, in the management of a groom will make ale.** *Swift.*

Hay. The time of mowing grass for hay must be regulated according to its growth and ripeness; nothing being more prejudicial to the crop than mowing it too soon; because the sap is not then fully come out of the root, and, when made into hay, the grass shrinks away to nothing. It must not, however, be let stand too long till it have shed its seeds. When the tops of the grass look brown, and begin to bend down, and the red honey-suckle flowers begin to wither, it is ripe for mowing.

A Hay for taking rabbits, hares, &c., is made from fifteen to twenty fathoms in length, and in depth a fathom. As rabbits often straggle abroad about mid-day for fresh grass, when they are gone forth to any remote brakes or thickets, pitch two or three of these hays about their burrows, and lie close there; but, if there are not hays enough to enclose all their burrows, some may be stopped up with stones, &c. Then set out with the dog to hunt up and down at a good distance, and draw on by degrees to the man who lies close by the hay, who may take them as they bolt into it.

Hay (William), esq., an English writer, born at Glenburne, in Sussex, about 1700, and educated at Headley. In 1730 he published a poem, called Mount Caburn, dedicated to the duchess of Newcastle. In 1734, when lord Hardwicke was created a peer, he was chosen to succeed him as M. P. for Seaford, which he continued to represent during his life. He defended the measures of Sir Robert Walpole, and was supposed to be the author of a ministerial pamphlet, entitled A Letter to a freeholder on the late Reduction of the Land-tax to one Shilling in the Pound; printed in 1731. In 1735 he published Remarks on the Laws relative to the Poor, with Proposals for their better Relief and Employment; and brought in two bills for that purpose, but without effect. In May 1738 he was appointed a commissioner of the Victualling office. In 1753 appeared his Religio Philosophi; or the Principles of Morality and Christianity, illustrated from a View of the Universe, and of Man's Situation in it. This was followed, in 1754, by his Essay on Deformity; in which he rallies his own imperfections with much liveliness and good humor. 'Bodily deformity,' says he, 'is very rare. Among 558 gentlemen, in the house of commons, I am the only one that is so. Thanks to my worthy constituents, who never objected to my person, and I hope never to give them cause to object to my behaviour.' In 1754 he also translated Hawkins Browne De Immortalitate Animi. In 1755 he translated and modernised some Epigrams of Martial. A little time before, he had been appointed keeper of the Records in the Tower; and it is said that his attention and assiduity during the few months he held that office were eminently serviceable to his successors. He died January 19th, 1755.

Hay, in geography, a town of South Wales, in Brecknockshire, seated near the confluence of the rivers Wye and Dulas. It was a town of note in the time of the Romans; being fortified with a castle and wall, which were ruined in the rebellion of Owen Glendower. It is at present a considerable town; and has a large market for corn and cattle.

HAYDN (Joseph), a celebrated musical composer, born in Lower Austria, in 1733. His father was a wheel-wright, and placed in such circumstances that he could neither give his son an education suited to a liberal profession, nor procure for him instruction in that art for which he manifested an early and an ardent predilection. He was accustomed to sing to his father's harp the simple tunes which, without any knowledge of music, his father played; and he acquired a little acquaintance with different instruments under the tuition of a schoolmaster, his relation. From this school he was taken to Vienna, to sing in the choir of the imperial chapel. Reuter, who was maestro de capello of the cathedral, was here sensible of his merits and foresaw his fame. At the age when his voice began to change, Haydn was dismissed from the choir; after which, during a long course of years, he endured all the rigor of adverse fortune, finding it very difficult to earn even a bare subsistence. He lodged in the sixth story; his garret had neither door nor casement; his breath congealed on his bed-clothes; and the water which he fetched from the fountain for his toilette in the morning, was frequently changed into ice before he could re-ascend to the exalted regions of his abode. Haydn gave lessons, and performed at orchestras and musical parties; but his indigence kept him secluded from society: an old worm-eaten harpsichord was his sole source of happiness. Consoling himself with this companion of his misfortunes, he courageously continued to compose; and his ardent genius prevented him from sinking into a state of torpid despair. At last he had the good fortune to have as his pupil a Miss Mortini, a relation of Metastasio; and at her house he obtained his board gratis during three years. Afterwards he removed to one of the suburbs. About that time he engaged himself as director of the choir of the Charitable Brothers, in the Leopoldstadt, at a salary of sixty florins per annum. He was obliged, on Sundays and holidays, to be at their church by eight o'clock in the morning; at ten he played the organ in the chapel of count Haugwitz, and at eleven he sung in the choir of the cathedral of St. Stephen. Thousands would have sunk under such hardships. He came to England in 1791, and returned to Germany in 1796. During his stay he composed many pieces, and met with those rewards and that admiration which he so highly merited.—Haydn never was in Italy. If he had enjoyed that advantage, there can be no doubt that, with his excellent ideas of singing and harmony, he would have acquired great reputation as a composer of operas. He, however, spoke Italian with considerable facility, and acknowledged that he owed much to an Italian musician of the name of Porpora, with whom he became acquainted at the house of a lady in Meinersdorf. Haydn served about three months in the capacity of a valet, solely for the purpose of improving himself by his instructions. Porpora was teaching the lady to sing, and Haydn accompanied her on the harpsichord; during the intervals

between the lessons, he submitted his compositions to the correction of his master. Thus was formed the composer, whose sublime notes resound in all the orchestras of Europe; and who continued his labors with increasing applause and glory during half a century, to the time of his death in 1809. His principal works, besides innumerable symphonies, are, The Creation and the Seasons.

HAYE'S ISLAND, a small island near the southern point of Hudson's Bay, formed by the rivers Nelson and Hayes, which, after running togther for some time, separate into two arms. Near the entrance of them into the sea stands York Fort, called by the French De Bourbon.

HAYLEY (William), a poet and biographical writer, was born November 9, 1745, at Chichester, of which cathedral his grandfather had been dean. He received his education at the school of Kingston-upon-Thames, and at Eton, whence he removed to Trinity College, Cambridge. On leaving the University he retired to his paternal estate of Eartham, in Sussex, where he resided till the loss of a natural son, about 1800, so afflicted him that he removed to Felpham in that county, where he died November 12, 1820. His principal publications are, 1. An Essay on Painting. 2. An Essay on History. 3. An Essay on Epic Poetry. 4. The Triumphs of Temper. An edition of these, with other pieces and plays, was printed in 6 vols. 8vo. His prose works are, An Essay on Old Maids, 3 vols., and the Lives of Milton, Cowper, and Romney the Painter. He was the author of various elegant quartos, and quartos have been devoted to his personal history: but he will be chiefly known to posterity as the biographer of Cowper; whose character, after all, he but very imperfectly understood.

HAYNES (Hopton), a learned unitarian, born in 1672. In 1696 he was employed in the mint, in which he rose to the office of king's assay-master. In the year 1748, becoming infirm, he was allowed to retire. He was also principal talley-writer at the exchequer for forty years; and died in 1749, at the age of seventy-seven. He wrote The Scripture Account of the Attributes and Worship of God, and of the Character and Offices of Jesus Christ, of which a second edition was printed by the Rev. Theophilus Lindsay in 1790.

HAYNES (Samuel), son of the above, was educated at King's College, Cambridge, where he took his degree of D. D. 1748. He was tutor to the earl of Salisbury, by whom he was presented to the livings of Hatfield and Clothel; he was also a canon of Windsor, and published a collection of state papers, relating to affairs in the reigns of Henry VIII., Edward VI., Mary, and Elizabeth, from 1542 to 1570, transcribed from the Cecil MSS. Dr. Haynes died in 1752.

HAYTER (John), M. A., was educated at Eton and King's College, Cambridge, where he obtained the degree of B. A. in 1778, and that of M. A. in 1788, between which dates he was presented to the living of Hepworth in Suffolk. His present majesty, then prince of Wales, offering to be at the expense of unrolling and decyphering the Greek MSS. in the ruins of Herculaneum, Mr. Hayter was appointed to superintend the experiment, and in consequence took up his abode at Palermo. He returned in 1810, and the MSS. were presented to the University of Oxford; but the result disappointed the public. He soon after died of an apoplectic shock in France. He published Observations on the Herculanensia, 4to.

HAYWARD, one who keeps the common herd or cattle of a town. He is appointed by the lord's court; his office is to see that the cattle neither break nor crop the hedges of enclosed grounds.

HAYWARD (Sir John), an eminent English historian and biographer of the seventeenth century, educated in the University of Cambridge, where he took the degree of LL.D. In 1610 he was appointed historiographer of a college then at Chelsea; and, in 1619, was knighted. He wrote, 1. The lives of the three Norman kings of England, William I. and II., and Henry I. 2. The first part of the life and reign of king Henry IV. 3. The life and reign of king Edward VI.; and several theological works. He died in 1627.

HAZAEL, Heb. חזאל i. e. seeing God., an officer belonging to Benhadad, king of Syria, who, as is generally supposed from the common rendering of 2 Kings viii. 15, caused that prince to be put to death, and reigned in his stead. Some, however, have thought that the thick cloth was spread over the face of Benhadad by himself or by his order to allay the violence of the fever. Hazael defeated Joram, Jehu, and Jehoahaz, kings of Israel; and, after his death, was succeeded by Benhadad his son, A. A. C. 889.

HAZ'ARD, *n. s*, *v. a.* & HAZ'ARDABLE, *adj.* [*v n.* HAZ'ARDER, *n. s.* HAZ'ARDRY, *n. s.* HAZ'ARDOUS, *adj.* HAZ'ARDOUSLY, *adv.* French, *hazard*, *hazarder*, *hazardeux*; Ital. and Sp. *azar*; Runic, *haski*. 'Hazard,' says Crabb, 'comes from the oriental zar and tzar, signifying any thing bearing an impression, particularly the die used in chance games, which is called by the Italians *zara*, and by the Spaniards *azar*.' Hazard is when, in contingent events, the inclination is to the unfavorable side, and thus it is opposed to chance. The figurative meanings are, accident; danger; risk; to try your chance; to venture. Hazardry is temerity; precipitation; rash adventure; all derived from, and founded on, the literal meaning applied to dice

> Now wol I you defenden *hasardrie*
> *Hasard* is veray moder of lesinges,
> And of deceite, and cursed forsweringes
> * * * * *
> * * * * *
> It is repreve and contrary of honour,
> For to ben hold a common *hasardour*,
> And ever the higher he is of estat,
> The more he is holden desolat.
> *Chaucer. The Pardoneres Tale.*

> ——Live, and allegiance owe
> To him that gives thee life and liberty,
> And henceforth by this daies ensample trow,
> That hasty wroth and heedlesse *hazardry*,
> Doe breed repentance late and lasting infamy.
> *Spenser's Faerie Queene.*

More wise they weend to make of love delight
Then life to *hazard* for faire ladies looke. *Id.*

We are bound to yield unto our Creator, the Father of all mercy, eternal thanks, for that he hath delivered his law unto the world; a law wherein so many things are laid open, as a light which otherwise would have been buried in darkness, not without the *hazard*, or rather not with the *hazard*, but with the certain loss of thousands of souls, most undoubtedly now saved. *Hooker.*

They might, by persisting in the extremity of that opinion, *hazard* greatly their own estates, and so weaken that part which their places now give. *Id.*

I have set my life upon a cast,
And I will stand the *hazard* of the die.
Shakspeare.

I will upon all *hazards* well believe
Thou art my friend, that knowest my tongue so well.
Id.

I pray you tarry; pause a day or two
Before you *hazard*; for, in chusing wrong,
I lose your company. *Id.*

It was not in his power to adventure upon his own fortune, or hearing a public charge to *hazard* himself against a man of private condition. *Hayward.*

An *hazardable* determination it is, unto fluctuating and indifferent effects, to affix a positive type or period. *Browne.*

She from her fellow-provinces would go,
Rather than *hazard* to have you her foe.
Waller.

Grant that our *hazardous* attempt prove vain,
We feel the worst, secured from greater pain.
Dryden.

The *hazard* I have run to see you here, should inform you that I love not at a common rate. *Id.*

Where the mind does not perceive connection, there men's opinions are not the product of judgment, but the effects of chance and *hazard*, of a mind floating at all adventures, without choice and without direction. *Locke.*

The wise and active conquer difficulties
By daring to attempt them: sloth and folly
Shiver and shrink at sight of toil and *hazard*,
And make the impossibility they fear. *Rowe.*

Men are led on from one stage of life to another in a condition of the utmost *hazard*, and yet without the least apprehension of their danger. *Rogers.*

By dealing indifferently mercies to all, you may *hazard* your own share. *Sherlock.*

The duke, playing at *hazard*, held in a great many hands together, and drew a huge heap of gold. *Swift.*

Reason! the hoary dotard's dull directress,
That loses all because she *hazards* nothing.
Dr. Johnson's Irene.

HAZARD, in gaming. See GAMING.

HAZARD, is properly so called, as it speedily enriches a man or ruins him. It is played only with two dice without tables; and as many may play as can stand round the largest round table. Two things are chiefly to be observed, viz. main and chance; the latter belonging to the caster, and the former, or main, to the other gamesters. There can be no main thrown above 9, or under 5; so that 5, 6, 7, 8, and 9, are the only mains. Chances and nicks are from 4, to 10; thus 4 is a chance to 9, 5 to 8, 6 to 7, 7 to 6, 8 to 5; and 9 and 10 a chance to 5, 6, 7, and 8: in short, 4, 5, 6, 7, 8, 9, and 10, are chances to any main, if any of these nick it not. Now nicks are either when the chance is the same with the main, as 5 and 5; or the like; or 6 and 12, 7 and 12, 8 and 12. Here observe that 12 is out to 9, 7, and 5; 11 is out to 9, 8, 6, and 5; and ames-ace and deuce ace, are out to all mains whatever.

HAZE, *n. s.*, *v. n.* & *v. a.* } Sax. þarpe; Goth.
HA'ZY, *adj.* } *hasa*, hoar-frost.

Fog or mist; dark; dull: to haze is to confuse; hence to frighten or alarm.

Our clearest day here is misty and *hazy*; we see not far, and what we do see is in a bad light. *Burnet's Theory.*

Oft engendered by the *hazy* North,
Myriads on myriads, insect armies waft. *Thomson.*

HAZEBROUK, a large town of French Flanders, twenty-seven miles west by north of Lille. Its streets are straight, and its houses in general well built: its population about 6600. It is the capital of an arrondissement; and has a brisk trade in thread, linen, and fruits the produce of the surrounding country.

HA'ZEL, *adj.* } Sax. þæpel; Lat. *corylus*.
HA'ZELLY, *adj.* } Nut tree. Light brown, of the color of hazel; hence used figuratively to describe color.

Kate, like the *hazel* twig,
Is straight and slender; and as brown in hue
As *hazel* nuts, and sweeter than the kernels.
Shakspeare.

Her chariot is an empty *hazel* nut. *Id.*

Why sit we not beneath the grateful shade,
Which *hazels*, intermixed with elms, have made?
Dryden.

Uplands consist either of sand, gravel, chalk, rock, or stone, *hazelly* loam, clay, or black mould. *Mortimer.*

Chuse a warm dry soil, that has a good depth of light *hazel* mould. *Id.*

There are some from the size of a *hazel* nut to that of a man's fist. *Woodward.*

Where flows the murmuring brook, inviting dreams;
Where bordering *hazel* overhangs the streams,
Whose rolling current winding round and round,
With frequent falls makes all the woods resound.
Gay.

The nuts grow in clusters, and are closely joined together at the bottom, each being covered with an outward husk or cup, which opens at the top, and when the fruit is ripe it falls out. The species are *hazel*-nut, cobnut, and filbert. The red and white filberts are mostly esteemed for their fruit. *Miller.*

The flowering thorn, self-taught to wind
The *hazel's* stubborn stem entwined,
And bramble twigs were wreathed around,
And rough furze crept along the ground.
Beattie.

HAZEL, or HAZLE, in botany. See CORYLUS. The kernels of the fruit have a mild, farinaceous, oily taste, agreeable to most palates. Squirrels and mice are fond of them, as well as some birds. A kind of chocolate has been prepared from them; and there are instances of their having been formed into bread. The oil expressed from them is little inferior to the oil of almonds; and is used by painters and by chemists for receiving and retaining odors. The charcoal made of the wood is used by painters in drawing. Evelyn tells us that no plant is more proper for thickening of copses than the hazel, for which he directs the following expeditious method. Take a pole of hazel twenty or thirty feet in length, the head a little lopped into the ground, giving it a chop near the ground to make it succumb; this

fastened to the earth with a hook or two, and covered with some fresh mould at a competent depth, will produce a great number of suckers, and thicken and furnish a copse speedily. The fruit, leaves, and catkins of this tree are very commonly found in peat mosses, and in the alluvial accumulations in the bottoms of valleys, having but little fall, and on the flat shores of lakes. In the alluvial flats in the valleys of Derbyshire, &c., hazel-nuts, &c., are very common in layers, between the silt and gravel. Woodward, in his Catalogue of Fossils, mentions nuts being found in Milnclose mine, which doubtless fell or were washed into opens from the surface; and on the whole it seems clear, that all these belong to the class of peat fossils, and are preserved in the most modern of the earthy deposits or accumulations.

Hazel Earth, or Hazley Earth, a kind of red loam, which is said to be an excellent mixture with other sorts of earth; uniting what is too loose, cooling what is too hot, and gently retaining the moisture.

Hazel, Witch. See Hamamelis, and Ulmus.

Hazel Divining Rods. We have glanced at this subject more than once. See Bagvette Divinatoire, and Divining Rods. The fact is, that, in compiling both the foregoing articles, we obscurely recollected having seen a narrative on the subject, which we are at last able to present to our readers. It is from a note in the Quarterly Review. 'The narrative has been lately communicated to us,' says the writer, 'by a friend residing in Norfolk, and puts the subject in the clearest point of view. We shall simply state that the parties, whose names are well known to many of our readers, are utterly incapable either of deceiving others, or of being deceived themselves.

'January 21st, 1818.—It is just fifty years since lady N's attention was first called to this subject; she was then sixteen years old, and was on a visit with her family at a château in Provence, the owner of which wanted to find a spring to supply his house, and for that purpose had sent for a peasant, who could do so with a twig. The English party ridiculed the idea, but still agreed to accompany the man, who, after walking some way, pronounced that he had arrived at the object of his search, and they accordingly dug and found him correct.—He was quite an uneducated man, and could give no account of the faculty in him, or of the means which he employed, but many others, he said, could do the same.

'The English party now tried for themselves, but all in vain, till it came to the turn of lady N., when, to her amazement and alarm, she found that the same faculty was in her as in the peasant, and, on her return to England, she often exerted it, though in studious concealment. She was afraid lest she should be ridiculed, or should, perhaps, get the name of a witch, and in either case she thought that she should certainly never get a husband!

'Of late years her scruples began to wear away; and when Dr. Hutton published Ozanam's Researches, in 1803, where the effect of the divining rod is treated as absurd (vol. iv. p. 260-7), she wrote a long letter to him, signed X. Y. Z., stating the facts which she knew. The D answered it, begging further information; lady N. wrote again, and he, in his second letter, requested the name of his correspondent: that lady N. also gave.

'A few years afterwards she went, at Dr. Hutton's particular request, to see him at Woolwich, and she then showed him the experiment, and discovered a spring in a field which he had lately bought near the New College, then building. This same field he has since sold to the college, and for a larger price in consequence of the spring.

'Lady N. this morning shewed the experiment to lord G., Mr. S., and me, in the park at W. She took a thin forked hazel twig, about sixteen inches long, and held it by the end, the joint pointing downwards. When she came to a place where water was under the ground, the twig immediately bent, and the motion was more or less rapid as she approached or withdrew from the spring. When just over it, the twig turned so quick as to snap, breaking near her fingers, which by pressing it were indented, and heated, and almost blistered; a degree of agitation was also visible in her face. When she first made the experiment, she says, this agitation was great: and to this hour she cannot wholly divest herself of it, though it gradually decreases. She repeated the trial several times in different parts of the park, and her statements were always accurate. Among those persons in England who have the same faculty, she says, she never knew it so strong in any as in Sir C. H. and Miss F. It is extraordinary that no effect is produced at a well or ditch, or where earth does not interpose between the twig and the water. The exercise of the faculty is independent of any volition.'

'So far our narrator, in whom, we repeat, the most implicit confidence may be placed. The faculty so inherent in certain persons is evidently the same with that of the Spanish Zahories, though the latter do not employ the hazel twig.'

HE. Pronoun. Gen. him; plur. they; gen. them. Dut. *hy;* Sax. þe. It seems to have borrowed the plural from ðir, plural ðar, dative ðirum. The man that was named before.

> All the conspirators, save only *he*,
> Did that they did in envy of great Cæsar.
> *Shakspeare.*
>
> If much you note *him*,
> You shall offend *him*, and increase his passion;
> Feed and regard *him* not. *Id.*
> I am weary of this moon; would *he* would change. *Id.*
>
> Adam spoke;
> So cheered *he* his fair spouse, and she was cheered.
> *Milton.*
>
> When Adam waked, *he* on his side
> Leaning half raised hung over her. *Id.*
>
> Thus talking, hand in hand, along *they* passed
> On to their blissful bowers. *Id.*
>
> Extol
> *Him* first, *him* last, *him* midst. *Id.*

The man; the person. It sometimes stands without reference to any foregoing word.

He is never poor
That little hath, but *he* that much desires.
Daniel.

Man or male being.

Such mortal drugs I have; but Mantua's law
Is death to any *he* that utters them. *Shakspeare.*

I stand to answer thee, or any *he* the proudest of thy sort. *Id.*

Tros and his race the sculptor shall employ,
And *he* the god who built the walls of Troy.
Dryden.

Male: as, a he-bear, a he-goat. It is used where the male and female have not different denominations.

The *he's* in birds have the fairest feathers.
Bacon.

In the two last senses *he* is rather a noun than pronoun.

HEAD, *n. s.* Sax. þeaꝼoð, þeaꝼð; Belgic *houed;* old English heved, whence, by contraction, head. The part of the animal that contains the brain, or the organ of sensation and seat of thought.

But now a litel while I wol bewaile,
This Pompeius, this noble governour
Of Rome, which that fled at this bataille.
I say on of his men, a false traitour,
His *hed* of smote, to winnen him favour
Of Julius, and him the *hed* be brought:
Alas Pompeie! of the orient conquerour,
That Fortune unto swiche a fin thee brought.
Chaucer. The Monkes Tale.

Vein-healing verven, and *head*-purging dill.
Spenser.

Over *head* up-grew
Insuperable height of loftiest shade. *Milton*

The dewy paths of meadows we will tread,
For crowns and chaplets to adorn thy *head.*
Dryden.

I could still have offers, that some, who held their *heads* higher, would be glad to accept. *Swift.*

And far beneath the earth and ocean spread
Round him are icy rocks, and loudly blow
Contending tempests on his naked *head,*
And thus reward the toils which to those summits led.
Byron.

Person as exposed to any danger or penalty.

What he gets more of her than sharp words, let it lie on my *head.* *Shakspeare.*

Who of all ages to succeed, but feeling
The evil on him brought by me, will curse
My *head?* ill fare our ancestor impure. *Milton.*

O breast of pity void! t' oppress the weak,
To point your vengeance at the friendless *head,*
And with one mutual cry insult the fallen!
Emblem too just of man's degenerate race.
Somerville's Chase.

Head and ears. The whole person.

In gingling rhimes well fortified and strong,
He fights intrenched o'er *head and ears* in song.
Granville.

Denomination of any animals.

When Innocent desired the marquis of Carpio to furnish thirty thousand *head* of swine, he could not spare them; but thirty thousand lawyers he had at his service. *Addison.*

The tax upon pasturage was raised according to a certain rate per *head* upon cattle. *Arbuthnot.*

Chief; principal person; one to whom the rest are subordinate; leader; commander.

For their commons there is little danger from them, except it be where they have great and potent *heads.*
Bacon.

Your *head* I him appoint;
And by myself have sworn, to him shall bow
All knees in heaven, and shall confess him lord.
Milton.

The *heads* of the chief sects of philosophy, as Thales, Anaxagoras, and Pythagoras, did consent to this tradition. *Tillotson.*

Place of honor; the first place.

Notwithstanding all the justices had taken their places upon the bench, they made room for the old knight at the *head* of them. *Addison.*

Place of command.

An army of fourscore thousand troops, with the duke of Marlborough at the *head* of them, could do nothing. *Addison on the War.*

Countenance; presence.

Richard not far from hence hath hid his *head.*
Shakspeare. Richard II.

With Cain go wander through the shades of night,
And never shew thy *head* by day or light.
Shakspeare.

Ere to-morrow's sun shall shew his *head.* *Dryden.*

Understanding; faculties of the mind: commonly in a ludicrous sense.

The wenches laid their *heads* together.
L'Estrange.

Oh, says Reynard, never trouble your *head,* but leave that to me. *Id.*

Work with all the ease and speed you can, without breaking your *head,* and being so very industrious in starting scruples. *Dryden.*

The lazy and inconsiderate took up their notions by chance, without much beating their *heads* about them.
Locke.

If a man shews that he has no religion, why should we think that he beats his *head,* and troubles himself to examine the grounds of this or that doctrine? *Id.*

When in ordinary discourse we say a man has a fine *head,* we express ourselves metaphorically, and speak in relation to his understanding; and when we say of a woman she has a fine *head,* we speak only in relation to her commode. *Addison.*

We laid our *heads* together to consider what grievances the nation had suffered under king George.
Id.

Face; front; fore part.

The gathering crowd pursues;
The ravishers turn *head,* the fight renews. *Dryden.*

Resistance; hostile opposition.

Then made he *head* against his enemies,
And Hymner slew. *Faerie Queene.*

Sometimes hath Henry Bolingbroke made *head* against my power. *Shakspeare.*

Two valiant gentlemen making *head* against them, seconded by half a dozen more, made forty run away.
Raleigh.

Sin having depraved his judgment, and got possession of his will, there is no other principle left him naturally, by which he can make *head* against it.
South.

Spontaneous resolution.

The bordering wars in this kingdom were made altogether by voluntaries, upon their own *head,* without any pay or commission from the state. *Davies.*

State of a deer's horns, by which his age is known.

It was a buck of the first *head.* *Shakspeare.*

The buck is called the fifth year a buck of the first *head.* *Id.*

Individual. It is used in numbers or computation.

If there be six millions of people, then there are about four acres for every *head.* *Graunt.*

The top of any thing bigger than the rest.

His spear's *head* weighed six hundred shekels of iron. 1 *Samuel.*

As high
As his proud *head* is raised towards the sky,
So low towards hell his roots descend.
Denham.

Trees which have large and spreading *heads*, would lie with their branches up in the water. *Woodward.*

If the buds are made our food, they are called *heads* or tops; so *heads* of asparagus or artichokes. *Watts.*

Head is an equivocal term; for it signifies the *head* of a nail, or of a pin, as well as of an animal. *Id.*

When by the winds of autumn driven
The scattered clouds fly cross the heaven,
Oft have we from some mountain's *head*,
Beheld the alternate light and shade
Sweep along the vale. *Beattie.*

The fore part of any thing, as of a ship.

By gallies with brazen *heads*, she might transport over Indus at once three hundred thousand soldiers. *Raleigh.*

His gallies moor;
Their *heads* are turned to sea, their sterns to shore.
Dryden.

That which rises on the top.

Let it stand in a tub four or five days before it be put into the cask, stirring it twice a-day, and beating down the *head* or yeast into it. *Mortimer.*

The blade of an axe.

A man fetcheth a stroke with the axe to cut down the tree, and the *head* slippeth from the helve. *Deut.* xix. 5.

Upper part of a bed.

Israel bowed upon the bed's *head*. *Gen.* xlvii. 31.

The brain.

As eastern priests in giddy circles run,
And turn their *heads* to imitate the sun. *Pope.*

Dress of the head.

Ladies think they gain a point when they have teazed their husbands to buy them a laced *head* or a fine petticoat. *Swift.*

Principal topic of discourse.

These *heads* are of a mixed order, and we propose only such as belong to the natural world. *Burnet's Theory.*

'Tis our great interest and duty, to satisfy ourselves on this *head*, upon which our whole conduct depends. *Atterbury.*

Source of a stream.

It is the glory of God to give; his very nature delighteth in it: his mercies in the current, through which they would pass, may be dried up, but at the *head* they never fail. *Hooker.*

The current by Gaza is but a small stream, rising between it and the Red Sea, whose *head* from Gaza is little more than twenty English miles. *Raleigh's History.*

Some did the song, and some the choir maintain,
Beneath a laurel shade, where mighty Po
Mounts up to woods above, and hides his *head* below.
Dryden.

Crisis; pitch.

The indisposition which has long hung upon me, is at last grown to such a *head*, that it must quickly make an end of me, or of itself. *Addison.*

Power; influence; force; strength; dominion.

Within her breast though calm, her breast though pure,
Motherly cares and fears got *head*, and raised
Some troubled thoughts. *Milton.*

Body; conflux.

People under command chuse to consult, and after to march in order; and rebels contrariwise, run upon an *head* together in confusion. *Bacon.*

A mighty and a fearful *head* they are,
As ever offered foul play in a state. *Shakspeare.*
Far in the marches here we heard you were,
Making another *head* to fight again. *Id.*
Let all this wicked crew gather
Their forces to one *head*. *Ben Jonson.*

Power; armed force.

My lord, my lord, the French have gathered *head*. *Shakspeare.*

At sixteen years,
When Tarquin made a *head* for Rome, he sought
Beyond the mark of others. *Id.*

Liberty in running a horse.

He gave his able horse the *head*,
And bounding forward struck his agile heels
Against the panting sides of his poor jade
Up to the rowel head. *Shakspeare.*

License; freedom from restraint; a metaphor from horsemanship.

God will not admit of the passionate man's apology, that he has so long given his unruly passions their *head*, that he cannot now govern or controul them. *South.*

It is very improperly applied to roots.

How turnips hide their swelling *heads* below,
And how the closing coleworts upwards grow.
Gay.

Head and shoulders. By force; violently.

People that hit upon a thought that tickles them, will be still bringing it in by *head and shoulders*, over and over, in several companies. *L'Estrange.*

They bring in every figure of speech, *head and shoulders* by main force, in spite of nature and their subject. *Felton.*

HEAD, *adj.* & *v. a.*
HEAD'ER, *n. s.*
HEAD'INESS, *n. s.*
HEAD'LESS, *adj.*
HEAD'LONG, *adj.*
HEAD'Y, *adj.*
HEAD'STRONG, *adj.*

Chief, principal, whether applied to persons or things; to lead, influence, or direct; to behead; to fit any thing with a head; to lop the branches of trees. Header, one whose office it is to head pins or nails, &c.; the first brick of the angle. Headiness, haste; rashness; stubborness. Headless, without a head; without a chief; ignorant; obstinate; careless; inconsiderate. Headlong, precipitate; steep; rash. Headstrong, violent; ungovernable; resolute; one that will not be restrained. Heady, apt to affect the head; vertiginous; violent; impetuous.

If any rashly blame such his choice of old and unwonted words, him may I more justly blame and condemn, either of witless *headiness* in judging, or of *headless* hardiness in condemning. *Spenser.*

His shining helmet he 'gan soon unlace,
And left his *headless* body bleeding at the place.
Id.

Headed with flints and feathers bloody dyed,
Arrows the Indians in their quivers hide.
Id. Faerie Queene.

If you *head* and hang all that offend that way but for ten years together, you'll be glad to give out a commission for more heads. *Shakspeare.*

Take pity of your town and of your people,
While yet the cool and temperate wind of grace
O'erblows the filthy and contagious clouds
Of *heady* murther, spoil, and villany. *Id.*

I am advised what I say :
Neither disturbed with the effect of wine,
Nor, *heady* rash, provoked with raging ire ;
Albeit my wrongs might make one wiser mad. *Id.*
I'll forbear,
And am fallen out with my more *heady* will.
To take the indisposed and sickly fit
For the sound man. *Id.*
I'll look no more,
Lest my brain turn, and the deficient sight
Topple down *headlong*. *Id.*
Never can reformation in a flood
With such a *heady* current scowering faults ;
Nor ever hydra-*headed* wilfulness
So soon did lose his seat. *Id.*

Were I man, a duke, and next of blood,
I would remove these tedious stumbling-blocks,
And smooth my way upon their *headless* necks.
Id.

They rested not until they had made the empire stand *headless* about seventeen years. *Raleigh.*

Wives, the readiest helps
To betray *heady* husbands, rob the easy.
Ben Jonson.

On the cold earth lies the unregarded king,
A *headless* carcase, and a nameless thing.
Denham.

He liked the advice, and then soon it essayed,
And presents crowd *headlong* to give good example,
So the bribes overlaid her that Rome once betrayed,
The tribes ne'er contributed so to the temple.
Marvell.

The senate, which should *headstrong* princes stay,
Let loose the reins and gave the realm away ;
With lavish hands they constant tributes give,
And annual stipends for their guilt receive. *Id.*

It suddenly fell from an excess of favour, which many examples having taught them, never stopt his race, 'till it came to a *headlong* overthrow. *Sidney.*

If the *header* of one side of the wall is toothed as much as the stretcher on the outside, it would be a stronger toothing, and the joints of the *headers* of one side would be in the middle of the *headers* of the course they lie upon of the other side. *Moxon.*

I was entertained with a sort of wine which was very *heady*, but otherwise seemed to be sack. *Boyle.*

Those only are regarded who are true to their party ; and all the talent required is to be hot, to be *heady*, to be violent on one side or the other.
Temple.

Abas, who seemed our friend, is either fled,
Or, what we fear, our enemies does *head*.
Dryden.

Some ask for envy'd power, which publick hate
Pursues, and hurries *headlong* to their fate,
Down go the titles. *Id.*
Of cornel-wood a spear upright,
Headed with piercing steel, and polished bright.
Id.

Prickly stubs, instead of trees, are found ;
Headless the most, and hideous to behold. *Id.*

Since hearty beef and mutton will not do,
Here's julep-dance, ptisan of song and show :
Give you strong sense, the liquor is too *heady* ;
You're come to farce, that's ass's milk, already.
Id.

You must disbrancn them, leaving only the summit entire : it may be necessary to *head* them too.
Mortimer.

Nor is what has been said of princes less true of all other governours, from him that *heads* an army to him that is master of a family, or of one single servant. *South.*

To give Ahab such warning as might infallibly have prevented his destruction, was esteemed by him evil ; and to push him on *headlong* into it, because he was fond of it, was accounted good. *Id.*

If in good days, like these, the *headstrong* herd
Grow madly wanton and repine, it is
Because the reins of power are held too slack
And reverend authority of late
Has worn a face of mercy more than justice.
Rowe's Jane Shore.

Men, naturally warm and *heady*, are transported with the greatest flush of good-nature. *Addison.*

This lord had *headed* his appointed bands
In firm allegiance to his king's commands.
Prior.

So when dread Jove the son of Phœbus hurled,
Scared with dark thunder, to the nether world,
The *headstrong* coursers tore the silver reins,
And the sun's beamy ruin gilds the plains. *Gay.*

Flow, Welsted ! flow, like thine inspirer beer ;
Heady, not strong ; and foaming, though not full.
Pope.

Headlong from thence the glowing fury springs,
And o'er the Theban palace spreads her wings. *Id.*

And Haidee met the morning face to face ;
Her own was freshest, though a feverish flush
Had dyed it with the *headlong* blood whose race
From heart to cheek is curbed into a blush.
Byron. Don Juan.

HEAD OF A SHIP, an ornamental figure erected on the continuation of a ship's stem, as being expressive of her name, and emblematical of war, navigation, commerce, &c. Head is also used in a more enlarged sense, to signify the whole front or forepart of a ship, including the bows on each side ; the head therefore opens the column of water through which the ship passes when advancing. Hence we say, head-sails, head-sea, head-way, &c. See NAVIGATION, and SHIP-BUILDING.

HE'ADACH, *n. s.* Head and ach. Pain in the head.

From the cruel *headach*,
Riches do not preserve. *Sidney.*

Nothing more exposes to *headachs*, colds, catarrhs, and coughs, than keeping the head warm. *Locke.*

In the *headach* he orders the opening of the vein of the forehead. *Arbuthnot.*

At some dear idle time,
Nor plagued with *headachs*, or the want of rhyme.
Pope.

HEAD'BAND, *n. s.* A fillet for the head ; a topknot ; the band at each end of a book.

The Lord will take away the bonnets, and the *headbands*. *Isaiah.*

HEAD'BOROUGH, *n. s.* Head and borough. A constable ; a subordinate constable.

Here lies John Dod, ———
Father or mother, sister or brother, he never knew none ;
A *headborough* and a constable, a man of fame,
The first of his house, and last of his name.
Camden.

This none are able to break thorough,
Until they're freed by *head* of *borough*.
Hudibras.

HEAD'DRESS, *n. s.* The covering for a woman's head : any thing prominent on the head ; resembling a head-dress.

Among birds the males very soon appear in a most beautiful *headdress*, whether it be a crest, a comb, a

tuft of feathers, or a natural little plume, erected like a kind of pinnacle on the very top of the head.
Addison.

There is not so variable a thing in nature as a lady's *headdress:* I have known it rise and fall. *Id.*

If ere with airy horns I planted heads,
Or discomposed the *headdress* of a prude.
Pope.

The HEAD DRESS, amongst the ancient Jewish, Grecian, and Roman ladies, as among ourselves, was various, according to the times, and the fluctuations of fashion. It principally consisted of their hair differently dressed. It was usually divided before, with a bodkin, into two equal parts; sometimes it was covered with a net, or put into a kind of purse, or tied behind in the form of a knot, or bound back and plaited with ribands. It was washed with great care; essence and perfumes were applied to it, and gold dust sometimes made use of as powder. Pearls and jewels made a part of their ornaments; and pendants were worn in the ears. To cover the defect of hair, perukes were made use of by the gentlemen at Rome. Otho had a covering of false hair.

HEAD'GARGLE, *n. s.* Head and gargle. A disease in cattle.

For the *headgargle* give powder of fenugreek.
Mortimer.

HEAD'LAND, *n. s.* A promontory; a cape; ground under the hedges.

Now down with the grass upon *headlands* about,
That groweth in shadow so rank and so stout.
Tusser.

An heroick play ought to be an imitation of an heroick poem, and consequently love and valour ought to be the subject of it: both these Sir William Davenant began to shadow; but it was so as discoverers draw their maps with *headlands* and promontories.
Dryden.

HEADLEY (Henry), B. A., an ingenious young poet, born at Norwich in 1765, and educated under Dr. Parr. He studied at Trinity College, Oxford, where he took his degree. He published a volume of poems; several pieces in the Olla Podrida; and a curious work entitled Select Beauties of Ancient English Poetry, with remarks; in 2 vols. 8vo. He died at Norwich in 1788, aged twenty-three.

HEAD-MOULD-SHOT, in medicine, is a disease wherein the sutures are so closely locked together, as to compress the internal parts, the meninges, or even the brain. It is supposed to admit of no cure from medicine, unless room could be given by manual operation or a divulsion of the sutures. It is the opposite of the horse-shoe head.

HEAD'PIECE, *n. s.* Head and piece. Armour for the head; helmet; understanding; force of mind.

'Tis done by some severals
Of *headpiece* extraordinary, lower messes
Perchance are to this business purblind.
Shakspeare.

Eumenes had the best *headpiece* of all Alexander's captains. *Prideaux.*

I pulled off my *headpiece*, and humbly entreated her pardon, or knowledge why she was cruel.
Sidney.

The word is given; with eager speed they lace
The shining *headpiece*, and the shield embrace.
Dryden.

This champion will not come into the field, before his great blunderbuss can be got ready, his old rusty breastplate scoured, and his cracked *headpiece* mended. *Swift.*

A reason for this fiction of the one-eyed Cyclops, was their wearing a *headpiece*, or martial vizor, that had but one sight. *Broome.*

HEAD'QUARTERS, *n. s.* Head and quarters. The place of general rendezvous, or lodgment for soldiers. This is properly two words.

The horse made their escape to Winchester, the *headquarters.* *Clarendon*

Those spirits, posted upon the out-guards, immediately scour off to the brain, which is the *headquarters*, or office of intelligence, and there they make their report. *Collier.*

HEAD'SHIP, *n. s.* From head. Dignity; authority; chief place.

HEAD'SMAN, *n. s.* Head and man. Executioner; one that cuts off heads.

Rods broke on our associates' bleeding backs,
And *headsmen* lab'ring 'till they blunt their ax?
Dryden.

HEAD'STALL, *n. s.* Head and stall. Part of the bridle that covers the head.

His horse, with a half-checked bit, and a *headstall* of sheep's leather, which, being restrained to keep him from stumbling, hath been often burst, and now repaired with knots. *Shakspeare.*

HEAD'STONE, *n. s.* Head and stone. The first or capital stone.

The stone, which the builders refused, is become the *headstone.* *Psa.* cxviii. 24.

HEAL, *v. a.* & *v. n.*
HEAL'ER, *n. s.*
HEAL'ING, *adj.*
HEALTH, *n. s.*
HEALTH'FUL, *adj.*
HEALTH'FULLY, *adv.*
HEALTH'FULNESS, *n. s.*
HEALTHI'LY, *adv.*
HEALTH'INESS, *n. s.*
HEALTH'SOME, *adj.*
HEALTH'Y, *adj.*
HEALTH'LESS, *adj.*

Sax. pælan, from peel; Goth. *halgun*; Belg. *heelen*; Teut. *heilen.* To cure a person: to restore from hurt or sickness; the person or the means by which it is done; a cure: mild, gentle, assuasive. Health, freedom from pain or sickness as to the body; as to the mind, welfare; purity; goodness; salvation: also a wish for happiness, used in drinking: healthful, wholesome; salutary: healthless, weak; sickly; infirm; that which is not conducive to health.

Our father is in good *health*, he is yet alive.
Genesis.

My God, my God, why hast thou forsaken me, and art so far from my *health*, and from the words of my complaint? *Psalms.*

I will not be an *healer.* *Isaiah.*

Thou hast no *healing* medicines.
Jer. xxx. 13.

I will restore *health*, and *heal* thee of thy wounds.
Jer. xxx.

——— ther n'is erthe, water, fire, ne aire,
Ne creature that of hem maked is,
That may me *hele* or don comfort in this.
Chaucer. The Knightes Tale.

For now is Palamon in alle wele,
Living in blisse, in richesse, and in *hele.* *Id.*

To us surgiens apperteineth, that we do to every wight the best that we can; wher as we ben witholden, and to our patient that we do no damage, wherfore it happeth many a time and ofte, that whan twey men han, everich, wounded other o same surgien *heleth* hem both. *Chaucer. Tale of Melibeus.*

Shall I not then be stifled in the vault,
To whose foul mouth no *healthsome* air breathes in,
And there be strangled ere my Romeo comes?
Shakspeare.

May be he is not well;
Infirmity doth still neglect all office,
Whereto our *health* is bound. *Id.*

Those wounds *heal* that men do give themselves. *Id.*

Come, love and *health* to all;
I drink to the' general joy of the whole table. *Id.*

Such an exploit have I in hand,
Had you an *healthful* ear to hear it. *Id.*

Many good and *healthful* airs do appear by habitation and proofs, that differ not in smell from other airs. *Bacon.*

The best preservative to keep the mind in *health*, is the faithful admonition of a friend. *Id.*

He asked leave to begin two *healths*: the first was to the king's mistress, and the second to his wife. *Howel.*

Nothing in Nature's sober found
But an eternal *health* goes round. *Cowley.*

He that spends his time in sports, is like him whose garment is all made of fringes, and his meat nothing but sauces; they are *healthless*, chargeable, and useless. *Taylor.*

While they pervert pure nature's *healthful* rules
To loathsome sickness; worthily since they
God's image did not reverence in themselves. *Milton.*

Our *healthful* food the stomach labours thus,
At first embracing what it strait doth crush. *Dryden.*

For peace at home, and for the public wealth,
I mean to crown a bowl to Cæsar's *health*. *Id.*

Gardening or husbandry, and working in wood, are fit and *healthy* recreations for a man of study or business. *Locke.*

Adam knew no disease, so long as temperance from the forbidden fruit secured him: Nature was his physician, and innocence and abstinence would have kept him *healthful* to immortality. *South.*

The husbandman returns from the field, and from manuring his ground, strong and *healthy*, because innocent and laborious. *Id.*

Who would not believe that our Saviour *healed* the sick, and raised the dead, when it was published by those who themselves often did the same miracles? *Addison.*

To the winds the inhabitants of Geneva ascribe the *healthfulness* of their air; for as the Alps surround them on all sides, there would be a constant stagnation of vapours, did not the north wind put them in motion. *Id. on Italy.*

Health is the faculty of performing all actions proper to a human body, in the most perfect manner. *Quincy.*

Air and exercise contribute to make the animal *healthy*. *Arbuthnot.*

After separation of the eschar, I deterged and *healed*. *Wiseman.*

A fontanel had been made in the same leg, which he forced to *heal* up, by reason of the pain. *Id.*

Temperance, industry, and a publick spirit, running through the whole body of the people in Holland, hath preserved an infant commonwealth, of a sickly constitution, through so many dangers, as a much more *healthy* one could never have struggled against without those advantages. *Swift.*

Physicians, by just observations, grow up to an honourable degree of skill in the art of *healing*. *Watts.*

Here the great masters of the *healing* art,
These mighty mock-defrauders of the tomb,
Spite of their juleps and catholicons,
Resign to fate! *Blair's Grave.*

From labour *health*, from *health* contentment springs,
Contentment opes the source of every joy. *Beattie.*

And so all ye, who would be in the right
In *health* and purse, begin your day to date
From day-break. *Byron. Don Juan.*

HEALFANG, HEALSFANG, or HALSFANG, [from halp, neck, and pangen, to contain, Sax.] in the ancient English customs, signifies collistrigium, or the punishment of the pillory: Pæna scilicet qua alicui collum stringatur. Healfang is also taken for a pecuniary punishment or mulct, to commute for standing in the pillory; and is to be paid either to the king or the chief lord. Qui falsum testimonium dedit, reddat regi vel terræ domino healfang.

HEALTH. See MEDICINE.

HEALTH OF MARINERS, METHODS OF PRESERVING THE. See SEAMEN.

HEAM, in beasts, the same as the afterbirth in women. Thyme, penny-royal, winter savory, and common hore-hound, boiled in white wine, and given to a mare, are esteemed good to expel the heam. Dittany, applied in a pessary, expels the heam, as well as the dead foal; so also do fennel, hops, savin, angelica, &c.

HEAP, *n. s.* & *v. a.* } Sax. peap; Dut. and
HEAP'ER, *n. s.* } Scot. *hoop*; Swed. *hop*.
HEAP'Y, *adj.* } The primary idea is accumulation; a crowd; a throng; a cluster: to throw together; to lay up or hoard; to add: any thing lying on heaps.

Though the wicked *heap* up silver as the dust, and raiment as the clay; the just shall put it on, and the innocent shall divide the silver. *Job* xxvii. 16.

Heap on wood, kindle the fire. *Ezek.* xxiv. 10.

The dead were fallen down by *heaps*, one upon another. *Wisd.* xviii. 23.

And if that Love aught let his bridel go,
Al that now loveth, asonder should lepe—
And lost were al that Love halt now to *hepe*.
Chaucer. Troilus and Cresside.

For those of old,
And the late dignities *heaped* up to them,
We rest your hermits. *Shakspeare.*

The way to lay the city flat,
And bury all which yet distinctly ranges,
In *heaps* and piles of ruin. *Id.*

A cruel tyranny; a *heap* of vassals and slaves, no freemen, no inheritance, no stirp or ancient families. *Bacon.*

How great the credit was, wherein that oracle was preserved, may be gathered from the vast riches which were there *heaped* up from the offerings of all the Grecian nations. *Temple.*

They who will make profession of painting, must *heap* up treasures out of their reading, and there will find many wonderful means of raising themselves above others. *Dryden.*

An universal cry resounds aloud;
The sailors run in *heaps*, a helpless crowd. *Id.*

Huge *heaps* of slain around the body rise. *Id.*

At her feet were laid
The sceptres of the earth, exposed on *heaps*,
To chuse where she would reign. *Id.*

Venice in its first beginnings had only a few *heaps* of earth for its dominions. *Addison on Italy.*

To exult
Even o'er an enemy oppressed, and *heap*
Affliction on the afflicted, is the mark
And the mean triumph of a dastard soul.
Id. Cato.

Where a dim gleam the paly lanthorn throws
O'er the mid pavement, *heapy* rubbish grows. *Gay.*

Scarce his head
Raised o'er the *heapy* wreath, the branching elk
Lies slumbering sullen in the white abyss.
Thomson.

HEAR, *v. a.* & *v. n.* HEAR'ER, *n. s.* HEAR'ING, *n. s.* HEARK'EN, *v. n.* HEARK'ENER, *n. s.* HEAR'SAY, *n. s.* Sax. þyrnan, þeapcman; Goth. *heyra;* Teut. *hoeran;* Belg. *hooran.* The difference between hear and hearken: to hear is simply the act of the ear; to hearken, an act of the ear and mind, implying effort voluntarily made. Hear has the following meanings:—To enjoy the sense by which sounds are distinguished; to listen; to be told; to perceive; give audience; to obey; to attend favorably; to try; to attend; to acknowledge a title: hearer, one who attends discourses orally delivered; one of an audience: hearken, to listen eagerly or curiously; to attend: hearsay, rumor; report.

Hearken unto me, thou son of Zippor. *Numbers.*

Hear the causes and judge righteously.
Deut. i. 16.

In our *hearing* the king charged thee, beware that none touch Absalom. 2 *Sam.* xviii. 12.

A scorner *heareth* not rebuke. *Proverbs.*

Hear the word at my mouth, and give them warning from me. *Ezek.* iii. 17.

I was bowed down at the *hearing* of it; I was dismayed at the seeing of it. *Hosea.*

They think they shall be *heard* for their much speaking. *Matthew.*

I have *heard* by many of this man. *Acts*, ix. 13.

Agrippa and Bernice entered into the place of *hearing*. *Acts.*

He sent for Paul, and *heard* him concerning the faith in Christ. *Id.* xxiv. 24.

To-day if ye will *hear* his voice, harden not your hearts. *Hebrews.*

But only for the fece thus she cried,
And wept, that it wos pitee for to *here*.
Chaucer. The Knightes Tale.

Ful swetely *herde* he confession,
And plesant was his absolution.
Id. Prologue to the Canterbury Tales.

Now let us ride and *herkeneth* what I say,
And with that word we riden forth our way;
And he began with a right mery chere,
His tale anon, and saide as ye shul *here*.
Id.

While that this king sit thus in his nobley,
Herking his ministralles hir thinges pley,
Beforne him at his bord delisiously
In at the halle dore, al sodenly,
Ther came a knight upon a stede of bros.
Id. The Squieres Tale.

St. John and St. Matthew, which have recorded these sermons, *heard* them; and being *hearers*, did think themselves as well respected as the Pharisees. *Hooker.*

Words, be they never so few, are too many, when they benefit not the *hearer*. *Id*

If we profess, as Peter did, that we love the Lord, and profess it in the *hearing* of men; charity is prone to *hear* all things, and therefore charitable men are likely to think we do so. *Id.*

He affirmed, by *hearsay*, that some giants saved themselves upon the mountain Baris in Armenia.
Raleigh's History.

The *hearers* will shed tears,
And say, Alas! it was a piteous deed!
Shakspeare.

Tell thou the lamentable fall of me,
And send the *hearers* weeping to their beds. *Id.*

The youngest daughter, whom you *hearken* for,
Her father keeps from excess of suitors. *Id.*

He *hearkens* after prophecies and dreams. *Id.*

They do me too much injury,
That ever said I *hearken* for your death.
If it were so, I might have let alone
The' insulting hand of Douglas over you. *Id.*

The French ambassador upon that instant
Craved audience; and the hour, I think, is come
To give him a *hearing*. *Id.*

You have been talked of since your travels much,
And that in Hamlet's *hearing*, for a quality
Wherein they say you shine. *Id. Hamlet.*

Bees are called with sound upon brass, and therefore they have *hearing*. *Bacon's Nat. Hist.*

Plays in themselves have neither hopes nor fears;
Their fate is only in their *hearers'* ears. *Ben Jonson.*

Since 'tis your command, what you so well
Are pleased to *hear*, I cannot grieve to tell.
Denham.

Or *hearest* thou rather pure ethereal stream,
Whose fountain who shall tell? *Milton.*

So spake our mother Eve, and Adam *heard*,
Well pleased, but answered not. *Id.*

Great laughter was in heaven,
And looking down, to see the hubbub strange,
And *hear* the din. *Milton.*

On earth
Who against faith or conscience can be *heard*
Infallible? *Id.*

And so was she dulled withal, that we could come so near as to *hear* her speeches, and yet she not perceive the *hearers* of her lamentation. *Sidney.*

For prey these shepherds two he took,
Whose metal stiff he knew he could not bend
With *hearsay* pictures, or a window look. *Id.*

The readers are the jury to decide according the merits of the cause, or to bring it to another *hearing* before some other court. *Dryden.*

The gaping three-mouthed dog forgets to snarl;
The furies *hearken*, and their snakes uncurl. *Id.*

Louder and yet more loud, I hear the alarms
Of human cries:
I mount the terrass, thence the town survey,
And *hearken* what the fruitful sounds convey. *Id.*

And sure he *heard* me, but he would not *hear*.
Id.

The fox had the good luck to be within *hearing*.
L'Estrange.

This, of eldest parents, leaves us more in the dark, who, by divine institution, has a right to civil power, than those who never *heard* any thing at all of heir or descent. *Locke.*

Those who put passion in the place of reason, neither use their own, nor *hearken* to other people's reason, any farther than it suits their humour. *Id.*

I must beg the forbearance of censure, till I have been *heard* out in the sequel of this discourse. *Id.*

Hear of such a crime
As tragic poets, since the birth of time,
Ne'er feigned. *Tate's Juvenal.*

Those of different principles may be betrayed to give you a fair *hearing*, and to know what you have to say for yourself. *Addison.*

All the little scramblers after fame fall upon him, publish every blot in his life, and depend upon *hearsay* to defame him. *Id.*

Hearest thou submissive, but a lowly birth?
Prior.

Sound is nothing but a certain modulation of the external air, which, being gathered by the external air, beats, as is supposed, upon the membrana tympani, which moves the four little bones in the tympanum: in like manner, as it is beat by the external air, these little bones move the internal air which is in the tympanum and vestibulum; which internal air makes an impression upon the auditory nerve in the labyrinth and cochlea, according as it is moved by the little bones in the tympanum: so that, according to the various reflections of the external air, the internal air makes various impressions upon the auditory nerve, the immediate organ of *hearing*; and these different impressions represent different sounds. *Quincy.*

He who makes much necessary, will want much; and, wearied with the difficulty of the attainment, will *hearken* after any expedient that offers to shorten his way to it. *Rogers.*

Vice *heard* his fame, she read his bill,
Convinced of his inferior skill
She sought his booth, and from the crowd
Defyed the man of art aloud. *Gay's Fables.*

The goddess *heard*. *Pope.*

There's not a blessing individuals find,
But some way leans and *hearkens* to the kind. *Id.*

Her *hearers* had no share
In all she spoke, except to stare. *Swift.*

Hear it not ye stars,
And thou pale moon! turn paler at the sound.
Young.

All Nature fades extinct; and she alone
Heard, felt, and seen possesses every thought
Fills every sense, and pants in every vein.
Thomson.

And her voice was the warble of a bird,
So soft, so sweet, so delicately clear,
That finer, simpler music ne'er was *heard*:
The sort of sound we echo with a tear,
Without knowing why—an overpowering tone
Whence melody descends as from a throne.
Byron.

Heard signifies a keeper, and is sometimes initial; as heard-heart a glorious keeper: sometimes final, as cyneheard, a royal keeper.—Gibson's Camden. It is now written herd; as cow-herd, a cow-keeper; Saxon hyrd.

Heard (Sir Isaac), the late venerable garter principal king at arms, was born at Ottery St. Mary in Devonshire, December 10th, 1730. He entered early in life into the naval service, and had a narrow escape for his life on the coast of Africa, by falling overboard with the main-mast of the ship; but was saved by the exertions of a companion, Kingsmill, who afterwards became an admiral. In 1759, being only a midshipman, he was appointed by the favor of the earl of Effingham the acting earl marshal, blue mantle pursuivant of arms. In 1761 he was made Lancaster herald; in 1774 Norroy; in 1780 Clarencieux, by patent: and in 1784 garter principal king at arms. At the first chapter held in 1786 he was knighted. At the age of eighty-four Sir Isaac went to Brussels, where he invested the king of the Netherlands with the order of the garter; and thence to Vienna, to perform the same ceremony to the emperor of Austria. The last public service in which he engaged was that of attending the funeral of his late majesty, with whom he had been a great favorite. Sir Isaac died at the heralds' college, April 29th 1822, having seen, with the infant of the princess Charlotte, six generations of the Brunswick family. He was buried in St. George's Chapel at Windsor.

HEARNE (Thomas), a learned antiquary, and classical editor, was born at White Waltham Berkshire, where his father was parish clerk and school-master about 1678. After acquiring a knowledge of Latin and Greek, he was taken into the house of a Mr. Cherry, of Shottesbrooke, with whom the celebrated Henry Dodwell then resided, to whose instructions Hearne appears to have been indebted. He was sent in 1696 to Edmund Hall, Oxford, where he was employed by Dr. Mill and Dr. Grabe in the collation of MSS., and obtained his degrees in arts: in 1701 he was made assistant to Dr. Hudson, the keeper of the Bodleian library, when he greatly improved Hyde's catalogue of that literary collection. In 1712 he was appointed second librarian; and in 1715 archity-pographer and esquire beadle of the civil law; but he soon resigned these offices, through scrupling to take the oath of allegiance to George I. He however continued to reside at Edmund Hall, where he died June 10th 1735. His labors were almost exclusively those of an editor, in which character he merits the praise of accuracy and fidelity. He published editions of Livy, Justin, and Eutropius; but his publications chiefly consist of the monastic and other ancient chronicles of our history. Among the rarest is the Acts of the Apostles in Greek and Latin, from a MS. in the Bodleian library.

Hearne (Thomas), was born in 1744, at Binkworth, in Wiltshire, and learned the art of engraving from the ingenious Woollet; but did not afterwards follow that profession; being engaged by Sir Ralph Payne, governor of the Leeward Islands, to go out with him as a draughtsman. On his return to England he applied to the study of Gothic architecture and landscape; and, in conjunction with Mr. Byrne, undertook the Antiquities of Great Britain, for which he made the whole of the drawings. He seldom attempted bold scenery, but for truth and chasteness of coloring has seldom been surpassed. He was a member of the Society of Antiquaries: and the leader of all that is excellent in modern landscape painting in water colors. He died April 13th, 1818.

HEARSE, or Herse, *n. s.* Barb. Lat. *hersia*; or Goth. *hirda*, to environ, or enclose. A carriage in which the dead are conveyed to the grave; a temporary monument set over a grave.

To add to your laments
Wherewith you now bedew king Henry's *hearse*,
I must inform you of a dismal sight. *Shakspeare.*

Underneath this marble *herse*
Lies the subject of all verse. *Ben Jonson.*

And as they Nature's cradle decked,
Will in green age her *hearse* expect. *Marvell.*

HEART, *n. s.* Sax. þeoꝛt; Swed. *hærd*; Teut. *herts*. The muscle which by its contraction and dilatation propels the blood through the course of circulation, and is therefore considered as the source of vital motion. It is supposed in popular language to be the seat sometimes of courage, sometimes of affection, sometimes of honesty or baseness. The chief part; the vital part; the vigorous or efficacious part; the inner part of any thing. Person; character; used with respect to courage or kindness. Seat of love; affection; inclination; memory: though South seems to distinguish. Good-will; ardor of zeal. To take to heart any thing is to be zealous or solicitous or ardent about it. Anxiety; concern; secret recesses of the mind; disposition. The heart is considered as the seat of tenderness: a hard heart therefore is cruelty. To find in the heart, to be not wholly averse. Secret meaning or intention; conscience; strength; vigor; efficacy; the utmost degree of feeling; life. For my heart seems sometimes to signify, if life were at stake; and sometimes for tenderness. This word is much used in composition with other words to which it gives the idea of cordiality, or extreme of feeling; as in the following examples.

Joab perceived that the king's *heart* was towards Absalom. 2 *Sam.*

Michal saw king David leaping and dancing before the Lord, and she despised him in her *heart*. *Id.* vi. 16.

——— What pretty man is this
That rometh here? now, truly, drinke ne mete
Nede I not have, mine *herte* for joye doth bete
Him to beholde, so is he godely freshe;
It seemeth, for love, his *herte* is tendre and neshe.
Chaucer. The Court of Love.

Wide was the wound; and a large lukewarm flood,
Red as the rose, thence gushed grievously,
That when the painim spyed the streaming blood,
Gave him great *heart* and hope of victory.
Spenser. Faerie Queene.

There did other like unhappy accidents happen out of England, which gave *heart* and good opportunity to them to regain their old possessions. *Spenser.*

Every man's *heart* and conscience doth in good or evil, even secretly committed, and known to none but itself, either like or disallow itself. *Hooker.*

If he take not their causes to *heart*, how should there be but in them frozen coldness, when his affections seem benumbed, from whom theirs should take fire? *Id.*

This gay charm,
Like a right gipsy, hath, at fast and loose,
Beguiled me to the very *heart* of loss.
Shakspeare.

Set your *heart* at rest;
The fairy land buys not the child of me. *Id.*
Thou wouldest have left thy dearest *heart* blood there,
Rather than made that savage duke thine heir,
And disinherited thine only son. *Id.*

I thank you for my venison, master Shallow.
—Master Page, much good do it your good *heart*. *Id.*

Snakes in my *heart* blood warmed, that sting my *heart*. *Id.*

Our battle is more full of names than yours,
Our men more perfect in the use of arms,
Our armour all as strong, our cause the best;
Then reason wills our *hearts* should be as good. *Id.*

I will on with my speech in your praise,
And then shew you the *heart* of my message. *Id.*

I bid the rascal knock upon your gate,
And could not get him *for my heart* to do it. *Id.*

I gave it to a youth,
A prating boy, that begged it as a fee:
I could not *for my heart* deny it him. *Id.*
The king's a bawcock, and a *heart* of gold.
A lad of life, an imp of fame. *Id.*
Hey, my *hearts*; cheerly my *hearts*. *Id.*
What says my *heart* of elder? Ha! is he dead? *Id.*

I've seen thee stern, and thou hast oft beheld
Heart-hardening spectacles. *Id.*

Whatsoever was attained to, concerning God and his working in nature, the same was delivered over by *heart* and tradition from wise men to a posterity equally zealous. *Raleigh.*

Try whether leaves of trees, swept together, with some chalk and dung mixed, to give them more *heart*, would not make a good compost. *Bacon.*

If he would take the business to *heart*, and deal in it effectually, it would succeed well. *Id.*

Barley being steeped in water, and turned upon a dry floor, will sprout half an inch; and if it be let alone, much more, until the *heart* be out. *Id.*

The king's forces are employed in appeasing disorders more near the *heart* of the kingdom. *Hayward.*

Means how to feel, and learn each other's *heart*,
By the' abbot's skill of Westminster is found. *Daniel.*

The lady marchioness of Hertford engaged her husband to take this business to *heart*. *Clarendon.*

Amongst those who took it most to *heart*, Sir John Stawell was the chief. *Id.*

Having left that city well provided, and in good *heart*, his majesty removed with his little army to Bewdley. *Id.*

Eve, recovering *heart*, replyed: *Milton.*
Nor set thy *heart*,
Thus over-fond, on that which is not thine. *Id.*

Profoundly skilled in the black art,
As English Merlin *for his heart*. *Hudibras.*

He with providence and courage so passed over all, that the mother took such spiteful grief at it, that her *heart* brake withal, and she died. *Sidney.*

For my breaking the laws of friendship with you, I could *find in my heart* to ask you pardon for it, but that your now handling of me gives me reason to confirm my former dealing. *Id.*

If it please you to make his fortune known, I will after take *heart* again to go on with his falsehood. *Id.*

Doing all things with so pretty a grace, that it seemed ignorance could not make him do amiss, because he had a *heart* to do well. *Id.*

Every moment
I'm from thy sight, the *heart* within my bosom
Moans like a tender infant in its cradle,
Whose nurse had left it.
Otway. Venice Preserved.

Generally the inside or *heart* of trees is harder than the outward parts. *Boyle.*

A friend makes me a feast, and sets all before me, but I set my *heart* upon one dish alone, and if that happen to be thrown down, I scorn all the rest. *Temple.*

The expelled nations take *heart*, and when they fly from one country invade another. *Id.*

Then mixing powerful herbs with magick art,
She changed his form who could not change his *heart*. *Dryden.*

What did I not, her stubborn *heart* to gain?
But all my vows were answered with disdain. *Id.*

That the spent earth may gather *heart* again,
And, bettered by cessation, bear the grain. *Id.*

Here in the *heart* of all the town I'll stay,
And timely succour where it wants convey. *Id.*

We all set our *hearts* at rest, since whatever comes from above is for the best. *L'Estrange.*

'Tis well to be tender; but to set the *heart* too much upon any thing is what we cannot justify. *Id.*

Finding that it did them no hurt, they took *heart* upon't, went up to't, and viewed it. *Id.*

Would you have him open his *heart* to you, and ask your advice, you must be in to do so with him first. *Locke.*

We call the committing of a thing to memory the getting it by *heart*; for it is the memory that must transmit it to the *heart*; and it is in vain to expect that the *heart* should keep its hold of any truth, when the memory has let it go. *South.*

Every prudent and honest man would join himself to that side which had the good of their country most at *heart*. *Addison.*

Such iron *hearts* we are, and such
The base barbarity of human kind. *Rowe.*

Learned men have been now a long time searching after the happy country from which our first parents were exiled: if they can find it, with all my *heart*. *Woodward.*

Ah, what avails it me the flocks to keep,
Who lost my *heart* while I preserved my sheep! *Pope.*

Shall I in London act this idle part?
Composing songs for fools to get by *heart*. *Id.*

Men, some to pleasure, some to business take;
But every woman is, at *heart*, a rake. *Id.*

Prest with *heart*-corroding grief and years,
To the gay court a rural shed prefers. *Id.*

I would not be sorry to find the Presbyterians mistaken in this point, which they have most at *heart*. *Swift.*

What I have most at *heart* is, that some method should be thought on for ascertaining and fixing our language. *Id.*

Care must be taken not to plow ground out of *heart*, because if 'tis in *heart*, it may be improved by marl again. *Mortimer.*

A fonder parent Nature never knew,
And as his age increased his fondness grew.
A parent's love ne'er better was bestowed;
The pious daughter in her *heart* o'erflowed.
Young. Force of Religion.

Not kings alone,
Each villager has his ambition too;
No sultan prouder than his fettered slave;
Slaves build their little Babylons of straw,
Echo the proud Assyrian in their *hearts*,
And cry—'Behold the wonders of my might.'
Id. Night Thoughts.

But these thou must renounce, if lust of wealth
E'er win its way to thy corrupted *heart*;
For ah! it poisons like a scorpion's dart. *Beattie.*

O cruel! will no pang of pity pierce
That *heart* by lust of lucre seared to stone? *Id.*

The *heart* is like the sky, a part of heaven,
But changes night and day too, like the sky;
Now o'er it clouds and thunder must be driven,
And darkness and destruction as on high:
But when it hath been scorched, and pierced, and riven,
Its storms expire in water-drops; the eye
Pours forth at last the *heart's-blood* turned to tears,
Which make the English climate of our years.
Byron. Don Juan.

HEART. See ANATOMY, Index. Physiologists and anatomists have from time to time attempted to make estimates of the force of the blood in the heart and arteries; but have differed as widely from each other, as they have from the truth, for want of sufficient data. This set the ingenious Dr. Hales upon making proper experiments, to ascertain the force of the blood in the veins and arteries of several animals. If, according to Dr. Keil's estimate, the left ventricle of a man's heart throws out in each systole an ounce or 1·638 cubic inches of blood, and the area of the orifice of the aorta be =0·4187, then, dividing the former by this, the quotient 3·9 is the length of the cylinder of blood which is formed in passing through the aorta in each systole of the ventricle; and, in the seventy-five pulses of a minute, a cylinder of 292·5 inches in length will pass: this is at the rate of 1462 feet in an hour. But, the systole of the heart being performed in one-third of this time, the velocity of the blood in that instant will be thrice as much, viz. at the rate of 4386 feet in an hour, or seventy-three feet in a minute. And if the ventricle throws out one ounce in a pulse, then, in the seventy-five pulses of a minute, the quantity of blood will be equal to 4·4 lbs. 11 oz.; and in thirty-four minutes a quantity equal to a middle-sized man, viz. 158 lbs. will pass through the heart. But if, with Dr. Harvey and Dr. Lower, we suppose 2 oz. of blood, that is 3·276 cubic inches, to be thrown out at each systole of the ventricle, then the velocity of the blood in entering the orifice of the aorta will be double the former, viz. at the rate of 146 feet in a minute, and a quantity of blood equal to the weight of a man's body will pass in half the time, viz. seventeen minutes. If we suppose, what is probable, that the blood will rise $7+\frac{1}{2}$ feet high in a tube fixed to the carotid artery of a man, and that the inward area of the left ventricle of his heart is equal to fifteen square inches, these, multiplied into $7\times\frac{1}{2}$ feet, give 1350 cubic inches of blood, which presses on that ventricle, when it first begins to contract a weight equal to 15·5 lbs. What Dr. Hales thus calculated from supposition, with regard to mankind, he actually experimented upon horses, dogs, fallow-does, &c., by fixing tubes in orifices opened in their veins and arteries; by observing the several heights to which the blood rose in these tubes as they lay on the ground; and by measuring the capacities of the ventricles of the heart and orifices of the arteries. And, that the reader may the more readily compare the said estimates together, he has given a table of them, ranged in the following order.

The several animals.	Weight of each.	Height of the blood in the tube from the jugular vein.	Height of the blood in tubes fixed to arteries.	Capacity of the left ventricle of the heart.	Area of the orifice of the aorta.	Velocity of the blood in the aorta.	Quantities of blood equal to the weight of the animal, in what time.	How much in a minute.	Weight of the blood sustained in the left ventricle contracting.	No. of pulses in a minute.	Area of transverse section of descending aorta.	Area of the transverse section of ascending aorta.
	Pounds.	Inches.	Feet. Inches.	Cubic Inches.	Square inches.	Feet and inches in a minute.	Minutes.	Pounds.	Pounds.		Square inches.	Square inches.
Man	160	On straining.	7 6	1·659	0·4187	56·65	34·18	8·32	51·5	75		
				4·318		113·3	17·5	9·36				
Horse 1st			8 3									
—— 2d			9 8									
—— 3d	825	12 52	9 6	10	1·036	86·85	60	13·75	113·22	86	0·677	0·369
Ox	1600			12·5	1·539	76·95	88	18·14		38	0·912	0·84
												right. left.
Sheep	91	5½ 9	6 5½	1 85	0·172	174·5	20	4·593	36·56	65	0·094	0·07 0·012
Doe			4 2	9	0·476						0·383	0·246
												right. left.
Dog 1st	52	0 6	6 8	1·172	0·196	144·7	11·9	4·34	33·61	97	0·106	0·041 0·034
—— 2d	24	5 7	2 8	1	0·185	130·9	6·48	3·7			0·102	0·031 0·009
—— 3d	18	5	4 8	0·633	0·118	130	7·8	2·3	19·8		0·07	0·022 0·009
—— 4th	12½	4 0	3 3	0 5	0·101	120	6·7	1·85	11·1		0·061	0·015 0·007

HEART'-ACH, *n. s.*
HEART'-BREAK, *n. s.*
HEART'-BREAKER, *n. s.*
HEART'-BREAKING, *adj., n. s.*
HEART'-BURNED, *adj.*
HEART'-BURNING, *n. s.*
HEART'-RENDING, *adj.*
HEART'-ROBBING, *adj.*
HEART'-SICK, *adj.*
HEART'-SORE, *adj.*
HEART'-STRUCK, *adj.*
HEART'-SWELLING, *adj.*
HEART'-WOUNDED, *adj.*
HEART'-WOUNDING, *adj.*
HEART'-DEAR, *adj.*
HEART'-EASE, *n. s.*
HEART'-EASING, *adj.*
HEART'-FELT, *adj.*
HEART'-QUELLING, *adj.*
HEART'-STRING, *n. s.*
HEART'-WHOLE, *adj.*
HEART'S'-EASE, *n. s.*
HEART'-PEASE, *n. s.*

Compounds of heart with other words, for the most part expressing their own peculiar meanings, and implying various degrees of suffering or pleasure, sorrow or discontent. Heartburn, pain at the stomach arising from acidity, and figuratively secret discontent or enmity: heart-dear, sincerely beloved; heart-quelling, conquering the affection; heart-robbing, ecstatic to a degree depriving of thought; heart-string, ligaments or nerves supposed to sustain the heart, properly the vessels by which it is suspended; heart-whole, affections yet unfixed, or vitals yet unimpaired; the other words are too obvious to require specific illustration. Heart-breaker is an obsolete word or cant term for a woman's curls, supposed to break the heart of all her lovers; heart's-ease, the name of a flower; heart-pease, a plant.

Those piteous plaints and sorrowful sad time,
Which late you poured forth, as ye did sit
Beside the silver springs of Helicone,
Making your musick of *heart-breaking* mone.
Spenser.

Wherever he that godly knight may find,
His only *heart-sore* and his only foe.
Id. Faerie Queene.

Drawn into arms, and proof of mortal fight,
Through proud ambition and *heart-swelling* hate.
Spenser.

Sweet as thy virtue, as thyself sweet art;
For when on me thou shinedst, late in sadness,
A melting pleasance ran through every part,
And me revived with *heart-robbing* gladness. *Id.*

And let fair Venus, that is queen of love,
With her *heart-quelling* son, upon you smile. *Id.*

He was by Jove deprived
Of life himself, and *heart-strings* of an eagle rived.
Id.

Better a little chiding than a great deal of *heart-break.* *Shakspeare.*

Who is with him?
—None but the fool who labours to outjest
His *heart-struck* injuries. *Id.*

What infinite *heart-ease* must kings neglect,
That private men enjoy! *Id.*

Good Romeo, hide thyself.
—Not I, unless the breach of *heart-sick* groans
Mist-like, infold me from the search of eyes.
Id.

To die—to sleep—
No more; and, by a sleep, to say the end,
The *heart-ach*, and the thousand natural shocks
That flesh is heir to. *Id. Hamlet.*

How tartly that gentleman looks! I never can see him but I am *heart-burned* an hour after.
Shakspeare.

How, out of tune on the strings?
—Not so; but yet so false, that he grieves my very *heart-strings*. *Id.*

Cupid hath clapt him o' th' shoulder, but I'll warrant him *heart-whole*. *Id.*

The time was, father, that you broke your word,
When you were more endeared to it than now;
When your own Percy, when my *heart-dear* Harry,
Threw many a northward look to see his father
Bring up his powers; but he did long in vain!
Id.

What greater *heart-breaking* and confusion can there be to one, than to have all his secret faults laid open, and the sentence of condemnation passed upon him? *Hakewill.*

If we be *heart-sick*, or afflicted with an uncertain soul, then we are true desirers of relief and mercy. *Taylor.*

If thou thinkest thou shalt perish, I cannot blame thee to be sad 'till thy *heart-strings* crack. *Id.*

That grates my *heart-strings*; what should discontent him?
Except he thinks I live too long. *Denham.*

He added not; for Adam, at the news
Heart-struck, with chilling gripe of sorrow stood,
That all his senses bound! *Milton.*

But come, thou goddess, fair and free,
In heav'n ycleped Euphrosyne,
And by men *heart-easing* mirth. *Id.*

Like Samson's *heart-breakers*, it grew
In time to make a nation rue. *Hudibras.*

Heart rending news, and dreadful to those few
Who her resemble, and her steps pursue;
That death should licence have to rage among
The fair, the wise, the virtuous, and the young!
Waller.

You have not seen me yet, and therefore I am confident you are *heart-whole*. *Dryden.*

Heart's-ease is a sort of violet that blows all Summer, and often in Winter: it sows itself. *Mortimer.*

Fine clean chalk is one of the most noble absorbents, and powerfully corrects and subdues the acrid humours in the stomach: this property renders it very serviceable in the cardialgia, or *heart-burning*. *Woodward.*

There's the fatal wound
That tears my *heart-strings*; but he shall be found,
My arms shall hold him. *Granville.*

What nothing earthly gives, or can destroy,
The soul's calm sun-shine, and the *heart-felt* joy,
Is virtue's prize. *Pope.*

Mean time the queen, without reflection due,
Heart-wounded, to the bed of state withdrew. *Id.*

In great changes, when right of inheritance is broken, there will remain much *heart-burning* and discontent among the meaner people. *Swift.*

HEART-BURN, in medicine, is more usually called cardialgia. In surfeits, or upon swallowing victuals without due mastication, or when by any accident the saliva is vitiated, too scanty, or not intimately mixed with the food, the fermentation becomes tumultuous, the stomach swells with air, and this extraordinary commotion, being attended with an unusual heat, brings on the disorder called the heart-burn: which is relieved by whatever promotes a greater secretion of saliva, or helps to mix it with our aliment. The testaceous powders, as oyster-shells, chalk, &c. are the usual remedies for the heart-burn.

HEART'ED, *adj.*
HEART'EN, *v. a.*
HEARTI'LY, *adv.*
HEARTI'NESS, *n. s.*
HEART'LESS, *adj.*
HEART'LESSLY, *adv.*
HEART'LESSNESS, *n. s.*
HEART'Y, *adj.*
HEARTY-HALE, *adj.*

Derived from heart. Hearted, an epithet which derives its force from the words with which it is joined, implying intensity of feeling, as lion-hearted; hard-hearted: hearten, to encourage, animate, or renovate: heartily, cordially; fully; sincerely; eagerly: heartless implies defect in these qualities, as spiritless; cowardly; without feeling; dejected: hearty, undissembled; zealous; healthy; strong; vigorous; durable. Hearty-hale, good for the heart; an old word.

'Nay, Sire!' quod he, 'but swiche thing as I can
With *hertly* wille, for I wol not rebelle
Agein your lust, a tale wol I telle.
Have me excused if I speke amis:
My wille is good; and lo, my tale is this.'
Chaucer. The Squieres Tale.

'Avoy,' quod she; 'fy on you *herteles!*
Alas,' quod she, 'for, by that God above,
Now han ye lost myn *herte* and all my love;
I cannot love a coward, by my faith.'
Id. The Nonnes Preestes Tale.

Vein-healing verven, and head-purging dill,
Sound savory, and basil *hearty hale*. *Spenser.*

I joyed oft to chase the trembling pricket,
Or hunt the *heartless* hare 'till she were tame. *Id.*

Then hopeless, *heartless*, 'gan the cunning thief,
Persuade us die, to stint all further strife.
Faerie Queene.

My royal father, cheer these noble lords,
And *hearten* those that fight in your defence:
Unsheath your sword, good father; cry, St. George.
Shakspeare.

What, art thou drawn among these *heartless* hinds?
Turn thee, Benvolio; look upon thy death. *Id.*

I bear no malice for my death;
But those that sought it, I could wish more Christians;
Be what they will, I *heartily* forgive them. *Id.*

This entertainment may a free face put on: derive a liberty from *heartiness*, and well become the agent. *Id.*

This rare man, Tydides, would prepare;
That he might conquer, *heartened* him. *Chapman.*

Oak, and the like true *hearty* timber, being strong in all positions, may be better trusted in cross and transverse works. *Wotton.*

The ground one year at rest; forget not then
With richest dung to *hearten* it again. *May's Virgil.*

Thousands besides stood mute and *heartless* there,
Men valiant all; nor was I used to fear. *Cowley.*

The anger of an enemy represents our faults, or admonishes us of our duty, with more *heartiness* than the kindness of a friend. *Taylor.*

They did not bring that *hearty* inclination to peace, which they hoped they would have done. *Clarendon.*

Palladius blaming those that were slow, *heartening* them that were forward, but especially with his own example leading them, made an impression into the squadron. *Sidney.*

The peasants were accustomed to payments, and grew *heartless* as they grew poor. *Temple.*

Heartless they fought, and quitted soon their ground,
While ours with easy victory were crowned.
Dryden.

But the kind hosts their entertainment grace
With *hearty* welcome and an open face;

In all they did, you might discern with ease
A willing mind, and a desire to please. *Id.*

Thus *heartened* well, and fleshed upon his prey,
The youth may prove a man another day. *Id.*

As for my eating *heartily* of the food, know that anxiety has hindered my eating 'till this moment. *Addison.*

If to be sad is to be wise,
I do most *heartily* despise
Whatever Socrates has said,
Or Tully writ, or Wanley read. *Prior.*

He ne'er like bullies coward *hearted*,
Attacks in publick to be parted. *Gay.*

Where his judgment led him to oppose men on a publick account, he would do it vigorously and *heartily*; yet the opposition ended there. *Atterbury.*

Whose laughs are *hearty*, though his jests are coarse,
And loves you best of all things but his horse. *Pope.*

Every man may pretend to any employment, provided he has been loud and frequent in declaring himself *hearty* for the government. *Swift.*

HEARTH, *n. s.* Sax. þeorð; Swed. *hærd*; Teut. *herd*. The pavement of a room on which a fire is made; the ground under the chimney.

Hooped out of Rome: now this extremity
Hath brought me to this *hearth*. *Shakspeare.*

Cricket, to Windsor chimneys shalt thou leap,
Where thou findest fires unraked, and *hearths* unswept,
There pinch the maids as blue as bilberry. *Id.*

Good luck befriend thee, son; for at thy birth
The fairy ladies danced upon the *hearth*. *Milton.*

The vanquished fires withdraw from every place;
Or, full with feeding, sink into a sleep:
Each household genius shews again its face,
And from the *hearths* the little lares creep. *Dryden.*

HEAT, *n. s.* & *v. a.* } Sax. þeat, þæt; Dan.
HEAT'ER, *n. s.* } *heete*. The sensation caused by the approach or touch of fire; the cause of this sensation; hot weather; state of any body under the action of fire; a violent action unintermitted; a course at a race; pimples in the face; agitation; vehemence of action; passion; faction; ardor: to warm, either literally or figuratively; to agitate the blood and spirits with action: heater, an iron made hot, and put into a box-iron, to smooth linen.

He commanded that they should *heat* the furnace one seven times more than it was wont to be *heated*. *Dan.* iii. 19.

Nowe hote as fire, nowe cold as ashes ded;
Nowe hote for colde, now colde for *hete* again;
Now cold as yse; and now, as coles red,
For *hete* I brenne. And thus betwixen twaine,
I possed am and al forcaste in paine,—
So that my *hete*, full plainly as I fele,
Of grevous colde is caused every dele!
Chaucer. Complaint of the Blacke Knight.

The sword which is made fiery doth not only cut by reason of the sharpness which simply it hath, but also burns by means of that *heat* which it hath from fire. *Hooker.*

The friend hath lost his friend;
And the best quarrels, in the *heat*, are curst
By those that feel their sharpness. *Shakspeare.*

They are in a most warlike preparation, and hope to come upon them in the *heat* of their division. *Id.*

Thou art going to Lord Timon's feast.
—Ay, to see meat fill knaves, and wine *heat* fools. *Id.*

After they came down into the valley, and found the intolerable *heats* there, and knew no means of lighter apparel, they were forced to go naked. *Bacon.*

Where now he flings about his burning *heat*
As in a furnace some ambitious fire
Whose vent is stopt. *Ben Jonson.*

The cold and *heat* Winter and Summer shows;
Autumn by fruits, and Spring by flowers he knows. *Cowley.*

Virtue's a faint green-sickness to brave souls,
Dastards their hearts, their active *heat* controls. *Marvell.*

They, seing what forces were in the city with them, issued against the tyrant while they were in this *heat*, before practices might be used to dissever them. *Sidney.*

Mark well the flowering almonds in the wood;
The glebe will answer to the sylvan reign;
Great *heats* will follow, and large crops of grain. *Dryden.*

Feigned zeal, you saw, set out the speedier pace;
But the last *heat*, plain dealing won the race. *Id.*

A noble emulation *heats* your breast,
And your own fame now robs you of your rest. *Id.*

The continual agitations of the spirits must needs be a weakening of any constitution, especially in age: and many causes are required for refreshment betwixt the *heats*. *Id.*

What can more gratify the Phrygian foe
Than those distempered *heats*? *Id.*

I'll stake my fortune with him at a *heat*,
And give him not the leisure to forget. *Id.*

When he was well *heated* the younger champion could not stand before him; and we find the elder contended not for the gift, but for the honour. *Id.*

Heat is a very brisk agitation of the insensible parts of the object, which produces in us that sensation from whence we denominate the object hot; so what in our sensation is *heat*, in the object is nothing but motion. *Locke.*

Hops lying undried *heats* them, and changes their colour. *Mortimer.*

The *heats* smiths take of their iron are a blood-red *heat*, a white flame *heat*, and a sparkling or welding *heat*. *Moxon.*

They the turned lines on golden anvils beat,
Which look as if they struck them at a *heat*. *Tate.*

It might have pleased in the *heat* and hurry of his rage, but must have displeased in cool sedate reflection. *South.*

Plead it to her
With all the strength and *heat* of eloquence
Fraternal love and friendship can inspire. *Addison's Cato.*

We have spilt no blood but in the *heat* of the battle, or the chase. *Atterbury.*

Whatever increaseth the density of the blood, even without increasing its celerity, *heats*, because a denser body is hotter than a rarer. *Arbuthnot.*

One playing at hazard, drew a huge heap of gold; but in the *heat* of play never observed a sharper, who swept it into his hat. *Swift.*

The word *heat* is used to signify the sensation we have when we are near the fire, as well as the cause of that sensation, which is in the fire itself: and thence we conclude, that there is a sort of *heat* in the fire resembling our own sensation. *Watts.*

Yet could I seat me by this ivied stone
Till I had bodied forth the *heated* mind,
Forms from the floating wreck which ruin leaves behind. *Byron's Childe Harold.*

Heat, in physiology, is a term that has been used both for the peculiar sensation felt on the approach of bodies in a state of combustion, and for the cause of that sensation: in which last sense it is synomymous with fire. In the former sense it is opposed to cold. In modern science the term fire has been abandoned; but the term heat is generally taken for the supposed natural agent that produces the sensation we call by this name; for a great second cause, therefore, of some of the most important operations of nature, or as synonymous with the term caloric.

The great question among philosophers of modern times has been whether this is to be regarded as a distinct subtile fluid, or entity; or whether it is a property of matter universally diffused, and operating in a vibratory or intestine motion of its particles. The latter is the opinion of Sir Humphry Davy on this intricate point; and, as he has many claims to our attention on such a subject, we shall here transcribe his views respecting it. 'Calorific repulsion,' he says, 'has been accounted for, by supposing a subtile fluid capable of combining with bodies, and of separating their parts from each other, which has been named the matter of heat, or caloric.

'Many of the phenomena admit of a happy explanation on this idea, such as the cold produced during the conversion of solids into fluids or gases, and the increase of temperature connected with the condensation of gases and fluids.' In the former case we say the matter of heat is absorbed or combined, in the latter it is extruded or disengaged from combination. 'But there are other facts which are not so easily reconciled to the opinion. Such are the production of heat by friction and percussion; and some of the chemical changes which have been just referred to.' These are, the violent heat produced in the explosion of gunpowder, where a large quantity of aëriform matter is disengaged; and the fire which appears in the decomposition of the euchlorine gas, or protoxide of chlorine, though the resulting gases occupy a greater volume.

'When the temperature of bodies is raised by friction, there seems to be no diminution of their capacities, using the word in its common sense; and in many chemical changes, connected with an increase of temperature, there appears to be likewise an increase of capacity. A piece of iron made red-hot, by hammering, cannot be strongly heated a second time by the same means, unless it has been previously introduced into a fire. This fact has been explained by supposing that the fluid of heat has been pressed out of it, by the percussion, which is recovered in the fire; but this is a very rude mechanical idea: the arrangements of its parts are altered by hammering in this way, and it is rendered brittle. By a moderate degree of friction, as would appear from Rumford's experiments, the same piece of metal may be kept hot for any length of time; so that if heat be pressed out, the quantity must be inexhaustible. When any body is cooled, it occupies a smaller volume than before; it is evident, therefore, that its parts must have approached to each other: when the body is expanded by heat, it is equally evident that its parts must have separated from each other. The immediate cause of the phenomena of heat, then, is motion, and the laws of its communication are precisely the same as the laws of the communication of motion.

Since all matter may be made to fill a smaller volume, by cooling, it is evident that the particles of matter must have space between them; and since every body can communicate the power of expansion to a body of a lower temperature, that is, can give an expansive motion to its particles, it is a probable inference that its own particles are possessed of motion; but, as there is no change in the position of its parts as long as its temperature is uniform, the motion, if it exist, must be a vibratory or undulatory motion, or a motion of the particles round their axes, or a motion of particles round each other.

'It seems possible to account for all the phenomena of heat, if it be supposed that in solids the particles are in a constant state of vibratory motion, the particles of the hottest bodies moving with the greatest velocity, and through the greatest space; that in liquids and elastic fluids, besides the vibratory motion, which must be conceived greatest in the last, the particles have a motion round their own axes, with different velocities, the particles of elastic fluids moving with the greatest quickness; and that in ethereal substances, the particles move round their own axes, and separate from each other, penetrating in right lines through space. Temperature may be conceived to depend upon the velocities of the vibrations; increase of capacity, on the motion being performed in greater space; and the diminution of temperature, during the conversion of solids into fluids or gases, may be explained on the idea of the loss of vibratory motion, in consequence of the revolution of particles round their axes, at the moment when the body becomes liquid or aëriform; or from the loss of rapidity of vibration, in consequence of the motion of the particles through greater space.

'If a specific fluid of heat be admitted, it must be supposed liable to most of the affections which the particles of common matter are assumed to possess, to account for the phenomena; such as losing its motion when combining with bodies, producing motion when transmitted from one body to another, and gaining projectile motion when passing into free space; so that many hypotheses must be adopted to account for its agency, which renders this view of the subject less simple than the other. Very delicate experiments have been made, which show that bodies, when heated, do not increase in weight. This, as far as it goes, is an evidence against a subtile elastic fluid producing the calorific expansion; but it cannot be considered as decisive, on account of the imperfection of our instruments. A cubical inch of inflammable air requires a good balance to ascertain that it has any sensible weight, and a substance bearing the same relation to this, that this bears to platinum, could not perhaps be weighed by any method in our possession.'

Sir William Herschel, and Sir H. Englefield, on the other hand, have been supposed to

establish the materiality of caloric: or at least to have made it appear co-existent with light. Herschel found that when similar thermometers were placed in the different parts of the solar beam, decomposed by the prism into the primitive colors, they indicated different temperatures. He estimates the power of heating in the red rays to be to that of the green rays as fifty-five to twenty-six, and to that of the violet rays as fifty-five to sixteen. And in a space beyond the red rays, where there is no visible light, the increase of temperature is greatest of all. Thus a thermometer in the full red ray rose 7° Fahr. in ten minutes; beyond the confines of the colored beam entirely, it rose in an equal time 9°. His experiments were repeated by Sir H. Englefield.

Mr. Berard, however, came to a conclusion somewhat different. To render his experiments more certain, and their effects more sensible, this philosopher availed himself of the heliostat, an instrument by which the sunbeam can be steadily directed to one spot during the whole of its diurnal period. He decomposed by a prism the sunbeam, reflected from the mirror of the heliostat, and placed a sensible thermometer in each of the seven colored rays. The calorific faculty was found to increase progressively from the violet to the red portion of the spectrum, in which the maximum heat existed, and not beyond it, in the unilluminated space. The greatest rise in the thermometer took place while its bulb was still entirely covered by the last red rays; and it was observed progressively to sink as the bulb entered into the dark. Finally, on placing the bulb quite out of the visible spectrum, where Herschel fixed the maximum of heat, the elevation of its temperature above the ambient air was found, by M. Berard, to be only one-fifth of what it was in the extreme red ray. He afterwards made similar experiments on the double spectrum produced by Island crystal, and also on polarised light, and he found in both cases that the calorific principle accompanied the luminous molecules; and that, in the positions where light ceased to be reflected, heat also disappeared.

Newton has shown that the different refrangibility of the rays of light may be explained by supposing them composed of particles differing in size, the largest being at the red, and the smallest at the violet extremity of the spectrum. The same great man has put the query, Whether light and common matter are not convertible into each other? and, adopting the idea that the phenomena of sensible heat depend upon vibrations of the particles of bodies, supposes that a certain intensity of vibrations may send off particles into free space; and that particles in rapid motion in right lines, in losing their own motion, may communicate a vibratory motion to the particles of terrestrial bodies. In this way we can readily conceive how the red rays should impinge most forcibly, and therefore excite the greatest degree of heat. This controversy on the nature of heat is, therefore, far from being settled. There is little room, as Dr. Ure has observed, for being dogmatic on either side. But, if the essence of this most important cause be hid in mystery, we are well acquainted with many of its properties and effects. We shall, in this paper, chiefly attend to them as displayed—I. In the distribution of heat. II. In the general sympathies of heat with the different forms of matter.

PART I.

OF THE DISTRIBUTION OF HEAT.

Newton, in his Opuscula, suggests a law respecting the communication of heat which has long served as a basis for the calculation of philosophers. He assumes, a priori, that a heated body exposed to a constant cooling cause, such as the uniform action of a current of air, ought to lose at each instant a quantity of heat proportional to the excess of its temperature above that of the ambient air; and that consequently its losses of heat, in equal and successive portions of time, ought to form a decreasing geometrical progression. Martin, in his Essays on Heat, pointed out, however, long ago the inaccuracy of this law, and Erxleben proved, by very accurate observations, that the deviation of the supposed law increases more and more as we consider greater differences of temperatures: he concludes that we should fall into very great errors if we extended the law much beyond the temperature at which it has been verified. Yet Mr. Leslie since, in his Researches on Heat, has made this law the basis of several determinations; and Messrs. Dulong and Petit have investigated the true law in a masterly manner.

They employed in this research mercurial thermometers, whose bulbs were from 0·8 of an inch to 2·6; the latter containing about three pounds of mercury. They found, by preliminary trials, that the ratio of cooling was not affected by the size of the bulb, and that it held also in comparisons of mercury, with water, with absolute alcohol, and with sulphuric acid, through a range of temperature from 60° to 30° of the centigrade scale; so that the ratio of the velocity of cooling between 60° and 50°, and 40° and 30°, was sensibly the same. On cooling water in a tin plate, and in a glass sphere, they found the law of cooling to be more rapid in the former, at temperatures under the boiling point; but, by a very remarkable casualty, the contrary effect takes place in bodies heated to high temperatures, when the law of cooling in tin plates becomes least rapid. Hence, generally, that which cools by a most rapid law at the lower part of the scale, becomes the least rapid at high temperatures. Mr. Leslie, says these gentlemen, obtained such inaccurate results respecting this question, because he did not make experiments on the cooling of bodies raised to high temperatures. They terminate their preliminary researches by experiments on the cooling of water in three tin-plate vessels of the same capacity, the first of which was a sphere, the second and third cylinders; from which we learn that the law of cooling is not affected by the difference of shape.

The researches on cooling in a vacuum were made with an exhausted balloon; and a compensation was calculated for the minute quantity of residuary gas. The following series was ob-

tained when the balloon was surrounded with ice. The degrees are centigrade.

Excess of the therm. above the balloon.	Corresponding velocities of cooling.
240	10·69
220	8·81
200	7·40
180	6·10
160	4·89
140	3·88
120	3·02
100	2·30
80	1·74

The first column contains the excesses of temperature above the walls of the balloon; that is to say, the temperatures themselves, since the balloon was at 0°. The second column contains the corresponding velocities of cooling, calculated and corrected. These velocities are the numbers of degrees that the thermometer would sink in a minute. The first series shows clearly the inaccuracy of the geometrical law of Richmann; for, according to that law, the velocity of cooling at 200° should be double of that at 100°; whereas we find it as 7·4 to 2·3, or more than triple; and in like manner, when we compare the loss of heat at 240° and at 80°, we find the first about six times greater that the last; while, according to the law of Richmann, it ought to be merely triple. From the above, and some analogous experiments, the following law has been deduced: when a body cools in vacuo, surrounded by a medium whose temperature is constant, the velocity of cooling for excess of temperature, in arithmetical progression, increases as the terms of a geometrical progression, diminished by a certain quanty. Or, expressed in algebraic language, the following equation contains the law of cooling in vacuo,

$$V = m.\, a^{\theta}\,(a^{t} - 1).$$

θ is the temperature of the substance surrounding the vacuum; and t that of the heated body above the former. The ratio a of this progression is easily found for the thermometer, whose cooling is recorded above; for when θ augments by 20°, t remaining the same, the velocity of cooling is then multiplied by 1·165, which number is the mean of all the ratios experimentally determined. We have then

$$a = \sqrt[20]{1{\cdot}165} = 1{\cdot}0077.$$

It only remains, in order to verify the accuracy of this law, to compare it with the different series contained in the table inserted above. In that case, in which the surrounding medium was 0°, it is necessary to make $m = 2{\cdot}037$, for $m = \frac{n}{\log.\, a}$, and n is an intermediate number; we have then $V = 2{\cdot}037\,(a^{t} - 1)$.

Excesses of temp. or values of t.	Values of V observed.	Values of V calculated.
240	10·69	10·68
220	8·81	8·89
200	7·40	7·34
180	6·10	6·03
160	4·89	4·87
140	3·88	3·89
120	3·02	3·05
100	2·30	2·33
80	1·74	1·72

The laws of cooling in vacuo being known, nothing is more simple than to separate from the total cooling of a body surrounded with air, or with any other gas, the portion of the effect due to the contact of the fluid. For this, it is obviously sufficient to subtract from the real velocities of cooling, those velocities which would take place if the body, cæteris paribus, were placed in vacuo. This subtraction may be easily accomplished now that we have a formula, which represents this velocity with great precision, and for all possible cases.

From numerous experimental comparisons the following law was deduced: the velocity of cooling a body, owing to the sole contact of a gas, depends for the same excess of temperature on the density and temperature of the fluid; but this dependence is such, that the velocity of cooling remains the same, if the density and the temperature of the gas change in such a way that the elasticity remains constant.

The influence of the nature of the surface of bodies, in the distribution of heat, was first accurately examined by Mr. Leslie. This branch of the subject is usually called the radiation of caloric. To measure the amount of this influence, with precision, he contrived a peculiar instrument, called a differential thermometer. It consists of a glass tube, bent into the form of the letter U, terminated at each end with a bulb The bore is about the size of that of large thermometers, and the bulbs have a diameter of one-third of an inch and upwards. Before hermetically closing the instrument a small portion of sulphuric acid, tinged with carmine, is introduced. The adjustment of this liquid, so as to make it stand at the top of one of the stems, immediately below the bulb, requires dexterity in the operator. To this stem a scale divided into 100 parts is attached, and the instrument is then fixed upright by a little cement on a wooden sole. If the finger, or any body warmer than the ambient air, be applied to one of these bulbs, the air within will be heated, and will of course expand, and, issuing in part from the bulb, depress before it the tinged liquor. The amount of this depression observed upon the scale will denote the difference of temperature of the two balls. But if the instrument be merely carried, without touching either ball, from a warmer to a cooler, or from a cooler to a warmer air, or medium of any kind, it will not be affected; because the equality of contraction or expansion,

in the enclosed air of both bulbs, will maintain the equilibrium of the liquid in the stem. Being thus independent of the fluctuations of the surrounding medium, it is well adapted to measure the calorific emanations of different surfaces, successively converged, by a concave reflector, upon one of its bulbs.

Dr. Howard has described, in the sixteenth number of the Journal of Science, a differential thermometer of his contrivance, which he conceives to possess some advantages. Its form is an imitation of Mr. Leslie's; but it contains merely tinged alcohol, or ether; the air being expelled by ebullition previous to the hermetical closure of the instrument. The vapor of ether, or of spirit in vacuo, affords, he finds, a test of superior delicacy to air. He makes the two legs of different lengths; since it is in some cases very convenient to have the one bulb standing quite aloof from the other.

In Mr. Leslie's, when they are on the same level, their distance asunder varies from one-third of an inch to an inch or upwards, according to the size of the instrument. The general length of the legs of the syphon is about five or six inches. His reflecting mirrors, of about fourteen inches diameter, consisted of planished tin-plate, hammered into a parabolical form by the guidance of a curvilinear gauge. A hollow tin vessel, six inches cube, was the usual source of calorific emanation in his experiments. He coated one of its sides with lamp-black, another with paper, a third with glass, and a fourth was left bare. Having then filled it with hot water, and set it in the line of the axis and four or six feet in front of one of the mirrors, in whose focus the bulb of a differential thermometer stood, he noted the depression of the colored liquid produced on presenting the different sides of the tube towards the mirror in succession. The following table gives a general view of the results, with these, and other coatings:—

Lamp black	100
Water by estimate	100+
Writing paper	98
Resin	96
Sealing-wax	95
Crown glass	90
China ink	88
Ice	85
Red lead	80
Plumbago	75
Isinglass	75
Tarnished lead	45
Mercury	20+
Clean lead	19
Iron polished	15
Tin plate	12
Gold, silver, copper	12

Similar results were obtained by Leslie and Rumford in a simpler form.

Coating the bulb of his thermometer with different substances, Mr. Leslie ingeniously discovered the power of different substances to *absorb* heat; and he found this to follow the same order as the radiating or projecting quality. The same film of silver leaf which obstructs the egress of heat from a body to those surrounding it, prevents it from receiving their calorific emanations in return. On this principle we can understand how a metallic mirror, placed before a fire, should scorch substances in its focus, while itself remains cold; and, on the other hand, how a mirror of darkened, or even of silvered glass, should become intolerably hot to the touch while it throws little heat before it. From this absorbent faculty it comes that a thin pane of glass intercepts almost the whole heat of a blazing fire, while the light is scarcely diminished across it. By degrees indeed itself, becoming heated, constitutes a new focus of emanation; but still the energy of the fire is greatly interrupted. Hence also we see why the thinnest sheet of bright tin-foil is a perfect fire-screen; so impervious indeed to heat that, with a masque coated with it, our face may encounter without inconvenience the blaze of a glass-house furnace.

Since absorption of heat goes hand in hand with radiation, we perceive that the inverse of absorption, that is reflection, must be possessed in inverse powers by the different substances composing the list. Thus bright metals reflect most heat, and so on upwards in succession. Mr. Leslie is anxious to prove that elastic fluids, by their pulsatory undulations, are the media of the projection or radiation of heat; and that therefore liquids, as well as a perfect vacuum, should obstruct the operation of this faculty. But the laws of the cooling of bodies in vacuo, experimentally established by MM. Dulong and Petit, are fatal to Mr. Leslie's hypothesis, which indeed was not tenable against the numerous objections which had previously assailed it. The following beautiful experiment of Sir H. Davy seems alone to settle the question. He had an apparatus made by which platina wire could be heated in any elastic medium or in vacuo; and by which the effects of radiation could be distinctly exhibited by two mirrors, the heat being excited by a Voltaic battery. In several experiments, in which the same powers were employed to produce the ignition, it was found that the temperature of a thermometer rose nearly three times as much in the focus of radiation, when the air in the receiver was exhausted to $\frac{1}{130}$, as when it was in its natural state of condensation. The cooling power, by contact of the rarefied air, was much less than that of the air in its common state, for the glow of the platina was more intense in the first case than in the last; and this circumstance perhaps renders the experiment not altogether decisive; but the results seem favorable to the idea that the terrestrial radiation of heat is not dependent upon any motions or affections of the atmosphere. The plane of the two mirrors was placed parallel to the horizon, the ignited body being in the focus of the upper, and the thermometer in that of the under mirror. It is evident that a diminished density of the elastic medium, amounting to $\frac{1}{130}$, should, on Mr. Leslie's views, have occasioned a greatly diminished temperature in the inferior focus, and not a threefold increase, as happened. The experiments with screens of glass, paper, &c., which Mr. Leslie adduced in support of his undulatory hypothesis, have been since confronted with the experiments on screens of Dr Delaroche, who, by varying them, ob-

tained results incompatible with Mr. Leslie's views.

The constancy or steadiness of the temperature of a body will consist in the equality of the quantities of radiating caloric which it emits and receives in an equal time; and the equality of temperature between several bodies which influence one another, by their mutual radiation, will consist in the perfect compensation of the momentary interchanges effected among one and all. Such is the ingenious principle of a moveable equilibrium, proposed by professor Prevost: a principle, whose application, directed with discretion and combined with the properties peculiar to different surfaces, explains all the phenomena which we observe in the distribution of radiating caloric. Thus, when we put a ball of snow in the focus of one concave mirror, and a thermometer in that of an opposite mirror placed at some distance, we perceive the temperature instantly to fall, as if there were a real radiation of frigorific particles, according to the ancient notion. The true explanation is derived from the abstraction of that return of heat which the thermoscope mirror had previously derived from the one now influenced by the snow, and now participating in its inferior radiating tension. Thus, also, a black body placed in the focus of one mirror would diminish the light in the focus of the other; and, as Sir H. Davy happily remarks, the eye is, to the rays producing light, a measure, similar to that which the thermometer is to rays producing heat.

This interchange of heat is finely exemplified in the relation which subsists between any portion of the sky and the temperature of the subjacent surface of the earth. In the year 1788 Mr. Six of Canterbury mentioned, in a paper transmitted to the Royal Society, that on clear and dewy nights he always found the mercury lower in a thermometer laid upon the ground, in a meadow in his neighbourhood, than it was in a similar thermometer suspended in the air six feet above the former: and that upon one night the difference amounted to 5° of Fahrenheit's scale. And Dr. Wells, in autumn 1811, on laying a thermometer upon grass wet with dew, and suspending a second in the air two feet above the surface, found, in an hour afterwards, that the former stood 8° lower than the latter. He at first regarded this coldness of the surface to be the effect of the evaporation of the moisture; but subsequent observations and experiments convinced him that the cold was not the effect, but the cause of deposition of dew. Under a cloudless sky the earth projects its heat, without return, into empty space; but a canopy of cloud is a concave mirror, which restores the equilibrium by counter-radiation. See DEW.

On this principle Dr. Wollaston suggested the construction of an instrument, which professor Leslie has called an æthrioscope, whose function it is to denote the clearness and coolness of the sky. It consists of a polished metallic cup, of an oblong spheroidal shape, very like a silver porter-cup, standing upright, with the bulb of a differential thermometer placed in its axis, and the stem lying parallel to the stalk of the cup. The other ball is gilt, and turned outwards and upwards, so as to rest against the side of the vessel. The best form of the cup is an ellipsoid, whose eccentricity is equal to half the transverse axis, and the focus consequently placed at the third part of the whole height of the cavity; while the diameter of the thermoscope ball should be nearly the third part of the orifice of the cup. A lid of the same thin metal, unpolished, is fitted to the mouth of the cup, and removed only when an observation is to be made. The scale attached to the stem of the thermoscope may extend to sixty or seventy millesimal degrees above the zero, and about fifteen degrees below it. This instrument, exposed to the open air in clear weather, will at all times, both during the day and the night, 'indicate an impression of cold shot downward from the higher regions,' in the figurative language of Mr. Leslie. Yet the effect varies exceedingly. It is greatest while the sky has the pure azure hue; it diminishes fast as the atmosphere becomes loaded with spreading clouds; and it is almost extinguished when low fogs settle on the surface. The liquid in the stem falls and rises with every passing cloud. Dr. Howard's modification of the thermoscope would answer well here.

The diffusion of heat, among the particles of fluids themselves, depends upon their specific gravity and specific heat conjunctly, and therefore must vary for each particular substance. The mobility of the particles in a fluid, and their reciprocal independence on one another, permit them to change their places whenever they are expanded or contracted by alternations of temperature; and hence the immediate and inevitable effect of communicating heat to the under stratum of a fluid mass, or of abstracting it from the upper stratum, is to determine a series of intestine movements. The colder particles, by their superior density, descend in a perpetual current, and force upwards those rarefied by the heat. When, however, the upper stratum primarily acquires an elevated temperature, it seems to have little power of imparting heat to the subjacent strata of fluid particles. Water may be kept long in ebullition at the surface of a vessel, while the bottom remains ice cold, provided we take measures to prevent the heat passing downwards through the sides of the vessel itself. Count Rumford became so strongly persuaded of the impossibility of communicating heat downwards, through fluid particles, that he regarded them as utterly destitute of the faculty of transmitting that power from one to another, and capable of acquiring heat only in individual rotation, and directly from a foreign source. The proposition thus absolutely announced is absurd, for we know that by intermixture, and many other modes, fluid particles impart heat to each other; and experiments have been instituted, which prove the actual descent of heat through fluids by communication from one stratum to another. But unquestionably this communication is amazingly difficult and slow. We are hence led to conceive, that it is an actual contact of particles which in the solid condition facilitates the transmission of heat so speedily from point to point through their mass. This contact of certain poles in the molecules is perfectly consistent

with void spaces, in which these molecules may slide over each other in every direction; by which movements or condensations heat may be excited. The fluid condition reverts or averts the touching and cohering poles, whence mobility results. This statement may be viewed either as a representation of facts, or an hypothesis to aid conception.

The transmission of heat through *solids* was made the subject of some popular experiments by Dr. Ingenhousz. He took a number of metallic rods of the same length and thickness, and, having coated one of the ends of them for a few inches with bees' wax, he plunged their other ends into a heated liquid. The heat travelled onwards among the matter of each rod, and soon became manifest by the softening of the wax. The following is the order in which the wax melted; and according to that experiment, therefore, the order of conducting power relative to heat:—

1. Silver.
2. Gold.
3. Copper, } nearly equal.
4. Tin, }

Platinum, }
Iron, } much inferior to
Steel, } the others.
Lead, }

'In my repetition of the experiment, I found,' says Dr. Ure, 'silver by much the best conductor, next copper, then brass, iron, tin, much the same, then cast iron, next zinc, and, last of all, lead. Dense stones follow metals in conducting power, then bricks, pottery, and, at a long interval, glass. A rod of this singular body may be held in the fingers for a long time, at a distance of an inch from where it is ignited and fused by the blowpipe. It is owing to the inferior conducting power of stone, pottery, glass, and cast-iron, that the sudden application of heat so readily cracks them. The part acted on by the caloric expands, while the adjacent parts, retaining their pristine form and volume, do not accommodate themselves to the change; whence a fissure must necessarily ensue. Woods and bones are better conductors than glass; but the progress of heat in them, at elevated temperatures, may be aided by the vaporisation of their juices. Charcoal and saw-dust rank very low in conducting power. Hence the former is admirably fitted for arresting the dispersion of heat in metal furnaces. If the sides of these be formed of double plates, with an interval between them of an inch filled with pounded charcoal, an intense heat may exist within, while the outside is scarcely affected. Morveau has rated the conducting power of charcoal to that of fine sand as two to three, a difference much too small. Spongy organic substances, silk, wool, cotton, &c., are still worse conductors than any of the above substances; and the finer the fibres, the less conducting power they possess. The theory of clothing depends on this principle. The heat generated by the animal powers is accumulated round the body by the imperfect conductors of which clothing is composed.'

To discover the exact law of the distribution of heat in solids we may take a prismatic bar of iron, three feet long, and with a drill form three cavities in one of its sides, at ten, twenty, and thirty inches from its end, each cavity capable of receiving a little mercury, and the small bulb of a delicate thermometer. Cut a hole fitting exactly the prismatic bar, in the middle of a sheet of tin plate, which is then to be fixed to the bar, to screen it and the thermometers from the focus of heat. Immerse the extremity of the bar obliquely into oil or mercury heated to any known degree, and place the thermometers in their cavities surrounded with a little mercury. Or the bar may be kept horizontal, if an inch or two at its end be incurvated, at right angles to its length. Call the thermometers A, B, C. . Were there no dissipation of the heat, each thermometer would continue to mount till it attained the temperature of the source of heat. But, in actual experiments, projection and aërial currents modify that result, making the thermometers rise more slowly, and preventing them from ever reaching the temperature of the end of the bar. Their state becomes indeed stationary whenever the excess of temperature, each instant communicated by the preceding section of the bar, merely compensates what they lose by the contact of the succeeding section of the bar, and the other outlets of heat. The three thermometers now indicate three steady temperatures, but in diminishing progression. In forming an equation from the experimental results, M. Laplace has shown, that the difficulties of the calculation can be removed only by admitting, that a determinate point is influenced not only by those points which touch it, but by others at a small distance before and behind it. Then the laws of homogeneity, to which differentials are subject, are re-established, and all the rules of the differential calculus are observed. Now, in order that the calorific influence may thus extend to a distance in the interior of the bar, there must operate through the very substance of the solid elements a true radiation, analogous to that observed in air, but whose sensible influence is bounded to distances incomparably smaller. This result is in no respect improbable. In fact, Newton has taught us that all bodies, even the most opaque, become transparent when rendered sufficiently thin; and the most exact researches on radiating caloric prove, that it does not emanate solely from the external surface of bodies, but also from material particles situated within this surface, becoming no doubt insensible at a very slight depth, which probably varies in the same body with its temperature.

MM. Biot, Fourier, and Poisson, three of the most eminent mathematicians and philosophers of the age, have distinguished themselves in this abstruse investigation. The following is the formula of M. Biot, when one end of the bar is maintained at a constant temperature, and the other is so remote as to make the influence of the source insensible. Let y represent, in degrees of the thermometer, the temperature of the air by which the bar is surrounded; let the temperature of the focus be $y + Y$; then the integral becomes, $\log. y = \log. Y - \frac{x}{M} \sqrt{\frac{b}{a}}$.

x is the distance from the hot end of the bar, a and b are two co-efficients, supposed constant for the whole length of the bar, which serve to accommodate the formula to every possible case, and which must be assigned in each case, agreeably to two observations. M is the modulus of the ordinary logarithmic tables, or the number 2·302585. M. Biot presents several tables of observations, in which sometimes eight, and sometimes fourteen thermometers, were applied all at once to successive points of the bar; and then he computes by the above formula what ought to be the temperature of these successive points, having given the temperature of the source; and vice versâ, what should be the temperature of the source, from the indications of the thermometers. A perfect accordance is shown to exist between fact and theory. Whence we may regard the view opened up by the latter, as a true representation of the condition of the bar. With regard to the application of this theorem, to discover, for example, the temperature of a furnace, by thrusting the end of a thermoscopic iron bar into it, we must regret its insufficiency. M. Biot himself, after showing its exact coincidence at all temperatures, up to that of melting lead, declares that it ought not to apply at high heats. But we see no difficulty in making a very useful instrument of this kind by experiment, to give very valuable pyrometrical indications. The end of the bar which is to be exposed to the heat, being coated with fire-clay, or sheathed wtth platinum, should be inserted a few inches into the flame, and drops of oil being put into three successive cavities of the bar, we should measure the temperatures of the oil, when they have become stationary, and note the time elapsed to produce this effect. A pyroscope of this kind could not fail to give useful information to the practical chemist, as well as to the manufacturers of glass, pottery, steel, &c.

We shall insert here, from Dr. Ure, tabular views of the specific heats determined by the recent researches of the French chemists. MM. Petit and Dulong remark, that, 'the attempts hitherto made to discover some laws in the specific heats of bodies have been entirely unsuccessful. We shall not be surprised at this, if we attend to the great inaccuracy of some of the measurements; for if we except those of Lavoisier and Laplace (unfortunately very few), and those by Laroche and Berard for elastic fluids, we are forced to admit, that the greatest part of the others are extremely inaccurate, as our own experiments have informed us, and as might indeed be concluded from the great discordance in the results obtained for the same bodies by different experimenters.' From this censure we must except the recent results of MM. Clement and Desormes on gases, which may be regarded as entitled to equal confidence with those of Berard and Delaroche.

Table I.—Of the Specific Heats of Gases, by MM. Berard and Delaroche.

	Equal volumes.	Equal weights.	Specific gravity.
Air	1·0000	1·0000	1·0000
Hydrogen . . .	0·9033	12·3401	0·0732
Carbonic acid . .	1·2583	0·8280	1·5196
Oxygen	0·9765	0·8848	1·1036
Azote	1·0000	1·0318	0·9691
Oxide of azote .	1·3503	0·8878	1·5209
Olefiant gas . .	1·5530	1·5763	0·9885
Carbonic acid . .	1·0340	1·0805	0·9569

To reduce the above numbers to the standard of water, three different methods were employed; from which the three numbers, 0·2498, 0·2697, and 0·2813, were obtained for atmospheric air. The experimenters have taken 0·2669 as the mean, to which all the above results are referred, as follows:—

Table II.

Water	1·0000
Air	0·2669
Hydrogen gas . .	3·2936
Carbonic acid . .	0·2210
Oxygen	0·2361
Azote	0·2754
Oxide of azote . .	0·2369
Olefiant gas . . .	0·4207
Carbonic oxide . .	0·2884
Aqueous vapor . .	0·8470

The following are the results given by MM. Clement and Desormes, for equal volumes at temperatures from 0° to 60° centigrade, or 32° to 140° Fahrenheit.

Table III.

	Inches Barom.	Clement & Desormes.	Delaroche & Berard.
Atmospheric air at	39·6	1·215	1·2396
Ditto	29·84	1·000	1·0000
Ditto	14·92	0·693	
Ditto	7·44	0·540	
Ditto	3·74	0·368	
Do. charged with ether . . .	29·84	1·000	
Azote	29·84	1·000	1·0000
Oxygen	29·84	1·000	0·974
Hydrogen . . .	29·84	0·664	0·9033
Carbonic acid . .	29·84	1·500	1·2583

The relative specific heat of air to water is, by MM. Clement and Desormes, 0·250 to 1·000, or exactly one-fourth. The last table, which is extracted from the Journal de Physique, gives the specific heat of oxygen by Delaroche and Berard, a little different from their own number, Table I. from the Annales de Chimie, vol. 85. The most remarkable result given by MM. Cle-

ment and Desormes regards carbonic acid, which, being reduced to the standard of weights, gives a specific heat compared to air of about 0·987 to 1·000, while oxygen is only 0·9000. The former tables of Crawford and Dalton give the specific heat of oxygen 2·65, and of carbonic acid 0·586, compared to air 1·000. And, upon these very erroneous numbers, they reared their hypothetical fabric of latent heat, combustion, and the animal temperature.

We see from the experiments on air, at different densities, that its specific heat diminishes in a much slower rate than its specific gravity. When air is expanded to a quadruple volume, its specific heat becomes 0·540, and, when expanded to eight times the volume, its specific heat is 0·368. The densities in the geometrical progression 1, ½, ¼, ⅛, correspond nearly to the specific heats in the arithmetical series 5, 4, 3, 2. Hence also the specific heat of atmospherical air, and of probably all gases, considered in the ratio of its weight or mass, diminishes as the density increases. On the principle of the increase of specific heat, relative to its mass, has been explained the long observed phenomenon of the intense cold which prevails on the tops of mountains, and generally in the upper regions of the atmosphere; and also that of the prodigious evolution of heat, when air is forcibly condensed. According to M. Gay Lussac, a condensation of volume, amounting to four-fifths, is sufficient to ignite tinder. If a syringe of glass be used, a vivid flash of light is seen to accompany the condensation.

Table IV.—Of Specific Heats of some Solids determined by Dulong and Petit.

	Specific heats, that of water being 100.	Weight of the atoms, oxygen being 1.	Product of these two numbers.
Bismuth . .	0·0288	13·300	0·3830
Lead . . .	0·0293	12·950	0·3794
Gold . . .	0·0298	12·430	0·3704
Platinum .	0·0314	11·160	0·3740
Tin . . .	0·0514	7·350	0·3779
Silver . . .	0·0557	6·750	0·3759
Zinc . . .	0·0927	4·030	0·3736
Tellurium .	0·0912	4·030	0·3675
Copper . .	0·0949	3·957	0·3755
Nickel . .	0·1035	3·690	0·3819
Iron . . .	0·1100	3·392	0·3731
Cobalt . .	0·1498	2·460	0·3685
Sulphur . .	0·1880	2·011	0·3780

The above products, which express the capacities of the different atoms, approach so near equality, that the slight differences must be owing to slight errors, either in the measurement of the capacities, or in the chemical analyses, especially if we consider, that, in certain cases, these errors, derived from these two sources, may be on the same side, and consequently be found multiplied in the result. Each atom of these simple bodies seems, therefore, as was formerly stated, to have the same capacity for heat.

The question may here be asked, Whether a body, in cooling a certain thermometric range at a high temperature, gives out the same quantity of heat that it does in cooling through the same range at a lower temperature? No means seem better adapted for solving this problem, than to measure the refrigeration produced, by the same weights of ice, on uniform weights of water, at different temperatures. Mr. Dalton found in this way, that '176·5° expresses the number of degrees of temperature, such as are found between 200° and 212° of the old or common scale, entering into ice of 32° to convert it into water of 32°; 150° of the same scale, between 122° and 130°, suffice for the same effect; and between 45° and 50°, 128° are adequate to the conversion of the same ice into water. These three resulting numbers (128, 150, 176·5), are nearly as 5, 6, 7. Hence it follows, that as much heat is necessary to raise water 5° in the lower part of the old scale, as is required to raise it 7° in the higher, and 6° in the middle.' See his *New System of Chemical Philosophy*, vol. i. p. 53.

'Mr. Dalton, however,' says Dr. Ure, 'instead of adopting the obvious conclusion, that the capacity of water for heat is greater at lower than it is at higher temperatures, and that therefore a smaller number of degrees at the former should melt as much ice as a great number at the latter, ascribes the deviation denoted by these numbers, 5, 6, and 7, to the gross errors of the ordinary thermometric graduation, which he considers so excessive, as not only to equal, but greatly to overbalance the really increased specific heat or capacity of water; which, viewed in itself, he conceives would have exhibited opposite experimental results. That our old, and, according to his notions, obsolete thermometric scale, has no such prodigious deviation from truth, is, I believe, now fully admitted by chemical philosophers; and therefore the only legitimate inference from these very experiments of Mr. Dalton is the decreasing capacity of water, with the increase of its temperature. It deserves to be remarked, that my experiments on the relative times of cooling a globe of glass, successively filled with water, oil of vitriol, common oil, and oil of turpentine, give exactly the same results as Mr. Dalton had derived from mixtures of two ounces of ice with sixty of water, at different temperatures. This concurrence is the more satisfactory, since, when my paper on the specific heats of the above bodies, published in the Annals of Philosophy for October 1817, was written, I had no recollection of Mr. Dalton's experiments.'

Table V.—Of Capacities for Heat.

	Mean capacity between 0° and 100°	Mean capacity between 0° and 3000°.
Mercury . .	0·0330	0·0350
Zinc . . .	0·0927	0·1015
Antimony . .	0·0507	0·0549
Silver . . .	0·0557	0·0611
Copper . . .	0·0949	0·1013
Platinum . .	0·0355	0·0355
Glass . . .	0·1770	0·1900

The capacity of iron was determined at the four following intervals:—

From 0° to 100°, the capacity is	0·1098
0 to 200	0·1150
0 to 300	0·1218
0 to 350	0·1255

'If we estimate,' continues Dr. Ure, 'the temperatures, as some philosophers have proposed, by the ratios of the quantities of heat which the same body gives out in cooling to a determinate temperature, in order that this calculation be exact, it would be necessary that the body in cooling, for example, from 300° to 0°, should give out three times as much heat as in cooling from 100° to 0°. But it will give out more than three times as much, because the capacities are increasing. We should therefore find too high a temperature. We exhibit in the following table the temperatures that would be deduced by employing the different metals contained in the preceding table. We must suppose that they have been all placed in the same liquid bath at 300°, measured by an air thermometer.

Iron	332·2°
Mercury	318·2
Zinc	328·5
Antimony	324·8
Silver	329·3
Copper	320·0
Platinum	317·9
Glass	322·1

PART II.

OF THE GENERAL SYMPATHIES OF HEAT WITH THE DIFFERENT FORMS OF MATTER.

The effects of heat are either transient and physical, or permanent and chemical, inducing a durable change in the constitution of bodies. The latter effect we have already treated of in our article COMBUSTION. The first is to be discussed here; and divides itself into the two heads, of changes in the volume of bodies while they retain their form, and changes in the state of bodies.

1. The successive *increments* of volume which bodies receive with successive increments of temperature, have been the subjects of innumerable researches. The expansion of fluids is so much greater than that of solids, by the same elevation of their temperature, that it becomes an easy task to ascertain within certain limits the augmentation of volume which liquids and gases suffer through a moderate thermometric range. We have only to enclose them in a glass vessel of a proper form, and expose it to heat. But to determine their expansion with final accuracy, and free the results from the errors arising from the unequable expansion of the recipient, is a problem of no small difficulty. It seems, however, after many vain attempts by preceding experimenters, to have been finally solved by MM. Dulong and Petit. The expansion of solids had been previously measured with considerable accuracy by several philosophers, particularly by Smeaton, Roy, Ramsden, and Troughton, in this country, and Lavoisier and Laplace in France. The method devised by general Roy, and executed by him in conjunction with Ramsden, deserves the preference. The metallic or other rod, the subject of experiment, was placed horizontally in a rectangular trough of water, which could be conveniently heated. At any aliquot distance on the rod, two micrometer microscopes were attached at right angles, so that each being adjusted at first to two immoveable points, exterior to the heating apparatus, when the rod was elongated by heat, the displacement of the microscopes could be determined to a very minute quantity, to the twenty or thirty thousandth of an inch, by the micrometrical mechanism.

Dr. Ure, in the years 1812 and 1813, made, he tells us, many experiments with a micrometrical apparatus of a peculiar construction, for measuring the dilatation of solids. 'I was particularly perplexed,' he says, 'with the rods of zinc, which, after innumerable trials, I finally found to elongate permanently by being alternately heated and cooled. It would seem that the plates composing this metal, in sliding over each other by the expansive force of heat, present such an adhesive friction as to prevent their entire retraction. It would be desirable to know the limit of this effect, and to see what other metals are subject to the same change. I hope to be able, ere long, to finish these pyrometrical researches.' The doctor then gives us the following copious tables of dilatations, compiled from the best experiments:—

TABLE I.—Linear Dilatation of Solids by Heat.

Dimensions which a bar takes at 212°, whose length at 32° is 1·000000.			Dilatation in Vulgar Fractions.
Glass tube,	Smeaton,	1·00083333	
Do.	Roy,	1·00077615	
Do.	Deluc's mean,	1·00082800	$\frac{1}{1116}$
Do.	Dulong and Petit,	1·00086130	$\frac{1}{1148}$
Do.	Lavoisier and Laplace,	1·00081166	$\frac{1}{1123}$
Plate glass,	Do. do.	1·000890890	$\frac{1}{1143}$
Do. crown glass,	Do. do.	1·00087572	$\frac{1}{1114}$
Do. do.	Do. do.	1·00089760	$\frac{1}{1090}$
Do. do.	Do. do.	1·00091751	
Do. rod,	Roy,	1·00080787	
Deal,	Roy, as glass,		
Platina,	Borda,	1·00085655	
Do.	Dulong and Petit,	1·00088420	$\frac{1}{1131}$
Do.	Troughton,	1·00099180	
Do. and glass,	Berthoud,	1·00110000	
Palladium,	Wollaston,	1·00100000	

TABLE I.—Linear Dilatation of Solids by Heat.—*Continued*

Dimensions which a bar takes at 212°, whose length at 32° is 1·000000.			Dilatation in Vulgar Fractions.
Antimony,	Smeaton,	1·00108300	
Cast iron prism,	Roy,	1·00110940	
Cast iron,	Lavoisier, by Dr. Young,	1·00111111	
Steel,	Troughton,	1·00118990	
Steel rod,	Roy,	1·00114470	
Blistered steel,	Phil Trans. 1795, 428,	1·00112500	
Do.	Smeaton,	1·001150 0	
Steel not tempered,	Lavoisier and Laplace,	1·00107875	$\frac{1}{927}$
Do. do. do.	Do. do.	1·00107956	$\frac{1}{926}$
Do. tempered yellow,	Do. do.	1·00136900	
Do. do. do.	Do. do.	1·00138600	
Do. do. do. at a higher heat,	Do. do.	1·00123956	$\frac{1}{807}$
Steel,	Troughton,	1·00118980	
Hard steel,	Smeaton,	1·00122500	
Annealed steel,	Muschenbroek,	1·00122000	
Tempered steel.	Do.	1·00137000	
Iron,	Borda,	1·00115600	
Do.	Smeaton,	1·00125800	
Soft iron forged,	Lavoisier and Laplace,	1·00122045	
Round iron, wire-drawn,	Do. do.	1·90123504	
Iron wire,	Troughton,	1·00144010	
Iron,	Dulong and Petit,	1·00118203	$\frac{1}{846}$
Bismuth,	Smeaton,	1·00139200	
Annealed gold,	Muschenbroek,	1·00146000	
Gold,	Ellicot, by comparison,	1·00150000	
Do. procured by parting,	Lavoisier and Laplace,	1·00146606	$\frac{1}{682}$
Do. Paris standard, unannealed,	Do. do.	1· 0155155	$\frac{1}{645}$
Do. do. annealed,	Do. do.	1·00151361	$\frac{1}{661}$
Copper,	Muschenbroek,	1·0019100	
Do.	Lavoisier and Laplace,	1·00172244	$\frac{1}{581}$
Do.	Do. do.	1·00171222	$\frac{1}{584}$
Do.	Troughton,	1·00191880	
Do.	Dulong and Petit,	1·00171821	$\frac{1}{582}$
Brass,	Borda,	1·00178300	
Do.	Lavoisier and Laplace,	1·00186671	
Do.	Do. do.	1·04188971	
Brass scale, supposed from Hamburg,	Roy,	1·00185540	
Cast brass,	Smeaton,	1·00187500	
English plate-brass, in rod,	Roy,	1·00189280	
Do. do. in a trough form,	Do.	1·00189490	
Brass,	Troughton,	1·00191880	
Brass wire,	Smeaton,	1·00193000	
Brass,	Muschenbroek,	1·00216000	
Copper 8, tin 1,	Smeaton,	1·00181700	
Silver,	Herbert,	1·00189000	
Do.	Ellicot, by comparison,	1·0021000	
Do.	Muschenbroek,	1·00212000	
Do. of cupel,	Lavoisier and Laplace,	1·00190974	$\frac{1}{524}$
Do. Paris standard,	Do. do.	1·00190868	$\frac{1}{524}$
Silver,	Troughton,	1·0020826	
Brass 16, tin 1,	Smeaton,	1·00190800	
Speculum metal,	Do.	1·00193300	
Spelter solder; brass 2, zinc 1,	Do.	1·00205800	
Malacca tin,	Lavoisier and Laplace,	1·00193765	$\frac{1}{518}$
Tin from Falmouth,	Do. do.	1·00217298	$\frac{1}{462}$
Fine pewter,	Smeaton,	1·00228300	
Grain tin,	Do.	1·00248300	
Tin,	Muschenbroek,	1·00284000	
Soft solder; lead 2, tin 1,	Smeaton,	1·00250800	
Zinc 8, tin 1, a little hammered,	Do	1·00269200	
Lead,	Lavoisier and Laplace,	1·00284836	$\frac{1}{351}$
Do.	Smeaton,	1·00286700	
Zinc,	Do.	1·00294200	
Zinc, hammered out ½ inch per foot,	Do.	1·00301100	
Glass, from 32° to 212°,	Dulong and Petit	1·00086130	$\frac{1}{1171}$
Do. from 212°, to 392°,	Do. do.	1·00091827	$\frac{1}{1089}$
Do. from 392°, to 572°,	Do. do.	1·000101114	$\frac{1}{987}$

The last two measurements by an air thermometer.

TABLE II.—Dilatation of the volume of Liquids by being heated from 32° to 212°.

Mercury, Dalton	0·020000	1/50
Do. Lord Charles Cavendish	0·018870	1/53
Do. Deluc	0·018000	1/56
Do. General Roy	0·017000	1/59
Do. Shuckburgh	0·01851	1/54
Do. Lavoisier and Laplace	0·01810	1/55·22
Do. Haellstrœm	0·0181800	1/55
Do. Dulong and Petit	0·0180180	1/55·50
Do. do. from 211°, to 392°	0·0184331	1/54·25
Do. do. from 392°, to 572°	0·0188700	1/53
Do. do. in glass, from 32°, to 212°	0·015432	1/64·8
Do. do. do. from 212°, to 392°	0·015680	1/63·78
Do. do. do. from 392°, to 572°	0·0158280	1/63·18
Water, Kirwan, from 39°, its maximum density	0·04332	1/23·08
Muriatic acid (sp. gr. 1·137) Dalton,	0·0600	1/17
Nitric acid (sp. gr. 1·40), do.	0·1100	1/9
Sulphuric acid (sp. gr. 1·85), do.	0·0600	1/17
Alcohol, do.	0·1100	1/9
Water, do.	0·0460	1/22
Water saturated with common salt, do.	0·0500	1/20
Sulphuric ether, do.	0·0700	1/14
Fixed oils, do.	0·0800	1/12·5
Oil of turpentine, do.	0·0700	1/14
The quantities given by Mr. Dalton are probably too great, as is certainly the case with mercury; his experiments being perhaps modified by his hypothetical notions.		
Water saturated with common salt, Robison	0·05198	1/19

Dr. Young, in his valuable Catalogue Raisonnée, Natural Philosophy, vol. ii. p. 391, gives the following table of the expansions of water, constructed from a collation of experiments by Gilpin, Kirwan, and Achard. He says that the degrees of Fahrenheit's thermometer, reckoning either way from 39°, being called f, the expansion of water is nearly expressed by $22f^2$ (1 — ·002f) in 10 millionths; and the diminution of the sp. gr. by ·0000022f^2 — ·00000000472f^3. This equation, as well as the table, is very important for the reduction of specific gravities of bodies, taken by weighing them in water.

	Sp. grav.	Dimin. of sp. gr.	Expansion.
30°	0·99980	0·00020	
32	0·99988	0·00012	
34	0·99994	0·00006	
39	1·00000	0·00000	
44	0·99994	0·00006	
48	0·99982	0·00018	
49	0·99978	0·00022	
54	0·99951	0·00049	
59	0·99914	0·00086	
60	0·99906	0·00094	
64	0·99867	0·00133	
69	0·99812	0·00188	
74	0·99749	0·00251	
(77°)	0·99701 Achard		0·00299
79	0·99680 Gilpin	0·00320	0·00321
(82)	0·99612 Kirwan	0·00388	0·00389
90	0·99511 Gilpin	0·00489	0·00491
100	0·99313	0·00687	0·00692

	Sp. grav.	Dimin. of sp. gr.	Expansion.
102	0·99246 Kirwan	0·00754	0·00760
122	0·98757	0·01243	0·01258
	0·98872 Deluc	0·01128	
142	0·98199 K.	0·01801	0·01833
162	0·97583	0·02417	0·02481
167	0·97480 Deluc	0·02520	
182	0·96900 K.	0·03100	0·03198
202	0·96145	0·03855	0·04005
212	0·95848	0·04152	0·04333

M. Gay Lussac has lately endeavoured to discover some law which should correspond with the rate of dilatation of different liquids by heat. For this purpose, instead of comparing the dilatations of different liquids, above or below a temperature uniform for all, he set out from a point variable with regard to temperature, but uniform as to the cohesion of the particles of the bodies; namely, from the point at which each liquid boils under a given pressure. Among those which he examined, he found two which dilate equally from that point, viz. alcohol and sulphuret of carbon, of which the former boils at 173·14°, the latter at 115·9°, Fahrenheit. The other liquids did not present, in this respect, the same resemblance. Another analogy of the above two liquids is, that the same volume of each gives, at its boiling point, under the same atmospheric pressure, the same volume of vapor; or, in other words, that the densities of their vapors are to each other as those of the liquids at their respective boiling temperatures. The following table shows the results of this distinguished chemist:—

TABLE of the Contractions of 1000 parts in volume, by cooling.

	Water.		Alcohol.		Sulphuret of Carb.		Ether.	
	Contract by expt.	Ditto calculated.	Contract by expt.	Ditto calculated.	Contract by expt.	Ditto calculated.	Contract by expt.	Ditto calculated.
Boiling,	0·00	0·00	0·00	0·00	0·00	0·00	0·00	0·00
— 5°	3·34	3·35	5·55	5·56	6·14	6·07	8·15	8·16
— 10	6 61	6·65	11·43	11·24	12·01	12·08	16·17	16·01
— 15	10·50	9·89	17·51	17·00	17·98	17·99	24·16	23·60
— 20	13·15	13·03	24·34	23·41	23·80	23·80	31·83	30·92
— 25	16·06	16·06	29·15	28·60	29·65	29·50	39·14	38·08
— 30	18·85	18·95	34·74	34·37	35·06	35·05	46·42	45·04
— 35	21·52	21·67	40·28	40·05	40·48	40·43	52·06	51·86
— 40	24·10	24·20	45·68	45·66	45·77	45·67	58·77	58·77
— 45	26·50	26·52	50·85	51·11	51·08	50·70	65·48	65·20
— 50	28·56	28·61	56·02	56·37	56·28	55·52	72·01	71·79
— 55	30·60	30·43	61·01	61·43	61·14	60·12	78·38	78·36
— 60	32·42	31·96	65·96	66·23	66·21	64·48		
— 65	34·02	33·19	10·74	70·75				
— 70	35·47	34·09	75·48	74·93				
— 75	36·70	34·63	80·11	78·75				

Their respective boiling points are:

Water	100°	Cent. =	212° F.
Alcohol	78·41		173
Sulphuret of carb.	46·60		126
Sulphuric ether	35·66		96

The experiments were made in thermometer vessels hermetically sealed.

Alcohol, at 78·41° cent., produces 488·3 its volume of vapor.

Sulphuret of carbon, at 46·60° cent., produces 491·1 its volume of vapor.

Ether, at 35·66° cent., produces 285·9 its volume of vapor.

Water, at 100·00° cent., produces 1633·1 its volume of vapor.

Mr. Dalton has the merit of having first proved that the expansions of all aëriform bodies, when insulated from liquids, are uniform by the same increase of temperature; a fact of great importance to practical chemistry, which was fully verified by the independent and equally original researches of M. Gay Lussac on the subject, with a more refined and exact apparatus. The latter philosopher demonstrated that 100 in volume at 32° Fahrenheit, or 0° cent., became 1·375 at 212° Fahrenheit, or 100° cent. Hence the increment of bulk for each degree Fahrenheit is $\frac{0{\cdot}375}{180} = 0{\cdot}002083 = \frac{1}{480}$; and for the centigrade scale it is $\frac{0{\cdot}375}{100} = 0{\cdot}00375 = \frac{1}{266{\cdot}6}$. To reduce any volume of gas, therefore, to the bulk it would occupy at any standard temperature, we must multiply the thermometric difference in degrees of Fahrenheit by 0·002083, or $\frac{1}{480}$, subtracting the product from the given volume, if the gas be heated above, but adding it, if the gas be cooled below, the standard temperature. Thus twenty-five cubic inches at 120° Farenheit will at 60° occupy a volume of $21\frac{7}{8}$; for $\frac{1}{480} \times 60 = \frac{60}{480} = \frac{1}{8}$; and $\frac{3}{8} = 3\frac{1}{8}$, which, taken from 25, leaves $21\frac{7}{8}$. A table of reduction will be found under GAS. When the table is expressed decimally, indeed, to six or seven figures, it becomes more troublesome to apply than the above rule. Vapors, when heated out of contact of their respective liquids, obey the same law as gases; a discovery due to M. Gay Lussac.

2. *Of the change of state produced in bodies by caloric.*—The three forms of matter, the solid, liquid, and gaseous, seem immediately referrible to the power of heat, modifying, balancing, or subduing cohesive attraction. The system of the world presents magnificent effects of attraction dependent on figure. Such are the phenomena of nutation and the precession of the equinoxes, produced by the attractions of the sun and moon on the flattened spheroid of the earth. These sublime phenomena would not have existed had the earth been a sphere: they are connected with its oblateness and rotation, in a manner which may be mathematically deduced, and subjected to calculation. The investigation shows, that this part of the attraction dependent on figure decreases more rapidly than the principal force. The latter diminishes as the square of the distance; the part dependent on figure diminishes as the cube of the distance. Thus also, in the attractions which hold the parts of bodies united, we ought to expect an analogous difference to occur. Hence the force of crystallisation may be subdued, before the principal attractive force is overcome. When the particles are brought to this distance, they will be indifferent to all the positions which they can assume round their centre of gravity; this will constitute the liquid condition. We must now content ourselves with stating the results as much as possible in a tabular form.

TABLE of the Concreting or Congealing Temperatures of various Liquids by FAHRENHEIT'S Scale.

Sulphuric ether		— 46°
Liquid ammonia		— 46
Nitric acid, sp. gr.	1·424	— 45·5

Sulphuric acid, sp. gr.				1·6415	— 45
Mercury					— 39
Nitric acid, sp. gr.				1·407	— 30·1
Sulphuric acid				1·8064	— 26
Nitric acid				1·3880	— 18·1
Do.	Do.			1·2583	— 17·7
Do.	Do.			1·3290	— 2·4
Brandy					— 7·0
Sulphuric acid				1·8376	+ 1·
Pure prussic acid					4 to 5
Common salt	25	+	water	75	4
Do.	22·2	+	do.	77·8	7·2
Sal ammoniac	20	+	do.	80	8.
C. salt	20	+	do.	80	9·5
Do.	16·1	+	do.	83·9	13·5
Oil of turpentine					14.
Strong wines					20.
Rochelle salt	50	+	water	50	21.
C. salt	10	+	do.	90	21·5
Oil of bergamot					23
Blood					25
C. salt	6·25	+	water	93·75	25·5
Epsom salts	41·6	+	do.	58·4	25·5
Nitre	12·5	+	do.	87·5	26
C. salt	4·16	+	do.	95·84	27·5
Copperas	41·6	+	do.	58·4	28
Vinegar					28
Sul. of zinc.	53·3	+	water	46·7	28·6
Milk					30
Water					32
Olive oil					36
Sulphur and phosphorus, equal parts					40
Sulphuric acid, sp. gr.				1·741	42
Do.	Do.			1·780	46
Oil of anise					50
Concentrated acetic acid					50
Tallow, Dr. Thomson					92
Phosphorus					108
Stearin from hog's lard					109
Spermaceti					112
Tallow, Nicholson					127
Margaric acid					134
Potassium					136·4
Yellow wax					142
Do.	Do.				149
White wax					155
Sodium					194
Sulphur, Dr. Thomson					218
Do.	Dr. Hope				234
Tin					442
Bismuth					476
Lead					612
Zinc, by Sir H. Davy					680
Do.	Brogniart				698
Antimony					809?

The solidifying temperature of the bodies above tallow, in the table, is usually called their freezing or congealing point; and of tallow, and the bodies below it, the fusing or melting point. Now, though these temperatures be stated, opposite to some of the articles, to fractions of a thermometric degree, it must be observed, that various circumstances modify the concreting point of the liquids, through several degrees; but the liquefying points of the same bodies, when once solidified, are uniform and fixed to the preceding temperatures.

Water, all crystallisable solutions, and the three metals, cast-iron, bismuth, and antimony expand considerably in volume, at the instant of solidification. The greatest obstacles cannot resist the exertion of this expansive force. Thus, glass bottles, trunks of trees, iron and lead pipes, even mountain rocks, are burst by the dilatation of the water in their cavities, when it is converted into ice. In the same way our pavements are raised in winter. Major Williams of Quebec burst bombs, which were filled with water and plugged up, by exposing them to a freezing cold. The beneficial operation of this cause is exemplified in the comminution or loosening the texture of dense clay soils, by the winter's frost, whereby the delicate fibres of plants can easily penetrate them.

There is an important circumstance occurs in the preceding experiments on the sudden congelation of a body kept liquid below its usual congealing temperature, to which we must now advert. The mass, at the moment its crystallisation commences, rises in temperature to the term marked in the preceding table, whatever number of degrees it may have previously sunk below it. Suppose a globe of water suspended in an atmosphere at 21° Fahrenheit; the liquid will cool and remain stationary at this temperature, till vibration of the vessel, or contact of a spicula of ice, determines its concretion, when it instantly becomes 11° hotter than the surrounding medium. We owe the explanation of this fact, and its extension to many analogous chemical phenomena, to the sagacity of Dr. Black. His truly philosophical mind was particularly struck by the slowness with which a mass of ice liquefies when placed in a genial atmosphere. A lump of ice at 22° freely suspended in a room heated at 50°, which will rise to 32° in five minutes, will take 14 times 5, or seventy minutes to melt into water, whose temperature will be only 32°. Dr. Black suspended in an apartment two glass globules of the same size alongside of each other, one of which was filled with ice at 32°, the other with water at 33°. In half an hour the water had risen to 40°; but it took ten hours and a half to liquefy the ice, and heat the resulting water to 40°. Both these experiments concur, therefore, in showing that the fusion of ice is accompanied with the expenditure of 140° of calorific energy, which have no effect on the thermometer. For the first experiment tells us that 10° of heat entered the ice in the space of five minutes, and yet fourteen times that period passed in its liquefaction. The second experiment shows that 7° of heat entered the globes in half an hour; but twenty-one half hours were required for the fusion of the ice, and for heating of its water to 40°. If from the product of 7 into 21 = 147, we subtract the 7° which the water was above 33°, we have 140° as before. But the most simple and decisive experiment is to mingle a pound of ice in small fragments with a pound of water at 172°. Its liquefaction is instantly accomplished, but the temperature of the mixture is only 32°. Therefore, 140° of heat seem to have disappeared. Had we mixed a pound of ice-cold water with a pound of water at 172°, the resulting temperature would have been 102°, proving that the 70°

which had left the hotter portion, were manifestly transferred to that which was cooler. The converse of the preceding experiments may also be demonstrated; for on suspending a flask of water, at 35° for example, in an atmosphere at 20°, if it cool to 32° in three minutes, it will take 140 minutes to be converted into ice of 32°; because the heat, emanating at the rate of 1° per minute, it will require that time for 140° to escape. The latter experiment, however, from the inferior conducting power of ice, and the uncertainty when all is frozen, is not susceptible of the precision which the one immediately preceding admits. The tenth of 140 is obviously 14; and hence we may infer, that when a certain quantity of water, cooled to 22°, or 10° below 32°, is suddenly caused to congeal, 1-14th of the weight will become solid. We thus understand how the thaw which supervenes after an intense frost, should so slowly melt the wreaths of snow and beds of ice, a phenomenon observable in these latitudes from the origin of time, but whose explanation was reserved for Dr. Black. Indeed, had the transition of water from its solid into its liquid state not been accompanied by this great change in its relation to heat, every thaw would have occasioned a frightful inundation, and a single night's frost would have solidified our rivers and lakes. Neither animal nor vegetable life could have subsisted under such sudden and violent transitions.

Drs. Irvine, father and son, to both of whom the science of heat is deeply indebted, investigated the proportion of caloric disengaged by several other bodies in their passage from the liquid to the solid state, and obtained the following results:—

	Caloric of liquidity.	Do. referred to the specific heat of water.
Sulphur	143·68	27·14
Spermaceti	145·	
Lead	162·	5·6
Bees' wax	175·	
Zinc	493·	48·3
Tin	500·	33·
Bismuth	550·	23·25

The quantities in the second column are the degrees by which the temperatures of each of the bodies, in its solid state, would have been raised by the heat disengaged during its concretion. An exception must be made for wax and spermaceti; which are supposed to be in the fluid state, when indicating the above elevation.

Dr. Black supposed that the new relation to heat which solids acquire by liquefaction was derived from the absorption, and intimate combination, of a portion of that fluid, which, thus employing all its repulsive energies in subduing the stubborn force of cohesion, ceased to have any thermometric tension, or to be perceptible to our senses. He termed this supposed quantity of caloric, their latent heat; a term very convenient and proper, while we regard it simply as expressing the relation which the calorific agent bears to the same body in its fluid and solid states. To the presence of a certain portion of latent or combined heat in solids, Dr. Black ascribed their peculiar degrees of softness, toughness, malleability. Thus we know that the condensation of a metal by the hammer, or under the die, never fails to render it brittle, while, at the same time, heat is disengaged. Berthollett subjected equal pieces of copper and silver to repeated strokes of a fly press. The elevation of their temperature, which was considerable by the first blow, diminished greatly at each succeeding one, and became insensible whenever the condensation of volume ceased. The copper suffered greatest condensation, and evolved most heat. Here the analogy of a sponge, yielding its water to pressure, has been employed to illustrate the materiality of heat supposed deducible from these experiments. But the phenomenon may be referred to the intestine actions between the ultimate particles which must accompany the violent dislocation of their attracting poles. The cohesiveness of the metal is greatly impaired.

The equilibrium between the attractive and repulsive forces, which constitutes the liquid condition of bodies, is totally subverted by a definite elevation of temperature, when the external compressing forces do not vary. The transition from the liquid state into that of elastic fluidity, is usually accompanied with certain explosive movements, termed ebullition. The peculiar temperature at which different liquids undergo this change is therefore called their boiling point; and the resulting elastic fluid is termed a vapor, to distinguish it from a gas, a substance permanently elastic, and not condensable as vapors are, by moderate degrees of refrigeration. It is evident that when the attractive forces, however feeble in a liquid, are supplanted by strong repulsive powers, the distances between the particles must be greatly enlarged. Thus a cubic inch of water at 40° becomes a cubic inch and 1-25th on the verge of 212°, and at 212° it is converted into 1694 cubic inches of steam. The existence of this steam indicates a balance between its elastic force and the pressure of the atmosphere. If the latter be increased beyond its average quantity, by natural or artificial means, then the elasticity of the steam will be partially overcome, and a portion of it will return to the liquid condition. And conversely, if the pressure of the air be less than its mean quantity, liquids will assume elastic fluidity by a less intensity of calorific repulsion, or at a lower thermometric tension. Professor Robison performed a set of ingenious experiments, which appear to prove, that when the atmospheric pressure is wholly withdrawn, that is, in vacuo, liquids become elastic fluids 124° below their usual boiling points. Hence, water in vacuo will boil and distil over at 212°—124 = 88° Fahrenheit. This principle was long ago employed by the celebrated Watt, in his researches on the steam-engine, and has been recently applied in a very ingenious way by Mr. Tritton in his patent still (Phil. Mag. vol. 51),

and Mr. Barry, in his evaporator for vegetable extracts (Med. Chir. Trans. vol. 10).

On the same principle of the boiling varying with the atmospheric pressure, the Rev. Mr. Wollaston has constructed his beautiful thermometric barometer for measuring heights. He finds that a difference of 1° in the boiling point of water is occasioned by a difference of 0·589 of an inch on the barometer. This corresponds to nearly 520 feet of difference of elevation. By using the judicious directions which he has given, the elevation of a place may thus be rigorously determined, and with great convenience. The whole apparatus weighing twenty ounces, packs in a cylindrical tin case, two inches diameter, and ten inches long.

When a vessel containing water is placed over a flame, a hissing sound or simmering is soon perceived. This is ascribed to the vibrations occasioned by the successive vaporisation and condensation of the particles in immediate contact with the bottom of the vessel. The sound becomes louder as the liquid is heated, and terminates in ebullition. The temperature becomes now of a sudden stationary when the vessel is open, however rapidly it rose before, and whatever force of fire be applied. Dr. Black set a tin cup full of water at 50°, on a red hot iron plate. In four minutes it reached the boiling point, and in twenty minutes it was all boiled off. From 50° to 212°, the elevation is 162°; which interval, divided by 4, gives 40½° of heat, which entered the tin cup per minute. Hence twenty minutes, or 5 × 4 multiplied into 40½ = 810, will represent the quantity of heat that passed into the boiling water to convert it into a vapor. But the temperature of this is still only 212°. Hence, according to Black, these 810° have been expended solely in giving elastic tension, or, according to Irvine, in supplying the vastly increased capacity of the aëriform state; and therefore they may be denominated latent heat, being insensible to the thermometer. The more exact experiments of Mr. Matt have shown, that whatever period be assigned for the heating of a mass of water from 50° to 212°, six times this period is requisite with a uniform heat for its total vaporisation. But 6 × 162° = 972 = the latent heat of steam; a result which accords with Dr. Ure's experiments made in a different way. Every attentive operator must have observed the greater explosive violence and apparent difficulty of the ebullition of water exposed to a similar heat in glass, than in metallic vessels. M. Gay Lussac has studied this subject with his characteristic sagacity. He discovered that water boiling in a glass vessel has a temperature of 214·2°, and in a tin vessel contiguous to it, of only 212°. A few particles of pounded glass thrown into the former vessel, reduced the thermometer plunged in it to 212·6, and iron filings to 212°. When the flame is withdrawn for a few seconds from under a glass vessel of boiling water, the ebullition will recommence on throwing in a pinch of iron filings.

The following is a tabular view of the boiling points by Fahrenheit's scale of the most important liquids, under a mean barometrical pressure of thirty inches:—

		Boiling points.
Ether, sp. gr. 0·7365 at 48° G.	Lussac	100°
Carburet of sulphur	do	113
Alcohol, sp. gr. 0·813	Ure.	173·5
Nitric acid 1·500	Dalton.	210
Water		212
Saturated sol. of Glaub. salt,	Biot.	213⅓
Do. do. sugar of lead	do.	215⅔
Do. sea salt	do.	224⅓
Muriate of lime 1 + water 2	Ure.	230
Do. 35·5 + do. 64·5	do	235
Do. 40·5 + do. 59·5	do.	240
Muriatic acid 1·094	Dalton.	232
Do. 1·127	do.	222
Do. 1·047	do.	222
Nitric acid 1·45	do.	240
Do. 1·42	do.	248
Do. 1·40	do.	247
Do. 1·35	do.	242
Do. 1·30	do.	236
Do. 1·16	do.	220
Rectified petroleum	Ure.	306
Oil of turpentine	do.	316
Sulphuric acid, sp. gr. 1·30 +	Dalton.	240
Do. 1·408	do.	260
Do. 1·520	do.	290
Do. 1·650	do.	350
Do. 1·670	do.	360
Do. 1·699	do.	374
Do. 1·730	do.	391
Do. 1·780	do.	435
Do. 1·810	do.	473
Do. 1·819	do.	487
Do. 1·827	do.	501
Do. 1·833	do.	515
Do. 1·842	do.	545
Do. 1·847	do.	575
Do. 1·848	do.	590
Do. 1·849	do.	605
Do. 1·850	do.	620
Do. 1·848	Ure.	600
Phosphorus		554
Sulphur		570
Linseed oil		640
Mercury (Dulong, 662°)		656

These liquids emit vapors, which, at their respective boiling points, balance a pressure of the atmosphere equivalent to thirty vertical inches of mercury. But at inferior temperatures they yield vapors of inferior elastic power.

Mr. W. Creighton of Soho communicated, in March 1819, to the Philosophical Magazine, the following ingenious formula for aqueous vapor. Let the degrees of Fahrenheit × 85 = D, and the corresponding force of steam in inches of mercury — 0·09 = I. Then log. D — 2·22679 × 6 = log. I.

EXAMPLE.

212° + 85 = 297 log. = 2·47276
— 2·22679 constant number.

0·24579
× 6

Log. 1·47582 = 29·91 = I
+ 0·09

Inches 30·00 D.

He then gives a satisfactory tabular view of the near correspondences between the results of his formula, and by experiments.

M. Gay Lussac, by determining experimentally the volume of vapor which a given volume of liquid can produce at 212°, has happily solved the very difficult problem of the specific gravity of vapors. He took a spherule of thin glass, with a short capillary stem, and of a known weight. He filled it with the peculiar liquid, hermetically sealed the orifice, and weighed it. Deducting from its whole weight the known weight of the spherule, he knew the weight, and from its specific gravity the bulk of the liquid. He filled a tall graduated glass receiver, capable of holding about three pints, with mercury, inverted it in a basin, and let up the spherule. The receiver was now surrounded by a bottomless cylinder, which rested at its lower edge in the mercury of the basin. The interval between the two cylinders was filled with water. Heat was applied by means of a convenient bath, till the water and the included mercury assumed the temperature of 212°. The expansible liquid had ere this burst the spherule, expanded into vapor, and depressed the mercury. The height of the quicksilver column in the graduated cylinder above the level of the basin, being observed, it was easy to calculate the volume of the incumbent vapor. The quantity of liquid used was always so small, that the whole of it was converted into vapor.

The following exhibits the specific gravities as determined by the above method :—

	Spec. Gr. Air at 212°, = 1.		Boiling point, Fahrenheit.
Vapor of water	0·62349		212°
Hydroprussic acid .	0·94760		79·7
Absolute alcohol . .	1·6050		173
Sulphuric ether . .	2·5860		96
Hydriodic ether . .	5·4749		148
Oil of turpentine .	5 0130		316
Carburet of sulphur .	2·6447		116
Muriatic ether . .	2·2190	Thenard	52

The above specific gravities are estimated under a barometric pressure of 29·92 inches.

It appears, that a volume of water at 40° forms 1694 volumes of steam at 212°. The subsequent increase of the volume of steam, and of other vapors, out of the contact of their respective liquids, we formerly stated to be in the ratio of the expansion of gases, forming an addition to their volume of three-eighths for every 180° Fahrenheit. We can now infer, both from this expansion of one measure into 1694, and from the table of the elastic forces of steam, the explosive violence of this agent at still higher temperatures, and the danger to be apprehended from the introduction of water into the close moulds in which melted metal is to be poured. Hence, also, the formidable accidents which have happened, from a litttle water falling into heated oils. The little glass spherules, called candle bombs, exhibit the force of steam in a very striking manner; but the risk of particles of glass being driven into the eye, should cause their employment to be confined to prudent experimenters. Mr. Watt estimated the volumes of steam resulting from a volume of water at 1800; and in round numbers at 1728; numbers differing little from the above determination of M. Gay Lussac. Desagulier's estimate of 14,000 was therefore extravagant.

It has been already mentioned, that the caloric of fluidity in steam surpasses that of an equal weight of boiling water by about 972°. This quantity, or the latent heat of steam, as it is called, is most conveniently determined, by transmitting a certain weight of it into a given weight of water, at a known temperature, and, from the observed elevation of temperature in the liquid, deducing the heat evolved during condensation. Dr. Black, Mr. Watt, Lavoisier, count Rumford, Clement, and Desormes, as well as Dr. Ure have published observations on the subject.

'Aqueous vapor of an elastic force balancing the atmospheric pressure,' says Dr. Ure, 'has a specific gravity compared to air, by the accurate experiments of M. Gay Lussac, of 10 to 16. For facility of comparison, let us call the steam of water unity, or 1·00; then the specific gravity of the vapor of pure ether is 4·00, while the specific gravity of the vapor of absolute alcohol is 2·60. But the vapor of ether, whose boiling point is not 100°, but 112°, like the above ether, contains some alcohol; hence we must accordingly diminish a little the specific gravity number of its vapor. It will then become, instead of 4·00, 3·55. Alcohol of 0·825 specific gravity contains much water; specific gravity of its vapor 2·30. That of water, as before unity, 1·00. The interstitial spaces in these vapors will therefore be inversely as these numbers, or $\frac{1}{355}$ for ether, $\frac{1}{230}$ for alcohol, $\frac{1}{100}$ for water. Hence, $\frac{1}{355}$ of latent heat, existing in ethereal vapor, will occupy a proportional space, be equally condensed, or possess the same tension with $\frac{1}{230}$ in alcoholic, and $\frac{1}{100}$ in aqueous vapor. A small modification will no doubt be introduced by the difference of the thermometric tensions, or sensible heats, under the same elastic force. Common steam, for example, may be considered as deriving its total elastic energy from the latent heat multiplied into the specific gravity + the thermometric tension.

'Hence: the elastic force of the vapors of water, ether, and alcohol, are as follows :—

$$E_w = 970 \times 1{\cdot}00 + 212^\circ = 1182$$
$$E_e = 302 \times 3{\cdot}55 + 112^\circ = 1184$$
$$E_{al} = 440 \times 2{\cdot}30 + 175^\circ = 1185$$

Three equations, which yield, according to my general proposition, equal quantities. When the elastic forces of vapors are doubled, or when they sustain a double pressure, their interstices are proportionably diminished. We may consider them now as in the condition of vapors possessed of greater specific gravities. Hence the second portion of heat introduced to give double the elastic force, need not be equal to the first, in order to produce the double tension.

'This view accords with the experiments of Mr. Watt, alluded to in the beginning of the memoir. He found that the latent heat of steam is less when it is produced under a greater pressure, or in a more dense state; and greater when it is produced under a less pressure, or in a less dense state. Berthollet thinks this fact so unaccountable, that he has been willing to discard it altogether. Whether the view I have just opened, of the relation subsisting between the elastic force, density, and latent heat of different vapors, harmonise with chemical phenomena in general, I leave others to determine. It certainly agrees with that unaccountable fact. Whatever be the fate of the general law now respectfully offered, the statement of Mr. Watt may he implicitly received under the sanction of his acknowledged sagacity and candor.' *Ure's Researches on Heat*, pp. 54 & 55.

M. Clement inserted a pipe, connected with a steam boiler capable of bearing high pressure, into a given quantity of water at a certain temperature, contained in a bucket. He now turned the stop-cock on the pipe, and allowed a certain quantity of steam, at 212° Fahrenheit, to enter. He then noted the increase of temperature which the water had received. He repeated the experiment; only the steam in the boiler and that which issued through the pipe had been heated till its elasticity was double of that at 212°. As soon as the water in the bucket indicated, by its increase of volume, that the same quantity of steam had been condensed as in the first experiment, he shut the stop-cock and measured the temperature of the bucket. He found it to be the same as before. A third experiment with steam having an elastic force equal to three atmospheres, was next subjected to examination; and he found the same result. Hence he inferred, that equal weights of steam, incumbent over water, at whatsoever temperature, contain the same quantity of heat; or, in popular language, that the total heat of steam is a constant quantity: for, in proportion as the sensible heat augments, the latent or specific heat diminishes. On this proposition he has founded a luminous theory of steam engines, which, we hope, he will soon present to the world in his promised Traité de Chaleur.

As it is the vastly greater relation to heat which steam possesses above water that makes the boiling point of that liquid so perfectly stationary in open vessels, over the strongest fires, we may imagine that other vapors, which have a smaller latent heat, may not be capable, by their formation, of keeping the ebullition of their respective liquids at a uniform temperature. This variation of the boiling point has been observed actually to happen with oil of turpentine, petroleum, and sulphuric acid. When these liquids are heated briskly in apothecaries' phials, they rise 20° or 30° above the ordinary point at which they boil in hemispherical capsules. Hence, also, their vapors, being generated with little heat, are apt to rise with explosive violence. Oil of turpentine varies, moreover, in its boiling point, according to its freshness and limpidity. It is needless therefore to raise an argument on a couple of degrees of difference. But, in Dr. Murray's, and in all our other chemical systems, published prior to 1817, 560° was assigned as the boiling point of this volatile oil. Mr. Dalton's must be excepted, for he says, 'several authors have it, that oil of turpentine boils at 560°.'

Mr. Darwin has explained the production of snow on the tops of the highest mountains, by the precipitation of vapor from the rarefied air which ascends from plains and valleys. 'The Andes,' says Sir H. Davy, 'placed almost under the line, rise in the midst of burning sands; about the middle height is a pleasant and mild climate; the summits are covered with unchanging snows; and these ranges of temperature are always distinct: the hot winds from below, if they ascend, become cooled in consequence of expansion; and the cold air, if by any force of the blast it is driven downwards, is condensed, and rendered warmer as it descends.'

Evaporation and rarefaction, the grand means employed by nature to temper the excessive heats of the torrid zone, operate very powerfully among mountains and seas. But the level sands are devoured by unmitigated heat. In milder climates, the fervors of the solstitial sun are assuaged by the vapors copiously raised from every river and field, while the wintry cold is moderated by the condensation of atmospheric vapors in the form of snow. The equilibrium of animal temperature is maintained by the copious discharge of vapor from the lungs and the skin. The suppression of this exhalation is a common cause of many formidable diseases. Among these, fever takes the lead. The ardor of the body, in this case of suppressed perspiration, sometimes exceeds the standard of health by six or seven degrees. The direct and natural means of allaying this morbid temperature were first systematically enjoined by Dr. Currie of Liverpool. He showed that the dashing or affusion of cold water on the skin of a fever patient, has most sanatory effects when the heat is steadily about 98°, and when there is no sensation of chillness, and no moisture on the surface. Topical refrigeration is elegantly procured, by applying a piece of muslin or tissue paper to any part of the skin, and moistening it with ether, carburet of sulphur, or alcohol. By pouring a succession of drops of ether on the surface of a thin glass tube containing water, a cylinder of ice may be formed at Midsummer.

The most convenient plan which the chemist can employ, to free a gas from vapor, is to pass

it slowly through a long tortuous tube wrapped in porous paper wetted with ether. On the other hand, when he wishes to expose his vessels to a regulated heat, he causes hot vapor to be condensed on their cold surface. The heat, thus disengaged from the vapor, passes into the vessel, and speedily raises it to a temperature which he can adjust with the nicest precision. A vapor bath ought therefore to be provided for every laboratory.

But the most splendid trophy erected to the science of caloric, is the steam-engine of Watt. This illustrious philosopher, from a mistake of his friend Dr. Robison, has been hitherto deprived of a part of his claims to the admiration and gratitude of mankind. The fundamental researches on the constitution of steam, which formed the solid basis of his gigantic superstructure, though they coincided perfectly with Dr. Black's results, were not drawn from them. In some conversations with Dr. Ure, a short period before his death, Mr. Watt described the simple, but decisive experiments, by which he discovered the latent heat of steam. His means and his leisure not then permitting an expensive and complex apparatus, he used apothecaries' phials. With these he ascertained the two main facts, first, that a cubic inch of water would form about a cubic foot of ordinary steam, or 1728 inches; and that the condensation of that quantity of steam would heat six cubic inches of water from the atmospheric temperature to the boiling point. Hence he saw that six times the difference of temperature, or fully 900° of heat, had been employed in giving elasticity to steam; which must be all abstracted before a complete vacuum could be procured under the piston of the steam-engine. These practical determinations he afterwards found to agree pretty nearly with the observations of Dr. Black. Though Mr. Watt was then known to the Dr. he was not on those terms of intimacy with him which he afterwards came to be, nor was he a member of his class.

Mr. Watt's three capital improvements, which seem to have nearly exhausted the resources of science and art, were the following: 1. The separate condensing chest, immersed in a body of cold water, and connected merely by a slender pipe with the great cylinder, in which the impelling piston moved. On opening a valve or stop-cock of communication, the elastic steam, which had floated the ponderous piston, rushed into the distant chest with magical velocity, leaving an almost perfect vacuum in the cylinder, into which the piston was forced by atmospheric pressure. What had appeared impossible to all previous engineers was thus accomplished. A vacuum was formed without cooling the cylinder itself. Thus it remained boiling hot, ready the next instant to receive and maintain the elastic steam. 2. His second grand improvement consisted in closing the cylinder at top, making the piston-rod slide through a stuffing box in the lid, and causing the steam to give the impulsive pressure, instead of the atmosphere. Henceforth the waste of heat was greatly diminished. 3. The final improvement was the double impulse, whereby the power of his engines, which was before so great, was in a moment more than doubled. The counter-weight required in the single-stroke engine, to depress the pump-end of the working beam, was now laid aside. He thus freed the machine from a dead weight or drag of many hundred pounds, which had hung upon it from its birth, about seventy years before.

The application of steam to heat apartments is another valuable fruit of these studies. Safety, cleanliness, and comfort, thus combine in giving a genial warmth for every purpose of private accommodation, or public manufacture. It has been ascertained that one cubic foot of boiler will heat about 2000 feet of space in a cotton mill, whose average heat is from 70° to 80° Fahr. And if we allow twenty-five cubic feet of a boiler for a horse's power, in a steam-engine supplied by it, such a boiler would be adequate to the warming of 50,000 cubic feet of space. It has been also ascertained, that one square foot of surface of steam pipe is adequate to the warming of 200 cubic feet of space. This quantity is adapted to a well finished ordinary brick or stone building. The safety valve on the boiler should be loaded with two pounds and a half for an area of a square inch, as is the rule for Mr. Watt's engines. Cast iron pipes are preferable to all others, for the diffusion of heat. Freedom of expansion must be allowed, which in cast iron may be taken at about a tenth of an inch for every ten feet in length. The pipes should be distributed within a few inches of the floor.

Steam is now used extensively for drying muslins and calicoes. Large cylinders are filled with it, which, diffusing in the apartment a temperature of 100° or 130°, rapidly dry the suspended cloth. Occasionally the cloth is made to glide in a serpentine manner closely round a series of steam cylinders, arranged in parallel rows. It is thus safely and thoroughly dried in the course of a minute. Experience has shown that bright dyed yarns like scarlet, dried in a common stove heat of 128°, have their color darkened, and acquire a harsh feel; while similar hanks, laid on a steam pipe heated up to 165° retain the shade and lustre they possessed in the wetted state. The people who work in steam drying-rooms are healthy; those who were formerly employed in the stove-heated apartments became soon sickly and emaciated. These injurious effects must be ascribed to the action of cast iron, at a high temperature, on the atmosphere. The heating by steam of large quantities of water or other liquids, either for baths or manufactures, may be effected in two ways: that is, the steam pipe may be plunged with an open end into the water cistern; or the steam may be diffused around the liquid in the interval between the wooden vessel and an interior metallic case. The second mode is of universal applicability. Since a gallon of water in the form of steam will heat six gallons at 50°, up to the boiling point, or 162°; one gallon of the former will be adequate to heat eighteen gallons of the latter up to 100°, making a liberal allowance for waste in the conducting pipe. But see our article STEAM.

HEATH, *n. s.* HEATH'-COCK, *n. s.* HEATH'-PEASELING, HEATH'-POUT, *n. s.* HEATH'-ROSE, *n. s.* HEATH'Y, *adj.* Lat. *erica*; Teut. and Belgic *heide*; à Greek *αιθω*, to burn. Minsheu. Heath, an evergreen shrub of low stature; a place overgrown with heath; a place covered with shrubs: heathcock, a fowl that frequents heaths: heath-peaseling, a species of vetch: heath-pout, a bird: heath-rose, a plant.

Say, from whence
You owe this strange intelligence? or why,
Upon this blasted *heath* you stop our way
With such prophetick greeting? *Shakspeare.*

Some woods of oranges, and *heaths* of rosemary, will smell a great way into the sea. *Bacon.*

Cornwall hath quail, rail, partridge, pheasant, *heath-cock*, and powte. *Carew's Survey.*

Health and long life have been found rather on the peak of Derbyshire, and the *heaths* of Staffordshire, than fertile soils. *Temple.*

Not *heath-pout*, or the rarer bird
Which Phasis or Ionia yields,
More pleasing morsels would afford
Than the fat olives of my fields. *Dryden.*

In Kent they cut up the *heath* in May, burn it, and spread the ashes. *Mortimer's Husbandry.*

This sort of land they order the same way with the *heathy* land. *Id.*

Oft with bolder wing they soaring dare
The purple *heath*. *Thomson.*

HEATH (Benjamin), L.L.D., an eminent lawyer, town clerk of Exeter, and author of several learned works, was educated at Oxford, where he took his degree in civil law, 31st of March 1762. He wrote, 1. An Essay towards a demonstrative Proof of the Divine Existence, Unity, and Attributes; to which is premised, A short Defence of the Argument commonly called à priori, 1740. 2. Notæ sive Lectiones, ad opera Tragicorum Græcorum veterum, Æschyli, &c. 1752, 4to., a work which places the author's learning and critical skill in a very conspicuous light. 3. The Case of the County of Devon with respect to the Consequences of the New Excise Duty on Cyder and Perry. Published by the direction of a Committee appointed at a General Meeting of that County to superintend the Application for the Repeal of that Duty, 1763, 4to. 4. A Revisal of Shakspeare's Text, wherein the alterations introduced into it by the more modern editors and critics are particularly considered: 8vo. 1765.

HEATH (James), an English historian, born in 1629 at London; where his father, who was the king's cutler, lived. He was educated at Westminster school, and became a student of Christ Church, Oxford, in 1646. In 1648 he was ejected by the parliamentary visitors for his adherence to the royal cause; and then marrying, was obliged to write books and correct the press to maintain his family. He died of a consumption and dropsy at London in August 1664, and left several children. His chief works were, 1. A brief Chronicle of the late Intestine War in the three kingdoms of England, Scotland, and Ireland, &c., 1661, 8vo.; afterwards enlarged, and completed from 1637 to 1663, in 4 parts, 1663, in 8vo. To this was again added a continuation from 1663 to 1675, by John Philips, nephew to Milton, 1676, folio. 2. Flagellum: or The Life and Death, Birth and Burial, of Oliver Cromwell, 1663. The third edition came out with additions in 1665, 8vo. 3. A New Book of Loyal English Martyrs and Confessors, who have endured the Pains and Terrors of Death, Arraignment, &c., for the Maintenance of the just and legal Government of these Kingdoms both in Church and State, 1663, 12mo. Heath, who perhaps had nothing but pamphlets and newspapers to compile from, frequently relates facts that throw light upon the history of those times, which Clarendon, though he drew every thing from the most authentic records, has omitted.

HEATHCOTE (Ralph), D.D., a learned English divine of considerable abilities, born in 1721. He was educated and graduated at Cambridge. He wrote, 1. A Treatise against the Hutchinsonians; 2. A Sketch of Lord Bolingbroke's Philosophy; 3. Sylva, or the Wood: and several other pieces.

HEA'THEN, *n. s.* & *adj.* HEA'THENISH, *adj.* HEA'THENISHLY, *adv.* HEA'THENISM, *n. s.* Teut. *heyden*; Swed. and Dan. *heden*; of Greek *εθνικος*, *εθνος*. The Gentiles; nations as yet unacquainted with Christianity: paganism: wild, savage, rapacious, cruel, untaught.

Deliver us from the *heathen*, that we may give thanks to thy holy name. 1 *Chron.* xvi. 35.

Under an *hethen* castel at the last,
(Of which the name in my text I not find)
Custance and eke her child the see up cast.
Almighty God, that saved all mankind,
Have on Custance and on hire child some mind,
That fallen is in *hethen* hond eftsone
In point to spill, as I shall tell you sone
Chaucer. The Man of Lawes Tale.

The Moors did tread under their *heathenish* feet whatever little they found yet there standing. *Spenser.*

When the apostles of our Lord and Saviour were ordained to alter the laws of *heathenish* religion, chosen they were, St. Paul excepted; the rest unschooled altogether, and unlettered men. *Hooker.*

If the opinions of others whom we think well of, be a ground of assent, men have reason to be *heathens* in Japan, Mahometans in Turkey, papists in Spain, and protestants in England. *Locke.*

In a paper of morality, I consider how I may recommend the particular virtues I treat of, by the precepts or examples of the ancient *heathens*. *Addison.*

That execrable Cromwell made a *heathenish* or rather inhuman edict against the episcopal clergy, that they should neither preach, pray in publick, baptize, marry, bury, nor teach schools. *South.*

HEATHENS. See MYSTERIES, MYTHOLOGY, and POLYTHEISM.

HEATHFIELD, Lord. See ELIOTT.

HEATH-PEAS. See OROBUS.

HEATOTOTL, in ornithology, the name of an American bird, described by Nierembeng, and called also avis venti. It is remarkable for a very large and round crest of whitish feathers on its head. Its breast is of a brownish-gray; its belly white, and its feet yellow; its tail is round when expanded, and is variegated with black and white; its back and wings are black.

HEAVE, *v. a.*, *v. n.*, & *n. s.* } Pret. heaved,
HEAVE'-OFFERING, *n. s.* } anciently hove; part. heaved, or hoven; Sax. *heavian*; Ger. *heben*, from the absolute particle *ha*, signifying high, which is the radical meaning of the word; and thus to heave is to lift, carry, raise, cause to swell, to force up from the breast, to exalt, to puff or elate, to pant, to labor, to keck, to feel a tendency to vomit; heave, an exertion, lift, struggle, &c.; heave-offering, an offering amongst the Jews.

Ye shall offer a cake of the first of your dough for an *heave-offering*, as ye do the *heave-offering* of the threshing floor. *Numbers.*

There nas no dore, that he nolde *heve* of barre
Or breke it at a renning with his hede
Chaucer. Prologue to Canterbury Tales.

So daunted, when the giant saw the knight,
His heavy hand he *heaved* up on high,
And him to dust thought to have battered quite.
Spenser.

Now we bear the king
Tow'rd Calais: grant him there; and there being seen,
Heave him away upon your winged thoughts
Athwart the sea. *Shakspeare.*

I cannot *heave*
My heart into my mouth. *Id.*

There's matter in these sighs; these profound *heaves*
You must translate; 'tis fit we understand them.
Id.

Made she no verbal quest?
Yes, once or twice she *heaved* the name of father
Pantingly forth, as if it prest her heart. *Id.*

The wretched animal *heaved* forth such groans;
That their discharge did stretch his leathern coat
Almost to bursting. *Id. As You Like It.*

'Tis such as you,
That creep like shadows by him, and do sigh
At each his needless *heavings*; such as you
Nourish the cause of his awaking. *Id.*

Poor shadow-painted queen!
One *heaved* on high, to be hurled down below.
Id.

The Scots, *heaved* up into high hope of victory, took the English for foolish birds fallen into their net, forsook their hill, and marched into the plain.
Hayward.

So stretched out huge in length the arch fiend lay,
Chained on the burning lake; nor ever thence
Had risen, or *heaved* his head, but that the will
And high permission of all-ruling heaven
Left him at large. *Milton.*

But, after many strains and *heaves*,
He got up to his saddle eaves. *Hudibras.*

Thou hast made my curdled blood run back,
My heart *heave* up, my hair to rise in bristles.
Dryden.

The wand'ring breath was on the wing to part;
Weak was the pulse, and hardly *heaved* the heart.
Id.

The holy priests gaze on her when she smiles,
And with *heaved* hands, forgetting gravity,
They bless her wanton eyes. *Id.*

None could guess whether the next *heave* of the earthquake would settle them on the first foundation, or swallow them. *Id.*

The groans of ghosts that cleave the earth with pain,
And *heave* it up: they pant and stick half way.
Id.

He died in fight;
Fought next my person, as in consort fought,
Save when he *heaved* his shield in my defence,
And on his naked side received my wound. *Id.*

He *heaves* for breath, which, from his lungs supplied,
And fetched from far, distends his lab'ring side.
Id.

No object affects my imagination so much as the sea or ocean: I cannot see the *heaving* of this prodigious bulk of waters, even in a calm, without a very pleasing astonishment. *Addison.*

Why dost thou frown upon me?
My blood runs cold, my heart forgets to *heave*,
And life itself goes out at thy displeasure.
Id. Cato.

Frequent for breath his panting bosom *heaves*. *Prior.*

The *heaving* tide
In widened circles beats on either side. *Gay.*

The glittering finny swarms,
That *heave* our friths and crowd upon our shores.
Thomson.

The church of England had struggled and *heaved* at a reformation ever since Wickliff's days.
Atterbury.

And souls immortal must for ever *heave*
At something great; the glitter, or the gold,
The praise of mortals, or the praise of Heaven.
Young.

Awaking with a start
The waters *heave* around me, and on high
The winds lift up their voices.
Byron. Childe Harold.

Thou glorious mirror, where the Almighty's form
Glasses itself in tempests; in all time,
Calm or convulsed—in breeze, or gale, or storm,
Icing the pole, or in the torrid clime
Dark *heaving*, boundless, endless, and sublime—
The image of Eternity. *Id.*

HEAV'EN, *n. s.*
HEAV'ENLY, *adj.* & *adv.*
HEAV'EN-WARD, *adv.*
HEAV'EN-BEGOT, *adj.*
HEAV'EN-BORN, *adj.*
HEAV'EN-BRED, *adj.*
HEAV'EN-BUILT, *adj.*
HEAV'EN-DIRECTED.

Sax. heofon, which seems to be derived from heofo, the places over head. See HEAVE. Heaven is a word especially connected with Christianity; the residence of the Almighty; in all its derivations properly applied only to moral and spiritual subjects; whilst celestial, as derived from *cælum*, is descriptive of the visible firmament, and applicable to many subjects illustrated in the heathen mythology, where heavenly would be evidently improper: it has, however, been used by authors without this distinction to denote the sky, the pagan gods, or whatever is high and exalted: the compounds are sufficiently obvious in their meanings.

Certes *heven* is yeven to hem that will labour, and not to idel folk. *Chaucer. The Persones Tale.*

——— the *heavenly* armitage
Which on a rock so high ystonds,
In strange se—out from all londs—
That, to maken the pilgrimage,
Is called a long perilous viage.
Id. Dreame.

Such were the goddesses which ye did see:
But that fourth mayed, which there amidst them traced,
Who can aread what creature mote she be;
Whether a creature, or a goddesse graced
With *heavenly* gifts from *heaven* first enraced.
Spenser. Faerie Queene.

It is a knell,
That summons thee to *heaven*, or to hell.
Shakspeare. Macbeth.

O, for a muse of fire, that would ascend
The brightest *heaven* of invention. *Shakspeare.*

Much is the force of *heaven-bred* poesy. *Id.*

A station like the herald Mercury,
New lighted on a *heaven*-kissing hill. *Id.*

Now *heaven* help him! *Id.*

Take physick, pomp;
Expose thyself to feel what wretches feel,
That thou may'st shake the superflux to them,
And show the *heavens* more just. *Id.*

They can judge as fitly of his worth,
As I can of those mysteries which *heaven*
Will not have earth to know. *Id.*

The words are taken more properly for the air and ether than for the *heavens*. *Raleigh's History.*

Thus they in *heaven*, above the starry sphere,
Their happy hours in joy and hymning spent.
Milton.

The will
And high permission of all-ruling *heaven*
Left him at large. *Id.*

Truth and peace and love shall ever shine
About the supreme throne
Of him, t'whose happy-making sight alone,
Our *heavenly* guided soul shall climb. *Id.*

These, the late
Heaven-banished host, left desert utmost hell. *Id.*

All yet left of that revolted rout,
Heaven fallen, in station stood, or just array,
Sublime with expectation. *Id.*

Who would such men *heaven's* messengers believe,
Who from the sacred pulpit dare deceive? *Marvell.*

As the love of *heaven* makes one *heavenly*, the love of virtue virtuous, so doth the love of the world make one become worldly. *Sidney.*

The prophets were taught to know the will of God, and thereby instruct the people, and enabled to prophesy, as a testimony of their being sent by *heaven*.
Temple.

Some fires may fall from *heaven*. *Id.*

Priesthood, that makes a merchandise of *heaven*!
Priesthood, that sells even to their prayers and blessings,
And force us to pay for our own cos'nage!
Dryden.

Thy race in time to come
Shall spread the conquests of imperial Rome;
Rome, whose ascending towers shall *heaven* invade,
Involving earth and ocean in her shade. *Id.*

Heavens! what a spring was in his arm, to throw!
How high he held his shield, and rose at every blow.
Id.

If I am *heaven-begot*, assert your son
By some sure sign. *Id.*

Adoring first the genius of the place,
Then earth, the mother of the *heavenly* race. *Id.*

If once a fever fires his sulphurous blood,
In every fit he feels the hand of God,
And *heaven-born* flame. *Id. Juvenal.*

This act, with shouts *heaven* high, the friendly band
Applaud. *Id.*

Not Maro's muse, who sung the mighty man;
Nor Pindar's *heavenly* lyre, nor Horace when a swan.
Id.

TAMERLANE. The world!—'twould be too little for thy pride!
Thou would'st scale *heaven*.

BAJAZET. I would:—Away! my soul
Disdains thy conference. *Rowe's Tamerlane.*

I prostrate lay,
By various doubts impelled, or to obey,
Or to object; at length, my mournful look,
Heavenward erect, determined, thus I spoke.
Prior.

Last night (I vow to *Heaven* 'tis true)
Bounce from the fire a coffin flew. *Gay.*

O sacred weapon; left for truth's defence;
To all but *heaven-directed* hands denied:
The muse may give it, but the gods must guide.
Pope.

His arms had wrought the destined fall
Of sacred Troy, and razed her *heaven-built* wall.
Id.

Oh! *heaven-born* sisters! source of art!
Who charm the sense, or mend the heart;
Who led fair Virtue's train along,
Moral truth, and mystick song! *Id.*

Who taught that *heaven-directed* spire to rise? *Id.*

In these deep solitudes and awful cells,
Where *heavenly* pensive Contemplation dwells,
And ever-musing Melancholy reigns,
What means this tumult in a vestal's veins? *Id.*

Heaven gives us friends to bless the present scene;
Resumes them, to prepare us for the next. *Young.*

When Juno's charms the prize of beauty claim,
Shall aught in earth, shall aught in *heaven* contend?
Beattie.

All *heaven* and earth are still—though not in sleep,
But breathless, as we grow when feeling most;
And silent, as we stand in thoughts too deep:—
All *heaven* and earth are still: From the high host
Of stars, to the lulled lake and mountain-coast,
All is concentered in a life intense.
Byron. Childe Harold.

HEAVEN, among Christian divines and philosophers, is considered as a place in which the omnipresent Deity affords a nearer and more immediate view of himself, and a more sensible manifestation of his glory, than in the other parts of the universe. This is often called the empyrean heaven, from that splendor with which it is supposed to be invested; and of this place the inspired writers give us the most noble and magnificent descriptions.

HEAVEN, among Pagans, was considered as the residence only of the celestial gods, into which no mortals were admitted after death, unless they were deified. As for the souls of good men, they were consigned to the Elysian fields. See ELYSIUM.

HEAVEN, in astronomy, called also the æthereal and starry heaven, is that immense region wherein the stars, planets, and comets, are disposed. See ASTRONOMY. This is what Moses calls the firmament, speaking of it as the work of the second day's creation; at least it is thus the word רקיע is usually rendered by his interpreters, though somewhat improperly, arising from the ancient notion of the heavens being firm or solid. But the word properly signifies no more than expanse or extension; a term very well adapted by the sacred historian to the impression which the heavens make on our senses; whence, in other parts of Scripture, the heaven is compared to a curtain, or a tent stretched out to dwell in. The LXX first added to this idea of expansion that of firm or solid; rendering it by στερεωμα, according to the philosophy of those times; in which they have been very injudiciously followed by the modern translators. Des Cartes,

Kircher, &c., demonstrated this heaven not to be solid but fluid; but they still supposed it full, or perfectly dense, without any vacuity, and cantoned out into many vortices. But others have overturned, not only the solidity, but the supposed plenitude of the heavens. Sir Isaac Newton has abundantly shown the heavens void of almost all resistance, and, consequently, of almost all matter: this he proves from the phenomena of the celestial bodies; from the planets persisting in their motions without any sensible diminution of their velocity; and the comets freely passing in all directions towards all parts of the heavens. Heaven, taken in a general sense, for the whole expanse between our earth and the remotest regions of the fixed stars, may be divided into two very unequal parts, according to the matter found therein; viz. the atmosphere, or aerial heaven, possessed by air; and the æthereal heaven, possessed by a thin, unresisting medium, called æther. Heaven is also used, in astronomy, for an orb, or circular region, of the æthereal heaven. The ancient astronomers supposed as many different heavens as they observed motions therein. These they supposed all to be solid, as thinking they could not otherwise sustain the bodies fixed in them; and spherical, that being the most proper form for motion. Thus they had seven heavens for the seven planets; viz. the heavens of the Moon, Mercury, Venus, the Sun, Mars, Jupiter, and Saturn. The eighth was for the fixed stars, which they called the firmament. Ptolemy adds a ninth heaven, which he called the primum mobile. Two crystalline heavens were added by king Alphonsus X., &c., to account for some irregularities in the motions of the other heavens: and, lastly, an empyrean heaven was drawn over the whole, for the residence of the Deity; which made the number twelve. But others admitted many more heavens, according as their different views and hypotheses required. Eudoxus supposed twenty-three, Callippus thirty, Regiomontanus thirty-three, Aristotle forty-seven, and Fracastor no less than seventy. The astronomers, however, did not much concern themselves whether the heavens they thus allowed of were real or not; provided they served a purpose in accounting for any of the celestial motions, and agreed with the phenomena.

HEAV'ILY, *adv.* } Sax. þeaꝼiȝ; Teut. *hevig.*
HEAV'INESS, *n. s.* } The primary idea is
HEAV'Y, *adj.* & *adv.* } weight, and is opposed to whatever is light, airy, cheerful; as depressed; dull; drowsy; oppressive; burdensome; sluggish; indigestible; rich in soil when applied to lands; heavy, adverb for heavily.

Heaviness in the heart of man maketh it stoop; but a good word maketh it glad. *Prov.* xii. 25.

Ye greatly rejoice; though now for a season ye are in *heaviness*, through manifold temptations. 1 *Pet.* i. 6.

Menelaus bore an *heavy* hand over the citizens, having a malicious mind. 2 *Mac.* v. 23.

Nature, the vicaire of the almightie Lorde,
That hote and colde; *hevie*, light; moiste, and drie,
Hath knit, by even number of accorde,—
In esie voice, began to speke and saie.
Chaucer. The Assemblee of Foules.

And every comfort possible in this cas
They don to hire, with all hir besinesse,
Al for to make hire leve hire *hevinesse*.
Id. The Frankeleines Tale.

————Doughter, stint thin *hevinesse*.
Among the goddes highe it is affermed,
And by eterne word written and confermed,
Thou shalt be wedded unto on of tho,
That han for thee so mochel care and wo;
But unto which of hem I may not tell.
Id. The Knightes Tale.

We are, at the hearing of some, more inclined unto sorrow and *heaviness*; of some more mollified and softened in mind. *Hooker.*

I would not be accounted so base minded, or *heavy* headed, that I will confess that any of them is for valour, power, or fortune, better than myself. *Knolles.*

Let not your ears despise my tongue for ever,
Which shall possess them with the *heaviest* sound
That ever yet they heard. *Shakspeare. Macbeth.*

If the cause be not good, the king himself hath a *heavy* reckoning to make. *Id. Henry V.*

Pray for this good man, and for his issue,
Whose *heavy* hand hath bowed you to the grave,
And beggared yours for ever. *Shakspeare.*

Our strength is all gone into *heaviness*,
That makes the weight. *Id.*

But let thy spiders that suck up thy venom,
And *heavy* gaited toads lie in their way. *Id.*

I came hither to transport the tydings,
Which I have *heavily* borne. *Id.*

Against ill chances men are ever merry;
But *heaviness* foreruns the good event. *Id.*

Let us not burthen our remembrance with
An *heaviness* that's gone. *Id.*

Why looks your grace so *heavily* to-day?
—O, I have past a miserable night. *Id.*

This *heavy* headed revel, East and West,
Make us traduced, and taxed of other nations. *Id.*

Hearing that there were forces coming against him, and not willing that they should find his men *heavy* and laden with booty, he returned unto Scotland. *Bacon's Henry VII.*

The subject is concerning the *heaviness* of several bodies, or the proportion that is required betwixt any weight and the power which may move it. *Wilkins.*

Mersennus tells us, that a little child, with an engine of an hundred double pulleys, might move this earth, though it were much *heavier* than it is. *Id.*

Fair, tall, his limbs with due proportion joined;
But of a *heavy*, dull, degenerate mind. *Dryden.*

He would not violate that sweet recess,
And found besides a welcome *heaviness*,
Which seized his eyes. *Id.*

I put into thy hands what has been the diversion of some of my idle and *heavy* hours. *Locke.*

What means this *heaviness* that hangs upon me?
This lethargy that creeps through all my senses? *Addison.*

My *heavy* eyes, you say, confess
A heart to love and grief inclined. *Prior.*

Ease must be impracticable to the envious: they lie under a double misfortune; common calamities and common blessings fall *heavily* upon them. *Collier.*

A sensation of drousiness, oppression, *heaviness*, and lassitude, are signs of a too plentiful meal. *Arbuthnot.*

As Alexandria exported many commodities, so it received some, which, by reason of the fatness and *heaviness* of the ground, Egypt did not produce; such as metals, wood, and pitch. *Id.*

Such preparations as retain the oil or fat, are most *heavy* to the stomach, which makes baked meat hard of digestion. *Id.*

Chartres, at the levee,
Tells with a sneer the tyding *heavy*. *Swift.*

A work was to be done, a *heavy* writer to be encouraged, and accordingly many thousand copies were bespoke. *Id.*

When alone, your time will not be *heavy* upon your hands for want of some trifling amusement. *Id.*

But, hark!—that *heavy* sound breaks in once more,
As if the clouds its echo would repeat;
And nearer, nearer, deadlier than before!
Arm! arm! it is—it is—the cannon's opening roar.
Byron. Childe Harold.

HEB'DOMAD, *n. s.* } Lat. *hebdomas*. A
HEBDOM'ADAL, *adj.* } space of seven days;
HEBDOM'ADARY, *adj.* } weekly.

As for *hebdomadal* periods, or weeks, in regard of their sabbaths, they were observed by the Hebrews. *Browne.*

Computing by the medical month, the first *hebdomad*, or septenary, consists of six days, seventeen hours and a half. *Id.*

HEBDOMADARY, HEBDOMADARIUS, or HEBDOMADIUS, from Gr. ἑβδομας, seven; a member of a chapter or convent, whose week it is to officiate in the choir, to rehearse the anthems and prayers, and to perform the usual functions which the superiors perform at solemn feasts, and other extraordinary occasions. He generally collates to the benefices which become vacant during his week. In cathedrals, the hebdomadary was a canon or prebendary, who had the peculiar care of the choir, and the inspection of the officers for his week. In monasteries, he waits at table for a week, or other stated period; directs and assists the cook, &c.

HEBDOMAGENES, from ἑπτα, seven, and γεννησις, birth, a title of Apollo, so named from his being born on the seventh day of the month; whence the seventh days were held sacred to him. See HEBDOME.

HEBDOME, Gr. ἑβδομας, the seventh day, a solemnity of the ancient Greeks, in honor of Apollo, in which the Athenians sung hymns to his praise, and carried in their hands branches of laurel. It was observed on the seventh day of every lunar month.

HEBE, in ancient mythology, a goddess, the idea of whom, among the Romans, seems to have been that of eternal youth, or immortality of bliss. She is fabled to have been a daughter of Jupiter and Juno. According to some, she was the daughter of Juno only, who conceived her after eating lettuces. She was fair, and always in the bloom of youth, being the goddess of youth, and made by her mother cup-bearer to the gods. She was dismissed from her office by Jupiter, because she fell down in an indecent posture as she was pouring nectar to the gods at a grand festival; and Ganymede, his favorite, appointed cup-bearer in her place. She was employed by Juno to prepare her chariot, and to harness her peacocks. When Hercules was raised to the rank of a demi-god, he was reconciled to Juno by marrying Hebe, by whom he had two sons, Alexiares and Anicetus. As Hebe had the power of restoring gods and men to the vigor of youth, she, at the request of her husband, performed that kind office to his friend Iolaus. She was worshipped at Sicyon, under the name of Dia, and at Rome, under that of Juventas.

HEBENSTREIT (John Ernest), M. D., a learned physician, born at Leipsic in 1702. He wrote Carmen de usu Partium, and several other works; and died in 1756, aged fifty-four. His brother, John Christian Hebenstreit, was an eminent Hebraist.

HEBENSTRETIA, in botany, a genus of the angiospermia order, and didynamia class of plants; natural order forty-eighth, aggregatæ: CAL. emarginated, and divided below: COR. unilabiate; the lip rising upwards, and quadrifid: CAPS. dispermous; the stamina inserted into the margin of the limb of the corolla. Species eight, all natives of the Cape of Good Hope. The two best known in this country are H. dentata, having a striped white flower, and H. aurea, golden-flowered hebenstretia, with a rich yellow flower, peculiarly fragrant in an evening.

HEBER, the son of Salah, great-grand-son of Shem, and father of Peleg, from whom according, to Josephus, Eusebius, Jerome, Bede, and most of the interpreters of the sacred writings, the Hebrews derived their name, but Huet has attempted to prove that the Hebrews took their name from the word Heber, which signifies beyond, because they came from beyond the Euphrates. Heber lived 464 years, and is supposed to have been born A. A. C. 2281.

HEBERDEN (William), a learned physician, was born in London in the year 1710. Having received his early education in his native city, he was entered of St. John's College, Cambridge, in 1724; and, after a residence of six years, he was elected a fellow. From this time he devoted himself to the study of medicine, partly at Cambridge, and partly in the metropolis. After he had taken the degree of M. D. he settled at Cambridge, where he practised his profession during ten years, and gave lectures on the materia medica annually to the students in the university. While he resided here, we believe, he printed a little tract, entitled Αντιθηρίακα; An Essay on Mithridatium and Theriaca, 1745. This tract contained a history of these medicaments, and an exposure of the absurdity of employing such a medley of discordant simples. In 1748 Dr. Heberden removed to London, to the general regret of the university and town of Cambridge, where his professional skill and suavity of manners had obtained for him a high esteem. He had already been elected a fellow of the College of Physicians, and was shortly after admitted into the Royal Society. He soon rose to a considerable professional reputation, and enjoyed a large share of medical practice in the metropolis. To Dr. Heberden's suggestion the public is indebted for the publication of the Medical Transactions of the College of Physicians, the first volume of which appeared in 1768, and two others subsequently, in 1772 and 1785. Among the useful communications contained in these volumes, the papers of Dr. Heberden himself are most prominent in number and value. His account of a fatal disorder o. the chest, which he denominated angina pectoris, first called the attention of physicians to it, as an idiopathic disease; and the numerous cases of it

which have since been promulgated, evince its frequency and importance. Dr. Heberden communicated some other papers to the Royal Society, which were printed in its Transactions. For several years he enjoyed the rewards of a virtuous and temperate life in a healthy and peaceful old age, cheered by domestic enjoyments, and scientific and literary pursuits. He died calmly in 1801, after completing the ninetieth year of his age, and was buried in the parish church of Windsor.

HEBERT (James Rene), a chief of one of the revolutionary factions of France, was born at Alençon, in the department of the Orne, about 1755; and supported himself, previously to the revolution, as a cheque-taker at the theatre des Variétés. He was dismissed, it is said, for dishonesty; after which he lived with a physician, whom he robbed. In 1789 he commenced political demagogue, and attracted notice by a journal entitled Le Père Duchesne, which abused the court and the monarchy. On the 10th of August, 1792, he became one of the members of the municipality of Paris; and was soon after nominated deputy of the national agent of the commune: it was then that, connecting himself intimately with Chaumette and Pache, he employed all his influence in forwarding a project to establish the authority of the commune on the ruins of the national representation. The Hebertists now rejected the advances of the Orleans party, and separated from the Cordeliers, of whom they had hitherto formed a part. The Girondists, who were at that period contending against the Mountain party, had credit enough to procure the arrest of Hebert, May 24th, 1793. He was defended by Murat in the convention; the deputies of all the sections spoke in his favor at the bar on the 25th; and, on the 27th, after a tempestuous session, he was again restored to liberty. Prompted by revenge, he now assisted with all his power in the proscription of the Brissotins. Their downfall hastened his own. Danton and Robespierre suspended their mutual jealousies to accomplish his destruction; and Hebert, with the greater part of his associates, was arrested, and condemned to death, March 24th, 1794. Besides his journal, he was the author of other political pieces of a similar description: he was the author of some of the basest calumnies on the unfortunate queen of France.

HEB'ETATE, *v.a.* } Fr. *hebeter*; Lat. *hebeto.*
HEBETA'TION, *n. s.* } To dull; to blunt, or
HEB'ETUDE, *n. s.* } stupify: obtuseness; stupidity.

The pestilent seminaries, according to their grossness or subtilty, activity or *hebetude*, cause more or less truculent plagues. *Harvey.*

The eye, especially if *hebetated*, might cause the same perception. *Id.*

Beef may confer a robustness on the limbs of my son, but will *hebetate* and clog his intellectuals. *Arbuthnot and Pope.*

HE'BRAISM, *n. s.* } Fr. *hebraisme*; Lat.
HE'BRAIST, *n. s.* } *hebraismus.* A Hebrew
HEBRIC'IAN, *n. s.* } idiom, and the appellations of persons skilled in the Hebrew language.

The words are more properly taken for the air or ether than the heavens, as the best *Hebricians* understand them. *Raleigh.*

The nature of the Hebrew verse, as the meanest *Hebrician* knoweth, consists of uneven feet. *Peacham.*

Milton has infused a great many Latinisms, as well as Græcisms, and sometimes *Hebraisms*, into his poem. *Spectator.*

HEBREW BIBLE. See BIBLE.

HEBREW CHARACTERS. There are two kinds of Hebrew characters; the ancient or square, and the modern or Rabbinical characters.

HEBREW CHARACTER, ANCIENT, or the SQUARE HEBREW, takes this last denomination from the figure of its characters, which stand more square, and have their angles more exact than the other. This character is used in the text of Holy Scripture, and the principal and most important writings of the Jews. When both this and the rabbinical character are used, in the same work, the former is for the text, or the fundamental part; and the latter for the accessory part, as the gloss, notes, commentaries, &c. The best and most beautiful characters of this kind are those copied from the characters in the Spanish MSS.; next, those from the Italian MSS.; then those from the French; and, lastly, those of the Germans, whose characters are much the same, with respect to the other genuine square Hebrew characters, that the Gothic or Dutch characters are with respect to the Roman. Several authors contend that the square character is not the real ancient Hebrew character, written from the beginning of the language to the time of the Babylonish captivity; but that it is the Assyrian, or Chaldee character, which the Jews assumed, and accustomed themselves to, during the captivity, and retained afterwards. They say that the Jews, during their captivity, had quite disused their ancient character; so that Ezra found it necessary to have the sacred books transcribed into the Chaldean square character. These authors add, that what we call the Samaritan character, is the genuine ancient Hebrew. Of this opinion are Scaliger, Bochart, Casaubon, Vossius, Grotius, Walton, Capellus, &c., and, among the ancients, Jerome and Eusebius. On this side it is urged, that the present characters are called Assyrian by the ancient Jewish writers of the Talmud, and therefore must have been brought from Assyria; but to this argument it is replied, that there were two sorts of characters anciently in use, viz. the sacred or present square character, and the profane or civil, which we call Samaritan; and that the sacred is called Assyrian, because it first began in Assyria to come into common use. It is farther alleged, that the Chaldee letters, which the Jews now use, were unknown to the ancient Jews before the captivity, from Dan. i. 4. It is also inferred from 2 Kings xvii. 28, where it is said that a Jewish priest was sent to teach the Samaritans the worship of Jehovah; on which occasion he must have taught them the law; and yet no mention is made of his teaching them the language or character, that the law was then written in, the character which the Samaritans used. But the chief argument is taken from some ancient Jew-

ish shekels, with a legend on one side, The shekel of Israel, and on the other Jerusalem, the holy, both in Samaritan characters. These shekels, it is said, must have been coined before the division of the two kingdoms of Judah and Israel, or at least before the Assyrian captivity, because the Samaritans never afterwards reckoned Jerusalem holy. On the other side, or for the primitive antiquity of the square character, are the two Buxtorfs, Leusden, Calovius, Hottinger, Spanheim, Lightfoot, &c. They urge, from Matthew v. 18, that jod is really the least of the consonants in the present Hebrew, whereas it is one of the largest characters in the Samaritan alphabet: but Walton replies, that, if our Saviour here speaks of the least letter of the alphabet, we can only infer, that the Chaldee character was used in our Saviour's time, which is not denied by those who maintain the Samaritan to be the original. They also allege, that the Jews were too obstinate and superstitious to allow their sacred character to be altered; but, if this was done under the direction and authority of Ezra, the argument will be much invalidated. Farther, they say that Ezra could not alter the ancient character, because it was impossible to make the alterations in all their copies. This argument, however, is contradicted by facts; since the old English black letter is actually changed for the Roman. They say, likewise, that Ezra was not disposed to profane the sacred writings with a heathen character; but this supposes that Ezra was so superstitious as to imagine that there was some peculiar sanctity in the shape of the letters. Moreover, the advocates for this opinion appeal to ancient coins found in Judea, with a legend in the Chaldee or Assyrian character. But the genuineness of these coins is suspected. The learned Jesuit Souciet maintains, with great address, that the ancient Hebrew character is that found on the medals of Simon, and others, commonly called Samaritan medals; but which, he asserts, were really Hebrew medals, struck by the Jews, and not the Samaritans. Buxtorf endeavours to reconcile these two opinions, by producing a variety of passages, from the rabbies, to prove that both these characters were anciently used; the present square character being that in which the tables of the law, and the copy deposited in the ark, were written; and the other character being used in the copies of the law which were written for private and common use, and in civil affairs in general; and that, after the captivity, Ezra enjoined the former to be used by the Jews on all occasions, leaving the latter to the Samaritans and apostates. But it can hardly be allowed by any who consider the difference between the Chaldee and Samaritan characters, with respect to convenience and beauty, that they were ever used at the same time. After all, it is of no great moment which of these, or whether either of them, were the original characters; since it appears, that no change of the words has arisen from the manner of writing them, because the Samaritan and Jewish Pentateuch almost always agree after so many ages. It is most probable that the form of these characters has varied in different periods; this appears from the testimony of Montfaucon, in his Hexapla Origenis, vol. i. p. 22, &c., and is implied in Dr. Kennicot's making the characters in which MSS. are written one test of their age.

Hebrew Character, Modern, or the rabbinical Hebrew, is a good neat character, formed of the square Hebrew, by rounding it, and retrenching most of the angles or corners of the letters, to make it the more easy and flowing. The letters used by the Germans are very different from the rabbinical characters used every where else, though all formed alike from the square character, but the German in a more slovenly manner than the rest. The rabbies frequently make use either of their own, or the square Hebrew character, to write the modern languages in. There are even books in the vulgar tongues printed in Hebrew characters; instances whereof are seen in the late French king's library. See Plate Alphabet.

Hebrew Language, Rabbinical, or the modern Hebrew, is the language used by the rabbies in their writings. The basis or body hereof is the Hebrew and Chaldee, with divers alterations in the words of these two languages, the meanings of which they have considerably enlarged and extended. Abundance of phrases they have borrowed from the Arabic: the rest is chiefly composed of words and expressions from the Greek; some from the Latin; and others from the other modern tongues; particularly that spoken in the place where each rabbi lived or wrote. The rabbinical Hebrew must be allowed to be a very copious language. M. Simon, in his Hist. Crit. du Vieux Testam. liv. iii. ch. 27, observes, that there is scarcely any art or science but the rabbies have treated thereof in it. They have translated most of the ancient philosophers, mathematicians, astronomers, and physicians; and have written themselves on most subjects; they do not want even orators and poets.

Hebrews, or Epistle to the Hebrews, a canonical book of the New Testament. Though St. Paul did not affix his name to this epistle, the concurrent testimony of the best authors ancient and modern afford such evidence of his being the author of it, that the objections to the contrary are of little or no weight. The Hebrews, to whom this epistle was written, were the believing Jews of Palestine; and its design was to convince them, and by their means all the Jewish converts wheresoever dispersed, of the insufficiency and abolition of the ceremonial and ritual law.

HEBRIDES, Æbudæ, or Western Islands, the general name of two archipelagos of islands, lying to the north-west of Scotland, and situated between 55° and 59° N. lat.: they are supposed to be about 300 in number, and to contain 50,000 inhabitants. Not above thirty of them, however, are of any consequence. We shall commence our notice with those nearest the main, going from south to north.

Elsa or *Ailsa* is a perpendicular rock of great height two miles in circuit, with only one landing place at a little beach on the north-east. It pastures some goats, abounds in rabbits, and is the resort of Soland geese, whose young and feathers, as well as the rabbit skins, pay the £33, at which it is rented from the earl of Cassilis. On the north-east side is a square tower of three vaulted stories.

Ghia, two miles from the west coast of Kintyre, is six miles long and one broad, with 500 inhabitants; it produces barley, oats, and flax, and in 1772 afforded a rent of £600.

Cara, south of Ghia, is three miles in circuit, and inhabited by a single family.

Ilay, one of the most fertile of the islands, is twenty-eight miles long and sixteeen broad. On the north it forms the deep Loch Indal, a good harbour; it contains mines of lead and other minerals, and has several lakes. The population is 7000, and in 1772 it afforded a rent of £2300. Bowmore, the chief place, is on Loch Indal, and is a good village with a fair and market.

Jura is separated from Ila by Ila Sound, one mile broad. The island is ten leagues long and one or two broad, forming two peninsulas; it is one of the most rocky and rugged of the Hebrides, rising near the south end in several conical summits, called the Paps of Jura, the highest of which, named Ben-an-oir, or the Golden Mountain, has 3000 feet elevation. Red deer are still found in the mountains, and abundance of grouse and moor game. There are two good harbours on the east side, but the whole business of the island employs only a few open boats. The population is 1200.

Colonsay, a rocky island three leagues long and two broad, has 500 inhabitants. Oransay is separated from Colonsay by a channel dry at low water; it is three miles long, and the population is 300. These islands have great numbers of rabbits, but no hares.

Scarba is separated from Jura by the strait of Corryvreken, noted for its whirlpool. The island is three miles long, very rugged, and mountainous.

Long Island and *Balnanaigh* are small islands, composed entirely of slate. Suyl is separated from the main land of Argyle by a channel so narrow, that a bridge of a single arch has been thrown across it.

Easdale is an entire rock of slate, from which 5,000,000 of slates are exported to England, Norway, and Canada.

Kerrera, a mile from the main land of Lorn, is four miles long and two broad; it has two good harbours.

Mull is separated from the peninsula of Morvern, in Argyle, by a strait one mile and a half broad. It is eight leagues long and five broad, rugged and mountainous, but with good pasture and some corn land; it has 6000 inhabitants, and is the joint property of the duke of Argyle and the M'Leans. Tobermoray, the chief place, is a village on the north-east with a good haven, where a fishing station has been founded.

Ulva is a small island in Loch Tua, on the west of Mull, the property of the family of M'Quarrie. Inch Kenneth, in the same loch, is a little fertile island, with the vestiges of a chapel.

Icolumkill, Iona or Hii, one of the most fertile and romantic of the Scottish islands, is two miles and a half long and one broad, with 150 inhabitants in two or three hamlets, who export some cattle and grain; it is the property of the duke of Argyle, and is celebrated for having afforded an asylum to St. Columba and other holy men, after the introduction of Christianity. The ancient cathedral of St. Mary is a beautiful structure, and contains the ashes of some Scottish, Irish, and Norwegian kings, as well as the tomb of St. Columba, and many inscriptions relative to the religious ceremonies of the primitive British Christians.

Staffa, one mile long and half a mile broad, is an immense pile of basaltic columns arranged in natural colonades, and exceeding in magnificence any thing of the kind in any other part of the world. The cave of Fingal is a natural cavern, 371 feet long, fifty-three broad, and 117 high, supported by pillars of this substance. A single family inhabit this island.

The *Threshanish* are three islands between Mull and Coll.

Coll is four leagues long and one broad; it is a great rock thinly covered with soil, producing a quantity of kelp, which is exported chiefly to Ireland. It has not a single tree, and several tracts of land formerly cultivated are now rendered barren by the sand blown from the shores. The streams are numerous, and it has forty-eight lakes, abounding in trout. It has a lead mine, not worked; has no foxes, which are met with on the other islands, but abundance of rabbits; contains 1000 inhabitants, and is the property of the duke of Argyle and M'Lean, and with Tirey forms a parish. Locheern on the east is a good harbour.

Tirey is four leagues long and one broad: is generally level and fertile, and has quarries of a fine rose-colored marble. It has no haven for any thing else but boats; has twenty-four lakes, and is said to be unhealthy. It rears cattle, horses and sheep, and exports 250 tons of kelp; a regular ferry boat crosses between this island and Coll, and between the latter and Mull.

Lismore Island, before the entrance of Loch Linne, is a vast mass of limestone, but covered with a good soil. Tradition says it was anciently a deer forest, and very large deer and ox horns are found in the soil. It was also the ancient residence of the bishops of Argyle; it has 1000 inhabitants.

Rum is three leagues long and two broad; has not above 200 inhabitants, who rear cattle and sheep; it has several rivulets, in which are salmon. Loch Serefort on the east is a good harbour.

Egg, four miles long and two broad, is hilly and generally rocky.

Muck, two or three miles long and one broad, is low, with a good soil; but without port, except for boats.

Cannay, three miles long and one broad, is only worthy of notice for a hill, near which the magnetic needle takes a reversed direction, whence it is called Compass Hill. It has a good haven, formed by the little island Sanday, on the north-east. Basaltic columns are seen on its shores.

Sky, the largest of the islands near the main, is fifteen leagues long and from two to six broad; the strait between it and the main is only a quarter of a mile broad in one place, and is the usua. track of ships bound to and from Norway. The whole island is composed of rocky mountains, and the coasts are so indented that every mile

presents a harbour. The climate is cold and damp; the rivers abound with salmon, and the sea lochs with sea fish. In 1750 the population was estimated at 15,000, but in 1772 was reduced to 1200, chiefly by emigration to America. *Strath*, the principal place of the island, is on the south-east. Dunvegan Castle, at the head of Loch Follart, on the north, is the residence of M'Leod, who has the title of laird of Sky.

Of the great number of rocky islets round Sky, one only is noticed by travellers: it is named *Bord Cruin*, or the Round Table, and is the easternmost of several islets off the point of Slate, the south-west of Sky; it is 500 yards in circuit. with perpendicular sides, leaving but one landing place, from which the ascent to the top is by a spiral path that admits but one person. In the middle of the platform on the summit is a well of fresh water.

Rasay, between Sky and the main, is four leagues long and one broad; though generally rocky, it produces pasture and corn, and has some plane, ash, and fir trees; the highest point is named by the people Dunlan, and by seamen Rasay's Cap. The island has lime and free-stone; it is considered the most humid of the chain, having near 300 rainy days in the year.

Rona, north of Rasay, three miles long and one broad, though very stony has some pasture.

The little island *Flodda-huan*, on the north side of Sky, is remarkable for the annual periodical arrival of flocks of plovers from Sky in September, and their return in April.

The western Scottish islands, the *Hæbudes* of the ancients, lie in a semicircle from south-west to north-east, and are separated by narrow straits filled with rocks, having the appearance of originally forming one land. The physical construction of this chain is worthy of notice; towards the west they are all flat, while they ascend towards the east, and at last form a precipitous ridge. This conformation exposes them to the whole force of the western winds and waves from the Atlantic, and the encroachment of the sea on this side is very observable. The rocks are primary, and their structure different from that of the continental islands or main land, all of which dip towards the east. The climate of these islands is divided into a wet and dry season, the former commencing in September and lasting till May: the summers are hot. The vegetables that the climate permits to be successfully cultivated are flax, hemp, potatoes, and barley. The sheep and black cattle are small, but numerous. The channel between this chain and the main land is called the Minsh.

The southern cluster is called Bishop's Islands; the other principal ones in succession are *Watersay*, three miles long.

Barray, eight miles long and two broad, is intersected by several sea lochs; it is barren and mountainous.

South Uist is thirty miles long and two to three broad; it has several sea lochs, affording good anchorage, and rears numbers of horses, cattle, and sheep.

Benbicula, ten miles in circuit, is only deserving notice for the ruins of a nunnery.

North Uist, five leagues long and three broad, is hilly on the east and fit for pasture only: on the west it is level, and produces corn ten to twenty fold. Loch Momoddy on the east is a great rendezvous of fishing boats, 400 vessels having loaded here in a season. There are several other inlets for vessels on the east side, but the west is inaccessible.

Berneeiary, a little island between North Uist and Harris, has a fresh lake, frequented by innumerable sea birds; it is inhabited, as are those of Pabbay, Calligray, and Eusay.

Harris is a peninsula joined to the island of Lewis by an isthmus a quarter of a mile broad; it belongs to the family of M'Leod, who reside on it, and have constructed a basin and quay for shipping at Loch Lodwell on the east. This island, including Lewis, is mountainous and rocky, except the west coast, which is bordered by a strip of level ground.

Taransay, *Scalpay*, and *Scarp*, are three small inhabited islands west of Harris. On the east point of Scalpay is a light-house, and near its west side two good harbours.

The Aire of *Lewis*, a peninsula on the east coast, and on the same coast is Stornaway, at the head of a loch, the only town of the Hebrides, with 2000 inhabitants: its houses are of stone slated, and it has a church and custom-house. The Butt of *Lewis*, or Cape Orby, is the north point of the island.

The detached islands belonging to the Hebrides are St. Kilda or Hirta, a solitary rock fifteen leagues off Lewis. It is about three leagues in circuit, rising to a mountain named Congara, 5400 feet above the sea; its shores are so rocky that there is but one landing place on the east, and this only practicable in fair weather; it is inhabited by about twenty-seven families in a hamlet on the east, who cultivate eighty acres of land, raise cattle, and take sea birds.

Soa is a high steep rock, a mile in circuit, half a mile from the west side of Kilda.

The *Flannan* Islands, or Seven Hunters, are five leagues west of Galleyhead, in Lewis.

Barra and *Rona* are two high, rocky, and barren islets twenty leagues north of the Butt of Lewis, from which they are visible in clear weather. *Rona*, the northern, is two miles in circuit, and surrounded by rocks.

In the most northerly isles, the sun, at the summer solstice, is not above an hour under the horizon at midnight, and not longer above it at mid-day in the depth of winter. The soil of the Hebrides varies also in different isles, and in different parts of the same island. Lead mines have been discovered in some of these islands, but not worked to much advantage; others have been found to contain quarries of marble, lime-stone, and free-stone; nor are they destitute of iron, talc, crystals, and many curious pebbles, some of which emulate the Brasilian topaz. With respect to vegetables, over and above the plentiful harvests of corn that the natives earn from agriculture, and the pot-herbs and roots that are planted in gardens for the sustenance of the people, these islands produce spontaneously a variety of plants and simples, used by the islanders in the cure of their diseases; but there is hardly a shrub or tree to be seen, except in a

very few spots, where some gentlemen have endeavoured to rear them with much more trouble than success. The animals, both of the land and sea, domestic and wild, quadrupeds, fowls, and fishes, found in and about these islands, are of the same species, size, and configuration, with those of the Orkneys.

Mr. Pennant has given a full history of these islands from their supposed visitation by Pytheas. If we may credit our Saxon historians, they appear to have been early under the dominion of the Picts. The first invasion of the Danes does not seem to be easily ascertained. It appears that they ravaged Ireland, and the isle Rathry, as early as the year 735. In the following century their expeditions became more frequent. Harold Harfager, or the light-haired, pursued hither, in 875, several petty princes, whom he had expelled out of Norway. He seems to have made a rapid conquest: put to death the chief of the pirates, and made an indiscriminate slaughter of their followers. Soon after his return the islanders re-possessed their ancient seats: and, in order to repress their insults, he sent Ketil, the flat-nosed, with a fleet and some forces for that purpose. This chief soon reduced them to terms, and sent back the fleet to Harold; openly declared himself the independent prince of the Hebrides; and caused them to acknowledge him as such, by the payment of tribute. Ketil remained, during life, master of the islands; and his subjects appear to have been a set of warlike freebooters. After the death of Ketil a kingdom was in aftertimes composed out of them, which, from the residence of the little monarch in the Isle of Man, was styled that of Man. The islands became tributary to that of Norway for a considerable time, and princes were sent thence to govern; but at length they again shook off the yoke. From the chronicles of the kings of Man we learn, that they had then a succession of princes. In 1093 Donald Bane, king of Scotland, called in the assistance of Magnus, the barefooted, king of Norway, and bribed him with the promise of all the islands. Magnus accepted the terms; but at the same time boasted that he did not come to invade the territories of others, but only to resume the ancient rights of Norway. His conquests were rapid and complete; for, besides the islands, by an ingenious fraud, he added Cantyre to his dominions. The Hebrides continued governed by a prince dependent on Norway. These viceroys were sometimes Norwegians, sometimes natives of the isles. In 1097 we find, that Magnus deputed a nobleman of the name of Ingemund; in after times we learn, that natives were appointed to that high office. Thus were the Hebrides governed, from the conquest by Magnus, till the year 1263, when Acho, or Haquin, king of Norway, by an unfortunate invasion of Scotland, terminating in his defeat at Largs, so weakened the powers of his kingdom, that his successor Magnus IV. was content to make a cession of the islands to Alexander III.; but not without stipulating for the payment of a large sum, and of a tribute of 100 marks for ever, which bore the name of the annual of Norway.

The islands still remained governed by powerful chieftains, who were the scourges of the kingdom. Encouraged by their distance from the seat of royalty, and the turbulence of the times, they exercised a regal power, and often assumed the title; but are more generally known in history by the style of the lords of the isles, or the earls of Ross; and sometimes by that of the Great M'Donald. Historians are silent about their proceedings, from the retreat of the Danes, in 1263, till that of 1533, when John, lord of the isles, withdrew his allegiance. In the beginning of the next century his successors were so independent, that Henry IV. entered into a formal alliance with the brothers Donald and John. This encouraged them to commit fresh hostilities against their natural prince. Donald, under a pretence of a claim to the earldom of Ross, invaded and made a conquest of that county; but, penetrating as far as the shire of Aberdeen, after a fierce but undecisive battle with the royal party, thought proper to retire, and in a little time to swear allegiance to his monarch, James I. of Scotland. But he was permitted to retain the county of Ross, and assume the title of earl. His successor, Alexander, at the head of 10,000 men, attacked and burnt Inverness; at length, terrified with the preparations made against him, he fell at the royal feet, and obtained pardon as to life, but was committed to strict confinement. His kinsman and deputy, Donald Balloch, resenting the imprisonment of his chieftain, excited another rebellion, and destroyed the country with fire and sword: but on his flight was taken and put to death by an Irish chieftain, with whom he sought protection.

In the reign of James II., in 1461, Donald another petty tyrant, an earl of Ross, and lord of the isles, renewed the claim of independency; surprised the castle of Inverness; forced his way as far as Athol; and obliged the earl and countess, with the principal inhabitants, to seek refuge in the church of St. Bridget, in hope of finding security from his cruelty by the sanctity of the place; but the barbarian and his followers set fire to the church, put the ecclesiastics to the sword, and, with a great booty, carried the earl and the countess prisoners to his castle of Claig, in the island of Ilay. In a second expedition, immediately following the first, he suffered the penalty of his impiety: a tempest overtook him, and overwhelmed most of his associates; and he, escaping to Inverness, perished by the hands of an Irish harper: his surviving followers returned to Ilay, conveyed the earl and countess of Athol to the sanctuary they had violated, and expiated their crime by restoring the plunder, and making large donations to the shrine of the offended saint. John, successor to the last earl of Ross, entered into alliance with Edward IV., and sent ambassadors to the court of England, where Edward empowered the bishop of Durham and earl of Winchester to conclude a treaty with him, another Donald Balloch, and his son and heir, John. They agreed to serve the king with all their power, and so became his subjects: the earl was to have 100 marks sterling for life in

ume of peace, and £200 in time of war; and these island allies, in case of the conquest of Scotland, were to have confirmed to them all the possessions north of the Scottish sea; and, in case of a truce with the Scottish monarch, they were to be included in it. But about the year 1476 Edward, from a change of politics, courted the alliance of James III. and dropt his new allies. James, being determined to subdue this rebellious race, sent against them a powerful army under the earl of Athol. Ross was terrified into submission; obtained his pardon; but was deprived of his earldom, which by act of parliament was then declared unalienably annexed to the crown; at the same time the king restored to him Knapdale and Cantyre, which the earl had resigned; and invested him anew with the lordship of the isles, to hold them of the king by service and relief. Thus the great power of the lords of the isles was broken; yet, for a considerable time after, the petty chieftains were continually breaking out into small rebellions, or harassed each other in private wars; and tyranny seems but to have been multiplied. James V. found it necessary to make the voyage of the isles in person in 1536, seized and brought away with him several of the most considerable leaders, and obliged them to find security for their own good behaviour and that of their vassals. The troubles that succeeded the death of James occasioned a neglect of these insulated parts of the Scottish dominions, and left them in a state of anarchy. In 1614 the M'Donalds made a formidable insurrection, oppugning the royal grant of Cantyre to the earl of Argyle and his relations. The petty chieftains continued in a sort of rebellion; and the sword of the greater, as usual in weak governments, was employed against them. The encouragement and protection given by them to pirates employed the power of the Campbells during the reign of James VI. and the beginning of that of Charles I. But the turbulent spirit of the old times continued even to the present age. The heads of clans were, by the divisions, and a false policy that predominated in Scotland during the reign of William III., flattered with an unreal importance: instead of being treated as bad subjects, they were courted as desirable allies: instead of feeling the hand of power, money was allowed to bribe them into the loyalty of the times. They would have accepted the subsidies, notwithstanding they detested the prince that offered them. They were taught to believe themselves of a consequence, that afterwards turned to their destruction. At last two rebellions gave the legislature a late experience of the folly of permitting the feudal system to exist in any part of its dominions; and the act of 1748, for abolishing heritable jurisdictions, at once deprived the chieftains of all power of injuring the public by their commotions.

The people inhabiting these islands are of the same race with those who live in the Highlands of Scotland; speak the same language, wear the same habit, and observe the same customs. See HIGHLANDERS.

The commodities which may be deemed the staples of this country are black cattle, sheep, and fish, which they sell to their fellow-subjects of Scotland. Part of the wool they work up into knit stockings, coarse cloth, and that variegated stuff called tartan. They likewise salt mutton in the hide, and export it in boats or barklings to different parts of the main-land. Cod, ling, mackarel, whitings, haddocks, and soles, are here caught in abundance, together with a small red cod, remarkably voracious, of a very delicate flavour: there are likewise two kinds of white fish, which seem to be peculiar to this coast, known by the names of lithe and eea, esteemed good eating. But the greatest treasure the ocean pours forth is the prodigious quantity of herrings. See HERRING and FISHERY.

HEBRIDES, NEW, a cluster of islands in the Pacific Ocean, so named by captain Cook. The northern islands of this archipelago were first discovered by the navigator Quiros, in 1606, who supposed them to be a part of a southern continent. They were next visited by M. de Bougainville in 1768, who, landing on the island of Lepers, discovered that the land was not connected, but composed of islands, which he called the Great Cyclades. Captain Cook explored the whole cluster, and, besides ascertaining the extent and situation of these islands, added the knowledge of several others. They extend 375 miles, from N. N. W to S. S. E. The natives are civil and hospitable; of a slender make, and dark color, and have mostly frizzled hair. The productions are cocoa-nuts, bread-fruit, plantains, sugar-canes, yams, &c. The most northern part of this archipelago was called by M. de Bougainville the Peak of the Etoile. The whole cluster consists of the following islands; some of which have received names from the different European navigators, others retain the names which they bear among the natives: viz. Tierra del Espiritu Santo, Mallicollo, St. Bartholomew, Isle of Lepers, Aurora, Whitsuntide, Ambrym, Immer, Apee, Three Hills, Sandwich, Montagu, Hinchinbrook, Shepherd, Erromanga, Erronan, Anattom, and Tanna. They are situated between 166° 40′ and 170° 21′ E. long., and between 14° 25′ and 20° 4 S. lat.

HEBRON, in ancient geography, a city seated in the hilly country of the tribe of Judah to the south. Its more ancient name was Kirjath-arba, or Cariath-arba. In antiquity it vied with the more ancient cities of Egypt, being seven years prior to Zoan. Josephus makes it not only older than Tanis, but even than Memphis. It stood to the west of the lake Asphaltites, and was for some time the royal residence of David. After the captivity it fell into the hands of the Edomites, as did all the south country of Judea. It is now called Habroun. The Arabs call it El-kalil, i. e. the well-beloved; the epithet they usually apply to Abraham, whose sepulchral grotto they pretend to show. It is seated at the foot of an eminence, on which are some wretched ruins of an ancient castle. The adjacent country is a sort of oblong hollow, five or six leagues in length, varied by rocky hillocks, groves of fir trees, stunted oaks, and a few plantations of vines and olive trees. These vineyards are not

cultivated with a view to make wine, the inhabitants being so zealous Mahommedans as not to permit any Christians to live among them: they are only of use to procure dried raisins, which are badly prepared, though the grapes are excellent. The peasants cultivate cotton, which is spun by their wives, and sold at Jerusalem and Gaza. They have also some soap manufactories, the kali for which is sold by the Bedouins; and a very ancient glass-house, the only one in Syria, wherein they make a great quantity of colored rings, bracelets for the wrists, legs, and arms, with various other trinkets, which are sent to Constantinople.

HEBRON, a township of New York, United States, in Washington county. Population 2436. —There is also a township of this name in Tolland county, Connecticut; and another in Cumberland county, Maine. It is also the name of a Moravian settlement in Pennsylvania.

HEBRUS, in ancient geography, the largest river of Thrace, rising from Mount Scombrus, running in two channels to Philippopolis, where they unite. It runs by two mouths into the Ægean Sea, north of Samothrace. It was supposed to roll its waters upon golden sands. The head of Orpheus was thrown into it, after it had been cut off by the Ciconian women.

HEBRUS, a city of Thrace, on the above river.

HEBTICH, or HEBITCH, a town of Germany, in the ci-devant county of Sponheim, annexed to the French republic by the treaty of Luneville in 1801, and included in the department of the Rhine and Moselle; two miles south-east of Taarbach.

HEBUDÆ, HEBUDES, or ÆBUDÆ, in ancient geography, islands on the west of Scotland. The ancients differed greatly as to their situation, number, and names; said in general to lie on the north of Ireland, and west of Scotland. They are now called the Western Islands, and Hebrides; which last is a modern name, supposed to be a corruption of Hebudes. By Beda they are called Mevaniæ, an appellation equally obscure. See HEBRIDES.

HECATE, in mythology, a name of Diana. She was called Luna in heaven, Diana on earth, and Hecate or Proserpine in hell; whence her name of Diva triformis, tergemina, triceps. She was supposed to preside over enchantments. She was generally represented like a woman, with the head of a horse, a dog, or a boar; and sometimes she appeared with three different bodies, and three faces, with one neck. Dogs, lambs, and honey were generally offered to her, especially in ways and cross roads, whence she obtained the name of Trivia. Her power was extended over heaven, earth, sea, and hell; and to her kings and nations supposed themselves indebted for their prosperity.

HECATE, in fabulous history, a queen of Taurica Chersonesus, daughter of Perses and Asteria, who poisoned her father; by some confounded with Hecate, the sister of Apollo.

HECATESIA, *εκατεσια*, in antiquity, an annual solemnity observed by the Stratonicensians, in honor of Hecate. The Athenians likewise had a public entertainment or supper every new moon, in honor of this goddess. The supper was provided at the charge of the rich; and was no sooner brought to the accustomed place but the poor carried all off, giving out that Hecate had devoured it. For the rest of the ceremonies observed on this occasion, see Pott. Arch. Græc.

HE'CATOMB, *n. s.* Fr. *hecatombe*; *ἑκατόμβη*. A sacrifice of a hundred cattle.

> In rich men's homes
> I bid kill some beasts, but no *hecatombs*;
> None starve, none surfeit so. *Donne.*
>
> One of these three is a whole *hecatomb*,
> And therefore only one of them shall die.
> *Dryden.*
>
> Her triumphant sons in war succeed,
> And slaughtered *hecatombs* around 'em bleed.
> *Addison.*

A HECATOMB, in antiquity, was a sacrifice of 100 beasts of the same kind, at 100 altars, and by 100 priests or sacrificers. The Greek word, *εκατομβη*, properly signifies a magnificent sacrifice. Others derive it from the Greek *εκατον*, a hundred, and *βους*, a bullock; others from *εκατον* and *πους*, a foot; on which principle they hold, that the hecatomb might consist of only twenty-five four-footed beasts; and that it did not matter what kind of beasts were chosen for victims, provided there were but 100 feet. Pythagoras is said to have sacrificed a hecatomb to the Muses of 100 oxen, in gratitude for discovering the demonstration of the forty-seventh problem of Euclid. Strabo relates, that there were 100 cities in Laconia, and that each city used to sacrifice a bullock every year for the common safety of the country; whence the institution of hecatombs. Others refer the origin of hecatombs to a plague, wherewith the 100 cities of Peloponnesus were afflicted; for the removal whereof, they jointly contributed to offer so splendid a sacrifice. Julius Capitolinus relates, that for a hecatomb they erected altars of turf, and on these sacrificed 100 sheep, and 100 hogs. He adds, that when the emperors offered sacrifices of this kind, they sacrificed 100 lions, 100 eagles, and 100 other wild animals.

HECATOMBÆON, *εκατομβαιων*, in chronology, the first month of the Athenian year. It consisted of thirty days, and began on the first new moon after the summer solstice; answering to the latter part of June and beginning of July. The Bœotians called it Hippodromus, and the Macedonians Lous. The word is derived from the Greek *εκατομβη*, a hecatomb, because of the great number of hecatombs sacrificed in it.

HECATOMPOLIS, a surname of Crete, from its 100 cities. The territory of Laconia also had anciently this name for the same reason.

HECATOMPYLOS, in ancient geography, the metropolis of Parthia, and royal residence of Arsaces, situated at the springs of the Araxes. Thebes in Egypt had also the same mame from its 100 gates.

HECHT (Christian), a learned divine, born at Essen, in East Friesland, in 1696. He wrote 1. Commentatio Philologica: critica exegetica, &c. 2. Antiquæ Hebræorum inter Judæos in Polonia. He died in 1748, aged fifty-two.

HECLA, or Hekla, a volcanic mountain of Iceland, and one of the most celebrated in the world. See Iceland. It was visited in 1772 by Dr. Van Troil, a Swedish gentleman, along with Mr., afterwards Sir Joseph, Banks; and subsequently, in 1810, by Sir George M'Kenzie. The latter intelligent traveller thus gives us its chief features and history:—

'After the fatigue we had undergone in our excursion towards the Torfa Jokul, in search of obsidianum, we did not expect to find ourselves sufficiently refreshed to attempt ascending Mount Hecla on the following day; but, as we had been long in the constant habit of enduring daily hardships, we rose at an early hour on the 3d of August, quite alert; and, on seeing the whole of the mountain free from clouds, we were soon ready to finish our labors by ascending Hecla, and attaining the summit of a mountain whose fame has spread to every quarter of the world. At ten o'clock we were ready; and, Brandtson having collected our horses, we mounted them, and began our expedition under circumstances as favorable as we could wish. We rode through sand and lava about three miles, when the surface became too rugged and steep for horses. Our guide proposed leaving the poor animals standing till we returned; but, though they would not have stirred from the spot, we sent them back, not choosing that such valuable and steady servants should remain a whole day without food. We now proceeded a considerable way along the edge of a stream of lava, and then crossed it where it was not very broad, and gained the foot of the south end of the mountain. From this place we saw several mounts and hollows, from which the streams of lava below appeared to have flowed. While we had to pass over rugged lava, we experienced no great difficulty in advancing; but when we arrived at the steepest part of the mountain, which was covered with loose slags, we sometimes lost at one step, by their yielding, a space that had been gained by several. In some places we saw collections of black sand, which, had there been any wind, might have proved extremely troublesome. The ascent now became very steep, but the roughness of the surface greatly assisted us.

'Before we had reached the first summit, clouds surrounded us, and prevented our seeing farther than a few yards. Placing implicit confidence in our guide, we proceeded; and, having attained what we thought was the nearest of the three summits, we sat down to refresh ourselves, when Brandtson told us that he had never been higher up the mountain. The clouds occasionally dividing, we saw that we had not yet reached the southern summit. After having passed a number of fissures, by leaping across some and stepping along masses of slags that lay over others, we at last got to the top of the first peak. The clouds now became so thick that we began to despair of being able to proceed any farther. Indeed it was dangerous even to move; for the peak consists of a very narrow ridge of slags, not more than two feet broad, having a precipice on each side many hundred feet high. One of these precipices forms the side of a vast hollow, which seems to have been one of the craters. At length the sky cleared a little, and enabled us to discover a ridge below that seemed to connect the peak we were on with the middle one. We lost no time in availing ourselves of this opportunity, and, by balancing ourselves like rope-dancers, we succeeded in passing along a ridge of slags so narrow that there was hardly room for our feet. After a short but very steep ascent we gained the highest point of this celebrated mountain.

'We now found that our usual good fortune had not yet forsaken us; for we had scarcely begun to ascend the middle peak when the sky became clear, and we had a full view of the surrounding country. Towards the north it is low, except where a Jokul here and there towers into the regions of perpetual snow. Several large lakes appeared in different places, and among them the Fiske Vatn was the most conspicuous. In this direction we saw nearly two-thirds across the island. The Blæfell and the Lange Jokuls stretched themselves in the distance to a great extent, presenting the appearance of enormous masses of snow heaped up on the plains. The Skaptar Jokul, whence the great eruption that took place in the year 1783 broke forth, bounded the view towards the north-east. It is a large, extensive, and lofty mountain, and appeared to be covered with snow to the very base. On the side next to us, though at a distance of about forty miles, we plainly discerned a black conical hill, which very probably may be one of the craters that were formed during the eruption. The Torfa, Tinfialla, and Eyafialla Jokuls, limit the view of the eastern part of the country. Towards the south the great plain we had passed through seemed as if stretched under our feet, and was bounded by the sea. The same valley was terminated towards the west by a range of curiously peaked mountains, those in the neighbourhood of Thingvalla, and to the north and west of the Geysers.

'The middle peak of Hecla forms one side of a hollow, which contains a large mass of snow at the bottom, and is evidently another crater. The whole summit of the mountain is a ridge of slags; and the hollows on each side appear to have been so many different vents from which the eruptions have from time to time issued. We saw no indications that lava had flowed from the upper part of the mountain; but our examination, from the frequent recurrence of fog, was unavoidably confined. After we had satisfied ourselves, in surveying the surrounding country, we began to collect specimens of the slags, and perceived some of them to be warm. On removing some from the surface we found those below were too hot to be handled; and, on placing a thermometer amongst them, it rose to 144°. The vapor of water ascended from several parts of the peak. It had been remarked to us, by many of the inhabitants, that there was less snow on Hecla at this time than had been observed for many years. We supposed, therefore, that the heat now noticed might be the recommencement of activity in the volcano, rather than the remaining effects of the last eruption, which took place in the year 1766.

'The crater, of which the highest peak forms

a part, does not much exceed 100 feet in depth. The bottom is filled by a large mass of snow, in which various caverns had been formed by its partial melting. In these the snow had become solid and transparent, reflecting a bluish tinge; and their whole appearance was extremely beautiful, reminding us of the description of magic palaces in eastern tales. At the foot of the mountain the thermometer at half past nine o'clock stood at 59°. At eleven it was 55°, and at four, on the top, at 39°. Our descent was greatly retarded by thick fog; and we found it much more hazardous than the ascent. We missed our way, and were under the necessity of crossing the lava we had passed in our way up, at a place where it had spread to a much greater breadth, and, from the rapidity of the slope along which it had flowed, had become frightfully rugged.

'Mount Hecla has acquired a degree of distinction, among volcanoes, to which it does not seem to be entitled. It is far behind Ætna and Vesuvius, both in the frequency and magnitude of its eruptions. We could not distinguish more than four streams of lava; three of which have descended on the south, and one on the north side; but there may be some streams on the east side, which we did not see. The early eruptions of this mountain do not seem to have been regularly recorded. Olafson and Paulson say, that, after careful research, they found that the number of eruptions amounted to twenty-two; and none are recorded as having happened before the year 1004. There were eruptions in the years 1137, 1222, 1300, 1341, 1362, 1389, 1538, 1619, 1636, and 1693. Flames appeared in the neighbourhood in 1728. In 1554 there were eruptions from the mountains to the eastward; and in 1754 flames burst out to the westward. From the mountain itself no eruption took place between the years 1693 and 1766, an interval of seventy-three years; and, during this last period of activity, no lava was thrown out. The following year flames broke out afresh, and the mountain was not perfectly quiet in the year 1768: since that time it has remained inactive. We had no opportunity of measuring the height of Mount Hecla; but we have been informed by Sir J. Stanley that the elevation which resulted from his observations was 4300 feet, and this, from different circumstances, we believe to be correct.

'The whole tract between Hecla and Krabla is a desert quite impassable and unknown; and there is still subsisting a ridiculous notion that it is inhabited by a tribe of robbers. Did such people really exist, and did they know the dread which they inspire, they might easily procure more comfortable quarters.' See Iceland.

HECQUET (Philip), a French physician of considerable eminence, and author of several works on medicine. But, being a great advocate for the use of warm water and copious bleeding, in many diseases, his practice was ridiculed by M. Le Sage, in his ingenious satirical novel of Gil Blas; wherein he is caricatured under the character of Dr. Sangrado. He died in 1737.

HE'CTIC, *n. s.* & *adj.* } Fr. *hectique*; from
HE'CTICAL, *adj.* } Gr. ἑξις. Habitual; constitutional: a fever so called; morbid heat. See Medicine.

Like the *hectick* in my blood he rages,
And thou must cure me. *Shakspeare. Hamlet.*

A *hectick* fever hath got hold
Of the whole substance, not to be controuled.
Donne.

No *hectick* student scares the gentle maid. *Taylor.*

Can this be death? there's bloom upon her cheek;
But I see it is no living hue,
But a strange *hectic*—like unnatural red
Which Autumn paints upon the perished leaf.
Byron's Manfred.

HEC'TOR, *n. s.*, *v. a.* & *v. n.* From the name of Hector, the great Homeric warrior. A bully; a blustering, turbulent, pervicacious, noisy fellow. The verbs signify to domineer or bully; to treat with insolence; to threaten.

They have attacked me, some with piteous moans and outcries, others grinning and only shewing their teeth, others ranting and *hectoring*, others scolding and reviling. *Stillingfleet.*

The weak low spirit Fortune makes her slave;
But she's a drudge, when *hectored* by the brave.
Dryden.

Those usurping *hectors*, who pretend to honour without religion, think the charge of a lye a blot not to be washed out but by blood. *South.*

One would think the *hectoring*, the storming, the sullen, and all the different species of the angry should be cured. *Spectator.*

They reckon they must part with honour together with their opinion, if they suffer themselves to be *hectored* out of it. *Government of the Tongue.*

We'll take one cooling cup of nectar,
And drink to this celestial *hector*. *Prior.*

An honest man, when he came home at night, found another fellow domineering in his family, *hectoring* his servants, and calling for supper.
Arbuthnot's History of John Bull.

Don Carlos made her chief director,
That she might o'er the servants *hector*. *Swift.*

Hector, the son of Priam and Hecuba, and the father of Astyanax, celebrated for the valor with which he defended the city of Troy against the Greeks. He was killed by Achilles, who dragged his body, fastened to his chariot, thrice round the walls of Troy, and afterwards restored it to Priam for a large ransom. See Troy.

HECUBA, in fabulous history, the wife of Priam, the last king of Troy, and the mother of nineteen of his fifty-three children. She was the daughter of Dymas, according to Homer, or of Cisseus, according to Virgil. When with child of Paris she dreamed that she brought forth a firebrand. See Paris. After the destruction of Troy she was carried captive by Ulysses, and in a fit of insanity for her misfortune threw herself into the Hellespont; whereupon she was fabled to have been turned into a bitch.

HEDERA, ivy, in botany, a genus of the monogynia order, and pentandria class of plants; natural order forty-sixth, hederaceæ. There are five oblong petals: the berry is pentaspermous, girt by the calyx.

H. dionysias, or poet's-ivy, a species that grows in many of the islands of the Archipelago; so named by Caspar Bauhine and Tournefort,

because the ancients made crowns of it for adorning the brows of their poets. It is called dionysias, because they also made use of it in their public feasts, in honor of Bacchus. The berries are of a fine gold color, whence it has been termed by others chrysocarpos.

H. helix, or common ivy, grows naturally in many parts of Britain; and, where it meets with any support, will rise to a great height, sending out roots on every side, which strike into the joints of walls or the bark of trees. If there is no support, they trail on the ground, and take root all their length, so that they closely cover the surface, and are difficult to eradicate. While these stalks are fixed to any support, or trail upon the ground, they are slender and flexible; but when they have reached to the top of their support, they shorten and become woody, forming themselves into large bushy heads; and their leaves are larger, more of an oval shape, and not divided into lobes like the lower leaves, so that it has quite a different appearance. There are two varieties of this species, one with silver-striped leaves, the other with yellowish leaves on the tops of the branches; and these are sometimes admitted into gardens. They are easily propagated, and thrive in any soil. The roots are used by leather-cutters to whet their knives upon. Apricots and peaches covered with ivy, bear fruit plentifully in February. The leaves have a nauseous taste; Haller says, they are given to children in Germany, as a specific for the atrophy. The people of England apply them to issues; and an ointment made from them is in great esteem among our Scots Highlanders as a ready cure for burns. The berries have a little acidity. When fully ripe, a dose of them has been recommended in the plague. In warm climates, a resinous juice exudes from the stalks, which is said to be a powerful resolvent and discutient, and an excellent ingredient in plasters and ointments adapted for these purposes. Horses and sheep eat the plant; goats and cows refuse it.

H. quinquefolia, the Virginian creeper, is a native of all the northern parts of America. It was first brought to Europe from Canada; and has been long cultivated in the British gardens, chiefly to plant against walls or buildings to cover them: which these plants will do in a short time; for they will shoot almost twenty feet in one year, and will mount up to the top of the highest building: but, as the leaves fall off in autumn, the plants make but an indifferent appearance in winter, and therefore are proper only for such situations as will not admit of better plants; for this will thrive in the midst of cities, and is not injured by smoke or the closeness of the air. It may be propagated by cuttings; which, if planted in autumn in a shady border, will take root, and by the following autumn will be fit to plant in those places where they are to remain.

HEDERACEÆ, from hedera, ivy. The forty-sixth order in Linnæus's fragments of a natural method. See BOTANY.

HEDERICH, or HEDERICUS (Benjamin), a learned lexicographer, born at Hain in Misnia, in 1675. He published a valuable Greek and Latin lexicon, and an edition of Empedocles de Sphæra. He died in 1748.

HEDGE, *n. s.* & *v. a.* } Sax. þeȝȝe; Belg.
HEDG'ER, *n. s.* } *haag*, *hag*. A fence made round grounds with prickly bushes, or woven twigs; to enclose; to obstruct; to encircle for defence; sometimes improperly written for edge; to shift; to hide the head. Hedge, prefixed to any word, notes something mean, vile, of the lowest class: perhaps from a hedge, or hedge-born man, a man without any known place of birth.

I will *hedge* up thy way with thorns.
Hosea ii. 6.

Hedge thy possession about with thorns.
Eccles.

And after that, within a litel throw,
The wind began so sturdily to blow,
That down goth all the flowres, everichone
So that, in all the mede there left not one,
Save such as succoured were, among the leves
Fro every storme that mightè hem assaile,
Growing under the *hegges* and thick greves.
Chaucer. The Floure and the Leafe.

I myself sometimes, hiding mine honour in my necessity, am fain to shuffle, to *hedge*, and to lurch.
Shakspeare.

England, *hedged* in with the main,
That water-walled bulwark, still secure
And confident from foreign purposes. *Id.*

There's such divinity doth *hedge* a king,
That treason can but peep to what it would. *Id.*

Those alleys must be *hedged* at both ends, to keep out the wind. *Bacon.*

The *hedge*, green satin pinked and cut, arrays
The heliotrope to cloth of gold aspires;
In hundred-coloured silks the tulip plays;
The' imperial flower, his neck with pearl attires.
Fletcher's Purple Island.

The laboured ox
In his loose traces from the furrow came,
And the swinked *hedger* at his supper sat.
Milton.

When I was hasty, thou delay'dst me longer:
I pr'thee, let me *hedge* one moment more
Into thy promise; for thy life preserved.
Dryden.

It must not be paid and exported in ready money; so says our law; but that is a law to *hedge* in the cuckow, and serves for no purpose: for if we export not goods, for which our merchants have money due to them, how can it be paid by bills of exchange.
Locke.

He would be laughed at, that should go about to make a fine dancer out of a country *hedger* at past fifty. *Id.*

It is a good wood for fire, if kept dry; and is very useful for stakes in *hedges*. *Mortimer.*

The gardens unfold variety of colours to the eye, every morning, and the *hedges* breath is beyond all perfume. *Pope.*

A person, who, by his style and literature, seems to have been the corrector of a *hedge*-press in Little Britain, proceeded gradually to an author. *Swift.*

The clergy do much better than a little *hedge*, contemptible, illiterate vicar can be presumed to do. *Id.*

When you are sent on an errand, be sure to *hedge* in some business of your own. *Id.*

Through the verdant maze
Of sweet-briar *hedges*, I pursue my walk.
Thomson.

Among the crooked lanes, on every *hedge*,
The glow-worm lights his gem; and through the dark,
A moving radiance twinkles.
Thomson's Seasons. Summer.

HEDGES, in agriculture, are either planted to make fences round enclosures, or to divide the several parts of a garden. When they are designed as outward fences, they are planted either with hawthorn, crabs, or black-thorn; but those hedges which are planted in gardens, either to surround wilderness quarters, or to screen the other parts of a garden from sight, are planted according to the fancy of the owner. Some prefer ever-greens, in which case the holly is best; next the yew, then the laurel, laurustinus, phyllyrea, &c. Others prefer the beech, the hornbeam, and the elm.

Before planting the hedge in the open field, it is proper to consider the nature of the land, what sort of plants will thrive best in it; and what is the soil whence they are to be taken. The sets ought to be about the thickness of one's little finger, and cut within about four or five inches of the ground; they ought to be fresh taken up, straight, smooth, and well-rooted. Those plants that are raised in the nursery are to be preferred. In planting outside hedges the turf is to be laid with the grassy side downwards, on that side of the ditch on which the bank is designed to be made; and some of the best mould should be laid upon it to bed the quick, which is set upon it at a foot asunder. When the first row of hawthorn or quick is set, it must be covered with mould; and, when the bank is a foot high, another row of sets may be laid against the spaces of the former, and covered like the others. The bank is then to be topped with the bottom of the ditch, and a dry or dead hedge laid, to shade and defend the under plantation. Stakes should then be driven into the loose earth, so low as to reach the firm ground: these are to be placed at about two feet and a half distance: to render the hedge yet stronger, edder it, that is, bind the top of the stakes with small long poles, and, when the eddering is finished, drive the stakes anew. The quick must be kept constantly weeded, and secured from being cropped by cattle; and in February it will be proper to cut it within an inch of the ground, which will cause it to strike root afresh, and help it much in the growth. The crab is frequently planted for hedges. Plants raised from the kernels of the small wild crabs are to be preferred to those raised from the kernels of all sorts of apples without distinction; because the plants of the true small crab never shoot so strong as those of the apples, and may therefore be better kept within the proper compass of a hedge. The black thorn, or sloe, is often planted for hedges. The best method is to raise the plant from the stones of the fruit, which should be sown about the middle of January, if the weather permit, in the place where the hedge is intended.

With respect to the age at which hedge-plants ought to be used, it is very common, especially where young hedges are made with thorns, to plant them of one, two, or three years old, seldom exceeding this last age. Plants of this description, says Mr. Loudon, however, are long in a state of infancy, and require great nursing and the most complete protection to bring them to perfection, and are liable to be either much hurt or totally destroyed by many accidents that would produce little or no effect upon older and stronger plants. Much time might be saved in the rearing of hedges, and the fences be much more perfect and useful, if older plants were employed for that purpose. Three years old is certainly the youngest that should be planted, and, if they are six or seven years old, so much the better: the prevailing idea that plants of that age will not thrive, if transplanted, is totally unfounded.

Hedges for ornament in gardens are sometimes planted with ever-greens, in which case the holly is preferable to any other; next to this most people prefer the yew; but the dead color of its leaves renders those hedges less agreeable. The laurel is one of the most beautiful ever-greens; but the shoots are so luxuriant that it is difficult to keep it in any tolerable shape; and, as the leaves are large, to prevent the disagreeable appearance given them by their being cut through with the shears, it will be best to prune them with a knife, cutting the shoots just down to a leaf. The laurustinus is a very fine plant for this purpose; but the same objection may be made to this as to the laurel; this, therefore, ought only to be pruned with a knife in April, when the flowers are going off; but the new shoots of the same spring must by no means be shortened. The small-leaved and rough-leaved laurustinus are the best plants for this purpose. The true phillyrea is the next best plant for hedges, which may be led up to the height of ten or twelve feet; and if they are kept narrow at the top, that there may not be too much width for the snow to lodge upon them, they will be close and thick, and make a fine appearance. The ilex, or ever-green oak, is also planted for hedges, and is a fit plant for those designed to grow very tall. The deciduous plants usually planted to form hedges in gardens are, the hornbeam, which may be kept neat with less trouble than most other plants; the beech, which has the same good qualities as the hornbeam: but the gradual falling of its leaves in winter causes a continual litter. The small-leaved English elm is a proper tree for tall hedges, but these should not be planted closer than eight or ten feet. The lime-tree has also been recommended for the same purpose; but, after they have stood some years, they grow very thin at bottom, and their leaves frequently turn of a black disagreeable color. Many of the flowering shrubs have also been planted in hedges, such as roses, honeysuckles, sweet briar, &c.; but these are difficult to train; and, if they are cut to bring them within compass, their flowers, which are their greatest beauty, will be entirely destroyed.

From the first year of planting, till the hedge has risen to the height of five or six feet, the main stems ought to be left untouched, and the pruning confined solely to the side branches, leaving those next the root pretty long, and gradually tapering towards the top; this pruning

of the side branches will make them send out many new shoots from their extremities; while the main stems, by being left untouched, continue their growth upward, when they may have their extremities cut off with perfect safety. When a hedge has attained the wished-for height, all that is requisite afterwards is cutting the sides regular with a hedge-bill, preserving it pretty broad at bottom, and drawing it gradually to a point at top; a hedge of this form is pleasant to the eye, is well calculated to stand the weather, and becomes every year stronger and thicker.

It sometimes happens, says Dr. Anderson, that a hedge may have been long neglected, and be in general in a healthy state, but full of gaps and openings, or so thin and straggling as to form but a very imperfect sort of fence. On these occasions, it is in vain to hope to fill up the gaps by planting young quicks; for these would always be outgrown, choked, and starved, by the old plants; nor could it be recovered by cutting clear over by the roots, as the gaps would still continue where they formerly were. The only methods that I know of rendering this a fence are, either to mend up the gaps with dead wood, or to plash the hedge; which last operation is always the most eligible where the gaps are not too large to admit of being cured by this means. The operation I here call plashing, may be defined, a wattling made of living wood. To form this, some stems are first selected, to be left as stakes at proper distances, the tops of which are all cut over at the height of four feet from the root. The straggling side branches of the other part of the hedge are also lopped away. Several of the remaining plants are then cut over, close by the ground, at convenient distances; and the remaining plants are cut perhaps half through, so as to permit them to be bent to one side. They are then bent down almost to a horizontal position, and interwoven with the upright stakes, so as to retain them in that position. Care ought to be taken, that these be laid very low at those places where there were formerly gaps; which ought to be farther strengthened by some dead stakes or truncheons of willows, which will frequently take root in this case, and continue to live. And sometimes a plant of eglantine will be able to overcome the difficulties it meets with, strike root, and grow up so as to strengthen the hedge in a most effectual manner. The operator begins at one end of the field, and proceeds regularly forward, bending all the stems in one direction, so that the points rise above the roots of the others, till the whole wattling is completed to the same height as the uprights. An expert operator will perform this work with much greater expedition, than one who has not seen it done could easily imagine. And as all the diagonal wattlings continue to live and send out shoots from many parts of their stems, and, as the upright shoots that rise from the stumps of those plants that have been cut over quickly rush up through the whole hedge, these serve to unite the whole into one entire mass, that forms a strong, durable, and beautiful fence. This is the best method of recovering an old neglected hedge that has as yet come to my knowledge.

In some cases it happens, that the young shoots of a hedge are killed every winter; in which case it soon becomes dead and unsightly, and can never rise to any considerable height. A remedy for this disease may therefore be wished for. Young hedges are observed to be chiefly affected with this disorder; and it is almost always occasioned by an injudicious management of the hedge, by means of which it has been forced to send out too great a number of shoots in summer, and is thus rendered so weakly as to be unable to resist the severe weather in winter. It often happens that the owner of a young hedge, with a view to render it very thick and close, cuts it over with the shears a few inches above the ground the first winter after planting: in consequence of which, many small shoots spring out from each of the stems that has been cut over; each of which, being afterwards cut over in the same manner, sends forth a still greater number of shoots, which are smaller and smaller in proportion to their number. If the soil in which the hedge has been planted is poor, in consequence of this management, the branches, after a few years, become so numerous, that the hedge is unable to send out any shoots at all, and the utmost exertion of the vegetative powers enables it only to put forth leaves. These leaves are renewed in a sickly state for some years, and at last cease to grow at all—the branches become covered with fog, and the hedge perishes entirely. But if the soil be very rich, notwithstanding this great multiplication of the stems, the roots will still have sufficient vigor to force out a great many small shoots, which advance to a great length, but never attain a proportional thickness. And, as the vigor of the hedge makes them continue to vegetate very late in the autumn, the frosts come on before the tops of these dangling shoots have attained any degree of woody firmness, so that they are almost entirely killed by it: the whole hedge becomes covered with these long dead shoots, which are always disagreeable to look at, and usually indicate the approaching end of the hedge. The causes of the disorder being thus explained, it will readily occur, that the radical cure is amputation; which, by giving an opportunity to begin with training the hedge anew, gives also an opportunity of avoiding the errors that occasioned it. In this case care ought to be taken to cut the plants as close to the ground as possible, as there the stems will be less numerous than at any greater height. And particular attention ought to be had to allow very few shoots to arise from the stems that have been cut over, and to guard carefully against shortening them. But as the roots, in the case here supposed, will be very strong, the shoots that are allowed to spring from the stems will be very vigorous, and there will be some danger of their continuing to grow later in the season than they ought in safety to do; in which case, some part of the top of the shoot may perhaps be killed the first winter, which ought, if possible, to be prevented. This can only be effectually done by giving a check to the vegetation in autumn, so as to allow the young shoots to harden in the points before the winter approaches. If any of the

leaves or branches of a tree are cut away while it is in the state of vegetation, the whole plant feels the loss, and it suffers a temporary check in its growth in proportion to the loss that it thus sustains. To check, therefore, the vigorous vegetation at the end of autumn, it will be prudent to choose the beginning of September for the time of lopping off all the supernumerary branches from the young hedge, and for clipping off the side branches that have sprung out from it; which will, in general, be sufficient to give it such a check in its growth, at that season, as will prevent any of the shoots from advancing afterwards. If the hedge is extremely vigorous, a few buds may be allowed to grow upon the large stumps in the spring, with a view to be cut off at this season, which will tend to stop the vegetation of the hedge still more effectually. By this mode of management the hedge may be preserved entire through the first winter. And, as the shoots become less vigorous every successive season, there will be less difficulty in preserving them at any future period. It will always be proper, however, to trim the sides of a very vigorous hedge for some years while it is young, about the same season of the year, which will tend powerfully to prevent this malady. But, when the hedge has advanced to any considerable height, it will be equally proper to clip it during any of the winter months, before Candlemas.

HEDGE-BORN, *adj.* Hedge and born. Of no known birth; meanly born.

He then, that is not furnished in this sort,
Doth but usurp the sacred name of knight,
And should, if I were worthy to be judge,
Be quite degraded, like a *hedge-born* swain,
That doth presume to boast of gentle blood.
Shakspeare.

HEDGE-CREEPER, *n. s.* Hedge and creep. One that skulks under hedges for bad purposes.

HEDGE-HOG, *n. s.* Hedge and hog; *erinaceus.*

An animal with prickles, like thorns in a hedge.

Like *hedge-hogs*, which
Lie tumbling in my bare-foot way, and mount
Their pricks at my foot-fall.
Shakspeare. Tempest.

Few have belief to swallow, or hope enough to experience, the collyrium of Albertus, that is to make one see in the dark: yet thus much, according to his receipt, will the right eye of an *hedge-hog*, boiled in oil, and preserved in a brazen vessel, effect.
Browne's Vulgar Errours.

The *hedge-hog* hath his backside and flanks thick set with strong and sharp prickles; and besides, by the help of a muscle, can contract himself into a globular figure, and so withdraw his whole underpart, head, belly, and legs, within his thicket of prickles.
Ray.

A term of reproach.

Did'st thou not kill this king?
—I grant ye.
—Do'st grant me, *hedge-hog?* *Shakspeare.*

A plant; trefoil; *medica echinata.*—Ainsworth.

The globe-fish; *orbis echinatus.*—Ainsworth.

HEDGE-HYSSOP, *n. s.* Hedge and hyssop. A species of willowwort; *gratiola.*

Hedge-hyssop is a purging medicine, and a very rough one: externally it is said to be a vulnerary.
Hill. Mat. Medica.

HEDGE-NOTE, *n. s.* Hedge and note. A word of contempt for low writing.

When they began to be somewhat better bred, they left these *hedge-notes* for another sort of poem, which was also full of pleasant raillery. *Dryden.*

HEDGE-PIG, *n. s.* Hedge and pig. A young hedge-hog.

Thrice the brinded cat hath mewed,
Thrice and once the *hedge-pig* whined.
Shakspeare.

HEDGE-ROW, *n. s.* Hedge and row. The series of trees or bushes planted for enclosures.

Sometime walking not unseen
By *hedge-row* elms, on hillocks green. *Milton.*

The fields in the northern side are divided by *hedge-rows* of myrtle. *Berkley to Pope.*

HEDGE-SPARROW, *n. s.* Hedge and sparrow; *curruca.* A sparrow that lives in bushes, distinguished from the sparrow that generally builds in thatch, or holes in walls.

The *hedge-sparrow* fed the cuckoo so long,
That it had its head bit off by its young.
Shakspeare.

HEDGING-BILL, *n. s.* Hedge and bill. A cutting-hook used in making hedges.

Comes master Dametas with a *hedging-bill* in his hand, chafing and swearing. *Sidney.*

HEDSJAS, one of the great divisions of modern Arabia, extends, in one vast plain, along the Red Sea from Mount Sinai to the frontier of Yemen. It is sandy and very barren; but one district yields the balm of Mecca: and there are some fruitful mountains behind. Except Jidda, there are few towns or villages of importance on the coast; and Hedsjas is chiefly remarkable for containing the famous capitals of Mecca and Medina; these have, however, a separate jurisdiction. See these articles. The highlands are possessed by a number of independent sheiks, but the Wahabees possess the general sovereignty.

HEDWIG (John), in biography, a botanist particularly celebrated for his discoveries relative to the fructification of mosses, and for a new and very ingenious generic distribution of them, the result of those discoveries, was born October 8th, 1730, at Cronstadt, in Transylvania, where his father filled a respectable station in the magistracy. He studied for four years at the public school of his native town On the death of his father in 1747, though he inherited but a very slender patrimony, he was enabled to go for further improvement to the university of Presburg in Hungary, where he remained two years, and then proceeded to Zittau in Upper Lusatia. In 1759 he took his degree of doctor of physic at Leipsic, on which occasion he published a thesis on the use of emetics in acute fevers, and was induced to establish himself at Chemnitz. The first and greatest fruit of Hedwig's labors, was the determination of the male and female flowers of mosses; the parts of which had been made out by Micheli, at least in a great measure, and even the true office of each sug-

gested; but the theory of the whole was first clearly detailed, as it was subsequently illustrated on every possible occasion, by Hedwig. Our author is recorded to have first beheld the bladder-like anther of the Linnæan Bryum pulvinatum, discharging its pollen, on the 17th of January 1770. He was already satisfied that what Linnæus, misled by Dillenius against his own previous opinion, had taken for anthers, were in fact the capsules of mosses, and produced real seed. A history of his discoveries was published in a German periodical work at Leipsic, in 1779. In 1782 appeared his valuable Fundamentum Historiæ Naturalis Muscorum Frondosorum, a handsome Latin quarto, in two parts, with twenty colored microscopical plates. Hedwig lost his first wife in 1776; and, after marrying again he in 1781 removed to Leipsic; and the following year the work above mentioned was there published, on which his fame as an original physiologist snd botanist most securely rests. The same subject is happily followed up in his Theoria Generationis et Fructificationis Plantarum Cryptoga Micarum Linnæi, published at Petersburgh in 1784. The literary fame of Hedwig, and his medical practice, were now every day increasing; he was made physician to the town-guards, and professor of physic and of botany at Leipsic. He lived to witness the general applause which his labors received, notwithstanding some attacks made on his theories of impregnation by Gærtner, Necker, and others. But he was not exempt from domestic afflictions. Of seven children brought him by his second wife six had died in their infancy; and the only remaining one, a favorite daughter, was taken from him at the age of sixteen, by a consumption. His grief, locked up in his own breast, could not be dissipated even by the scientific pursuits to which he wisely resorted for the occupation of his thoughts. His health declined; a succession of feverish attacks impaired his constitution; and he died of a typhus, after nine days' confinement, on the 17th of February 1799, aged sixty-eight.

HEDYPNOIS, from ἡδύς, sweet, and πνεω, to smell, is recorded by Pliny as a name sometimes given to the wild endive or succory. Class and order, syngenesia polygamia æqualis. Natural order, compositæ semiflosculosæ, Linn. cichoraceæ, Juss. Essential character; receptacle naked: CAL. with scales at the base; seed-crown of the disk double; the outermost obsolete, of many bristles: the inner of five chaffy scales: of the radius single, membranous and toothed. Species five; all natives of the south of Europe.

HEDYSARUM, French honey-suckle, a genus of the decandria order, and diadelphia class of plants; natural order thirty-second, papilionaceæ. The carina of the corolla is transversely obtuse; the seed-vessel a legumen with monospermous joints. There are above 120 species of this plant, of which the most remarkable are,

H. coronarium, the common biennial French honeysuckle, with large deeply striking biennial roots; upright, hollow, smooth, very branchy stalks, three or four feet high, garnished with pinnated leaves; and from between the leaves proceed long spikes of beautiful red flowers, succeeded by jointed seed-pods. It is easily raised from seed in any of the common borders, and is very ornamental.

H. gyrans, or sensitive hedysarum, a native of the East Indies, where it is called burrum chundali. It arrives at the height of four feet, and in autumn produces bunches of yellow flowers. The root is annual or biennial. It is a trifolious plant, and the lateral leaves are smaller than those at the end, and all day long they are in constant motion without any external impulse. They move up and down and circularly. This last motion is performed by the twisting of the footstalks; and, while the one leaf is rising, its associate is generally descending. The motion downwards is quicker and more irregular than the motion upwards, which is steady and uniform. These motions are observable for twenty-four hours in the leaves of a branch which is lopped off from the shrub, if kept in water. If from any obstacle the motion is retarded, upon the removal of that obstacle it is resumed with a greater degree of velocity. This species requires the common culture of tender exotics.

HEED, *v. a.* & *n. s.*
HEED'FUL, *adj.*
HEED'FULLY, *adv.*
HEED'FULNESS, *n. s.*
HEED'ILY, *adv.*
HEED'INESS, *n. s.*
HEED'LESS, *adj.*
HEED'LESSLY, *adv.*
HEED'LESSNESS, *n. s.*
Sax. þeðan; Swe. *hæd*; Belg. *hoede*; Goth. *hugad*, from *hug*, the mind.—Thomson. Attention and caution with reference to danger, especially as to morals: but, in a looser sense, regard; respect; caution; vigilance; care; observation: heedless is the opposite of all these.

Thou tokest noon *hede*, whils it shoon hoot;
Therfor wynter the nygheth, asay by thy cote.
Chaucer. The Merchantes Second Tale.

Take *heed*; have open eye; for thieves do foot by night;
Take *heed* ere Summer comes, or cuckoo birds affright.
Shakspeare. Merry Wives of Windsor.

Give him *heedful* note;
For I mine eyes will rivet to his face;
And, after, we will both our judgments join,
In censure of his seeming. *Id. Hamlet.*

Either wise bearing or ignorant carriage is caught as men catch diseases, one of another; therefore, let men take *heed* of their company. *Shakspeare.*

I am commanded
To tell the passion of my sovereign's heart;
Where fame, late ent'ring at his *heedful* ears,
Hath placed thy beauty's image and thy virtue.
Id.

To him one of the other twins was bound,
Whilst I had been like *heedful* of the other.
Id.

He did unseal them; and the first he viewed,
He did it with a serious mind; a *heed*
Was in his countenance. *Id.*

Speech must come by hearing and learning; and birds give more *heed*, and mark words more than beasts. *Bacon.*

With wanton *heed* and giddy cunning,
The melting voice through mazes running.
Milton.

The *heedless* lover does not know
Whose eyes they are that wound him so. *Waller.*

We should take *heed* of the neglect or contempt of his worship. *Tillotson.*

Heedless of verse, and hopeless of the crown,
Scarce half a wit, and more than half a clown.
Dryden.

With pleasure Argus the musician *heeds*;
But wonders much at those new vocal reeds. *Id.*

It is a way of calling a man a fool, when no *heed* is given to what he says. *L'Estrange.*

Take *heed* that, in their tender years, ideas, that have no natural cohesion, come not to be united in their heads. *Locke.*

In the little harms they suffer from knocks and falls, they should not be pitied, but bid do so again; which is a better way to cure their *heedlessness*. *Id.*

He will no more have clear ideas of all the operations of his mind, than he will have of all the particular ideas of any landscape or clock, who will not turn his eyes to it, and with attention *heed* all the parts of it. *Id.*

Some ideas, which have more than once offered themselves to the senses, have yet been little taken notice of; the mind being either *heedless*, as in children, or otherwise employed, as in men. *Id.*

Thou must take *heed*, my Portius?
The world has all its eyes on Cato's son.
Addison.

Surprises are often fatal to *heedless* unguarded innocence. *Sherlock.*

Whilst ye discharge the duties of matrimony, ye *heedlessly* slide into sin. *Arbuthnot and Pope.*

Thou *heedful* of advice, secure proceed;
My praise the precept is, be thine the deed.
Pope.

Let the learner maintain an honourable opinion of his instructor, and *heedfully* listen to his instructions, as one willing to be led. *Watts.*

The tempest caught them on the tender walk,
Heedless how far, and where its mazes strayed,
While with each other blest, creative love
Still bade eternal Eden smile around.
Thomson. Summer.

HEEL, *n. s.*, *v. n.* & *v. a.* } Sax. hele; Dan.
HEEL'ER, *n. s.* } *hæl*; Belg. *hiel*;
HEEL'PIECE, *n. s.* & *v. a.* } Goth. *hala*, the tail of an animal. A part of the foot; the whole foot; feet as employed in flight: to pursue as an enemy; to follow close as a dependent; to fetter or shackle: the back part of a stocking: heeler, a cock that strikes well with his heels: heel-piece, a piece fixed on the hinder part of the shoe, to supply what is worn away. To be at the heels is to pursue; to lay by the heels, to confine or overcome; to be out at heels, to be worn out or useless. Heel, to lean on one side, as the ship heels; to dance; to arm a cock for fighting.

In lusty leas at liberty I walk;
And of these news I feel nor weal nor woe,
Save that a clog doth hang yet at my *heel*.
Wyatt

Sir, when comes your book forth?
Upon the *heels* of my presentment. *Shakspeare.*

But is there no sequel at the *heels* of this
Mother's admiration? *Id. Hamlet.*

A good man's fortune may grow *out at heels*.
Id.

Through proud London he came sighing on,
After the admired *heels* of Bolingbroke. *Id.*

If the king blame me for't, I'll lay ye all
By the heels, and suddenly; and on your heads
Clap round fines for neglect. *Id.*

I cannot sing,
Nor *heel* the high lavolt, nor sweeten talk. *Id.*

The Spaniards fled on towards the north to seek their fortunes, being still chased by the English navy at their *heels*, until they were fain to give them over for want of powder. *Bacon.*

The stag recals his strength, his speed,
His winged *heels*, and then his armed head,
With these t' avoid, with that his fate to meet;
But fear prevails, and bids him trust his feet.
Denham.

Could we break our way
By force, and at our *heels* all hell should rise
With blackest insurrection, to confound
Heaven's purest light. *Milton.*

One half of man, his mind
Is sui juris, unconfined,
And cannot be *laid by the heels*. *Hudibras.*

Nothing is commoner, in times of danger, than for men to leave their masters to bears and tygers, and shew them a fair pair of *heels* for't. *L'Estrange.*

At the other side is a kind of *heel* or knob, to break clots with. *Mortimer's Husbandry.*

I began to smoke that they were a parcel of mummies; and wondered that none of the Middlesex justices took care to lay some of them *by the heels*.
Addison.

Pegasus appeared hanging off the side of a rock, with a fountain running from his *heel*. *Id.*

Some blamed Mrs. Bull for new *heel-piecing* her shoes. *Arbuthnot.*

If the luxated bone be distorted backward, it lieth over the *heel* bone. *Wiseman's Surgery.*

At his *heels*,
Close at his *heels*, a demagogue ascends,
And with a dex'trous jerk soon twists him down,
And wins them, but to lose them in his turn.
Cowper.

Their culverins and so forth, would find way
Through our friends armour there, with greater ease
Than the adulterer's arrow through his *heel*
Which Thetis had forgotten to baptize
In Styx. *Byron. The Deformed Transformed.*

HEFT, *n. s.* From heave; for HAFT, a handle, which see. Heaving; effort.

May be in the cup
A spider steeped, and one may drink; depart,
And yet partake no venom; for his knowledge
Is not infected: but if one present
The abhorred ingredient to his eye, make known
How he hath drunk, he cracks his gorge, his sides
With violent *hefts*. *Shakspeare. Winter's Tale.*

His oily side devours both blade and *heft*.
Waller.

HE'GIRA, *n. s.* Arabic. A term in chronology, signifying the epocha, or account of time, used by the Arabians and Turks, who begin their computation from the day that Mahomet was forced to make his escape from the city of Mecca, which happened on Friday, July 16th, A.D. 622, under the reign of the emperor Heraclius.

HEGIRA, from הגרה flight of, הגר to fly; is the epocha from which the Mahommedans reckon time. To render this epocha more creditable, the Mahommedans affect to use the word hegira in a peculiar sense for an act of religion, whereby a man forsakes his country, and gives way to the violence of persecutors and enemies of the faith: they add, that the Corashites, being then the strongest party in the city, obliged their prophet to fly, as not being able to endure his abolishing of idolatry. This flight was not the first of Mahomet's, but it was the most famous. It

happened in the fourteenth year from his assuming the character of prophet and apostle, and promulgating his new religion. The orientals do not agree with us as to the time of the hegira. Among the Mahommedans, Amasi fixes it to A. D. 630, and from the death of Moses 2347; and Ben Cassem to A. M. 5804: according to the Greek computation among the Christians, Said Ebn Batrick refers the hegira to A. D. 614, and A. M. 6113. Khondemir relates, that it was Omar, the second caliph, that first established the hegira as an epocha, and appointed the years to be numbered from it: at the time he made this decree, there were already seven years elapsed. This establishment was made in imitation of the Christians, who, in those times, reckoned their years from the persecution of Dioclesian. But there is another hegira, and that earlier too, though of less eminence. Mahomet, in the fourteenth year of his mission, was obliged to relinquish Medina; the Corashites had all along opposed him very vigorously, as an innovator and disturber of the public peace; and many of his disciples, not enduring to be reputed followers of an impostor, desired leave of him to abandon the city, for fear of being obliged to renounce their religion. This retreat makes the first hegira. These two hegiras the Mahommedans, in their language, call hegiratan. The years of the hegira consist only of 354 days. To reduce these years to the Julian kalendar, i. e. to find what Julian year a given year of the hegira answers to, reduce the year of the hegira given into days, by multiplying by 354, divide the product by 365, and from the quotient subtract the intercalations, i. e. as many days as there are four years in the quotient; and lastly, to the remainder add 622.

HEIDEGGER (John Henry), professor of divinity at Zurich, was born in 1633. He published 1. Exercitationes Selectæ de Historia sacra Patriarcharum, 2 vols. 4to. 2. De Ratione Studiorum Opuscula Aurea, 12mo. 3. Tumulus Tridentini Concilii, 4to. 4. Historia Papatus, 4to.

HEIDEGGER (John James), a native of Zurich, in Switzerland, who long figured in England as Arbiter Elegantiarum, or manager of the public amusements. He was the son of a clergyman, and married, but left his country in consequence of an intrigue. In 1708, when he was nearly fifty years old, he came to England on a negociation from the Swiss at Zurich; but, failing in his embassy, he entered as a private soldier in the guards for protection. By his sprightly conversation, and insinuating address, he soon worked himself into the good graces of people of fashion, who called him the Swiss count. He procured a subscription, with which, in 1709, he was enabled to furnish out the opera of Thomyris, which was written in English, and performed at the queen's theatre in the Haymarket. The music, however, was Italian; that is to say, airs selected from sundry of the foreign operas by Buononcini, Scarlatti, Steffani, Gasparini, and Albinoni. Heidegger, by this performance, gained 500 guineas. The judicious remarks he made on several defects in the conduct of our operas in general, and the hints he threw out for improving the entertainments of the royal theatre, soon established his character as a good critic. Appeals were made to his judgment; and some very magnificent and elegant decorations, introduced upon the stage in consequence of his advice, gave such satisfaction to George II., who was fond of operas, that, upon being informed to whose genius he was indebted for these improvements, he patronised him, and Heidegger soon obtained the chief management of the opera-house in the Haymarket. He then set about improving another species of diversion not less agreeable to the king, viz. the masquerades, and over these he always presided at the king's theatre. He was likewise appointed master of the revels. The nobility now favored him so much, that all splendid and elegant entertainments given upon particular occasions, and all private assemblies by subscription, were submitted to his direction. From the emoluments of these employments he gained a considerable income, amounting, in some years, to £5000, which he spent with much liberality, particularly in the maintenance of a luxurious table; so that it may be said he raised an income, but never a fortune. At the same time his charities ought not to pass unnoticed, which were frequent and ample. After a successful masquerade he has given away several hundred pounds at a time. 'You know poor objects of distress better than I do,' he would frequently say to a particular acquaintance, 'be so kind as to give away this money for me.' An amusing story is told respecting his conduct at the duke of Montagu's on one occasion. The facetious duke gave an entertainment to several of the nobility and gentry, when Heidegger was invited, and, in a few hours after dinner, so completely intoxicated, that he was carried out of the room, and laid insensible upon a bed. A Miss Salmon was now introduced, who took a mould from his face in plaster of Paris. From this a mask was made, and a few days before the next masquerade (at which the king promised to be present, with the countess of Yarmouth), the duke made application to Heidegger's valet de chambre, to know what suit of clothes he was likely to wear; and then, procuring a similar dress, and a person of the same stature, he gave him his instructions. On the evening of the masquerade, as soon as his majesty was seated, Heidegger as usual ordered the music to play 'God save the King;' but his back was no sooner turned, than the false Heidegger ordered them to strike up 'Over the water to Charley.' The whole company, and all the courtiers, not in the plot, were thunderstruck. Heidegger flew to the music-gallery, swore, stamped, and raved, accusing the musicians of drunkenness. The king and the countess laughed so immoderately, that they hazarded a discovery. While Heidegger staid in the gallery 'God save the king' was the tune; but when, after setting matters to rights, he retired to one of the dancing-rooms, to observe if decorum was kept by the company, the counterfeit stepping forwards, and placing himself upon the floor of the theatre, just in front of the music-gallery, called out in a most audible voice, imitating Heidegger, rated them for blockheads—had he not just told them to play 'Over the

water to Charley?' A pause ensued; the musicians who knew his character, in their turn, thought him either drunk or mad; but as he continued his vociferation, 'Charley' was played again. At this repetition of the supposed affront, some of the officers of the guards, who always attended upon these occasions, were for ascending the gallery, and kicking the musicians out; but the late duke of Cumberland, who could hardly contain himself, interposed. The company were thrown into great confusion. 'Shame! Shame!' resounded from all parts; and Heidegger once more flew in a violent rage to that part of the theatre facing the gallery. Here the duke of Montagu, artfully addressing himself to him, told him, 'the king was in a violent passion; that his best way was to go instantly and make an apology, for certainly the musicians were mad, and afterwards to discharge them.' Almost at the same instant he ordered the false Heidegger to do the same. The scene now became truly comic in the circle before the king. Heidegger had no sooner made an humble apology for the insolence of his musicians, but the false Heidegger advanced, and, in a plaintive tone, cried out, Indeed, sire, it is not my fault, 'but that devil in my likeness.' Poor Heidegger turned round, stared, staggered, grew pale, and could not utter a word. The duke then humanely whispered in his ear the sum of his plot, and the counterfeit was ordered to take off his mask. Here ended the frolic; but Heidegger swore he would never attend any public amusement, if that witch the wax-work woman did not break the mould, and melt down the mask before his face. Heidegger was of so peculiar a visage, we may add, that he made a bet with lord Chesterfield, that he could not produce an uglier man throughout the metropolis, and won the wager. He died in 1749 at the advanced age of ninety years.

HEIDELBERG, a populous but ill built city of Germany, once the capital of the Lower Palatinate, but now belonging to Baden. It has a celebrated university, founded in 1386, and stands in a pleasant rich country, famous for the best Rhenish wine. It has, however, undergone many calamities. It was entirely burnt down in 1278, and 1288. In 1622 it was plundered by the Bavarians, and the rich library was transported partly to Vienna, and party to the Vatican. After this it enjoyed peace till 1689, when, the Protestant electoral house becoming extinct, a bloody war ensued, in which not only the castle was ruined, and the town burnt, but the tombs and bodies of the electors were shamefully violated and pillaged. This happened in 1693; and the people of the Palatinate were obliged to abandon their dwellings, and take refuge in foreign countries. The great tun, said to hold 600 hhds., was broken to pieces in 1693 by the French, but repaired at great expense in 1729. The public buildings worth notice are the town-house, the three hospitals, several churches, and the university. The old fortress, Treutzkaiser, or Sternschanze, is also remarkable. The ancient electoral palace stands on a hill near the town, and is a fine ruin: its principal gate is ornamented with statues of the ancient electors and counts-palatine, as large as the life. The keep and outer wall of the platform are entire; and a beautiful semicircular walk runs through an adjoining plantation. From the interior of this edifice there is a subterraneous passage to the great square in the town.

The foundation of a new library was laid here by the celebrated Grævius; and it had been gradually carried to 30,000 volumes, when, in 1815, the books and MSS. carried to Rome were restored. A liberal grant is now made to the university annually, and its reputation is increasing: a botanical garden has been lately attached to it. Besides the university there is an academy, and various other public and private schools. Several literary journals are published here, where also are held the periodical meetings of the Baden Protestant church. The manufactures, on a small scale, embrace woollens and cottons, silk stockings, tapestry, and paper. The environs are extremely beautiful. The town stands on the Neckar, over which is a stone bridge 790 feet in length: fourteen miles north-east of Spire, and ten S.S.E. of Manheim.

HEI'FER, *n. s.* Sax. ꝑeapoꝛe. A young cow.

Who finds the *heifer* dead and bleeding fresh,
And sees fast by a butcher with an axe,
But will suspect 'twas he that made the slaughter?
Shakspeare.

A *heifer* will put up her nose, and snuff in the air against the rain. *Bacon.*

For her the flocks refuse the verdant food,
Nor thirsty *heifer* seek the gliding flood. *Pope.*

HEIGH Ho, *interj.* An expression of slight languor and uneasiness. It is used by Dryden, contrarily to custom, as a voice of exultation.

Heigh ho! an't be not four by the day, I'll be hanged. *Shakspeare.*

We'll toss off our ale 'till we cannot stand,
And *heigh ho* for the honour of Old England.
Dryden.

HEIGHT, *n. s.* } From HIGH, which see.
HEIGHT'EN, *v. a.* } The simple idea of elevation used in a variety of ways; as, altitude; degrees of latitude; summit; rank; dignity; the utmost degree, or exertion; state of excellence; improvement by decorations or colors: to aggravate, or increase, or ameliorate.

Round wos the shape, in manere of a compas
Ful of degrees, the *hight* of sixty pas.
Chaucer. The Knightes Tale.

Come on, sir; I shall now put you to the *height* of your breeding. *Shakspeare.*

By him that raised me to this careful *height*,
From that contented hap which I enjoyed. *Id.*

There is in Ticinium a church that is in length one hundred feet, in breadth twenty, and in *height* near fifty. *Bacon.*

Putrefaction doth not rise to its *height* at once. *Id.*

Abroad I'll study thee,
As he removes far off, that great *heights* takes.
Donne.

Guinea lieth to the North sea, in the same *height* as Peru to the South. *Abbott.*

Ten kings had from the Norman conqueror reigned,
When England to her greatest *height* attained,
Of power, dominion, glory, wealth, and state.
Daniel.

Into what pit thou seest,
From what *height* fallen. *Milton.*

Did not she
Of Timna first betray me, and reveal
The secret, wrested from me in the *height*
Of nuptial love professed? *Id.*

Hide me from the face
Of God, whom to behold was then my *height*
Of happiness! *Id.*

All beauty when at such a *height*
Is so already consecrate. *Marvell.*

As in a room, contrived for state, the height of the roof should bear a proportion to the area; so in the *heightenings* of poetry, the strength and vehemence of figures should be suited to the occasion. *Dryden.*

From Alpine *heights* the father first descends;
His daughter's husband in the plain attends.
Id. Æneid.

An amphitheatre appeared,
Raised in degrees, to sixty paces reared:
That when a man was placed in one degree,
Height was allowed for him above to see.
Dryden.

An amphitheatre's amazing *height*
Here fills the eye with terror and delight.
Addison.

ocial duties are carried to greater *heights*, and enforced with stronger motives, by the principles of our religion. *Id.*

Foreign states used their endeavours to *heighten* our confusions, and plunge us into all the evils of a civil war. *Id.*

Despair is the *height* of madness. *Sherlock.*

Every man of learning need not enter into their difficulties, nor climb the *heights* to which some others have arrived. *Watts.*

Her robe along the gale profusely streamed,
Light leaned the sceptre on her bending arm;
And round her brow a starry circlet gleamed,
Height'ning the pride of each commanding charm.
Beattie.

It is the hush of night, and all between
Thy margin and the mountains, dusk, yet clear,
Mellowed and mingling, yet distinctly seen,
Save darkened Jura, whose capt *heights* appear
Precipitously steep. *Byron. Childe Harold.*

HEILBRONN, a town of Wirtemberg, on the Neckar, containing three churches, a well-endowed academy, and public baths. Its name signifies 'The Spring of Health,' derived from a fountain in the neighbourhood, once used medicinally, and which still supplies the town with water. It formerly had a commandery of the Teutonic order, and was the chief place of one of their provinces. The culture of the neighbouring vineyards, and the conveyance of goods by the Neckar, are the chief employment of the inhabitants. The only manufacturing establishment worth notice is an ingenious machine for the preparation of plaster of Paris. In 1810 Heilbronn became the capital of the department of the Lower Neckar. Twenty-five miles north of Stutgard.

HEINECCIUS (John Gotlieb), a celebrated civilian of the eighteenth century, born at Eisenberg, in Altenburg, in 1681. After having studied at Goslar and Leipsic he became professor of philosophy at Halle in 1710; and in 1721 he was made professor of civil law, with the title of counsellor of the court. His great reputation induced the states of Friesland to invite him to Franeker in 1724; but in 1727 the king of Prussia prevailed on him to accept of a professorship of law at Frankfort on the Oder, where he distinguished himself till 1733. Becoming again professor at Halle, he remained there till his death in 1741, though invited to Marpurg, Denmark, and Holland. He wrote many works, all of them much esteemed. The principal are, 1. Antiquitatum Romanarum Jurisprudentiam Illustrantium Syntagma. This excellent abridgment gave rise to his reputation in foreign countries. 2. Elementa Juris Civilis. 3. Fundamenta Styli Cultioris. 4. Elementa Philosophiæ Rationalis et Moralis. 5. Historia Juris Civilis Romani ac Germanici. 6. Elementa Juris Naturæ et Gentium, &c.

HEINECKEN, or HEINETKEN (Christian), an extraordinary child born at Lubeck in 1721. He spoke his maternal tongue fluently at ten months. At one year old he knew the principal events of the pentateuch; in two months more he was master of the entire history of the Old and New Testaments; at two years and a half he answered the principal questions in geography, and in ancient and modern history; and he spoke Latin and French with great facility before his fourth year. His constitution was so delicate, that he was not weaned till a few months before his death. M. Martini of Lubeck published a pamphlet in 1730, in which he endeavoured to give natural reasons for the extraordinary capacity of this child, who died in his fifth year.

HEIN'OUS, *adj.* } Fr. *haineux*, from *haine*,
HEIN'OUSNESS, *n. s.* } hate; or from the Teu-
HEIN'OUSLY, *adv.* } tonic *hoon*, shame. Atrocious; wicked in a high degree: atrociousness; wickedness; criminality; daring offence.

To abrogate or innovate the gospel of Christ, if men or angels should attempt, it were most *heinous* and accursed sacrilege. *Hooker.*

This is the man should do the bloody deed:
The image of a wicked *heinous* fault
Lives in his eye. *Shakspeare.*

As it is a most *heinous*, so it is a most dangerous impiety to despise him that can destroy us. *Tillotson.*

He who can treat offences provoking God, as jests and trifles, must have little sense of the *heinousness* of them. *Rogers.*

HEINSIUS (Daniel), professor of politics and history at Leyden, and librarian to the university, was born at Ghent in 1580. He became a pupil of Joseph Scaliger at Leyden, and was greatly indebted to him for the eminence to which he attained in literature. He distinguished himself as a critic by his labors on many classical authors; and was highly honored at home and abroad. Gustavus Adolphus gave him a place among his counsellors of state; the republic of Venice made him a knight of the order of St. Mark; and pope Urban VIII. invited him to come, as he expressed it, 'to rescue Rome from barbarism.' He died in 1666, leaving several works both in poetry and prose. This great critic was lamentably attached to his bottle: his pupils, finding the door of the lecture-room closed one day, and suspecting the reason, are said to have written on it 'Heinsius non legit hodie, propter hesternam crapulam:' and one night, returning at a

late hour towards his own house, in a zigzag direction, he had, we are told, sufficient command over his faculties to compose the following Latin verses:—

Sta pes, sta bone pes,
Aut hi lapides
Mihi lectus erunt.

Steady! my feet—good feet be staid,
Or else these stones will be my bed.

Heinsius (Nicholas), the son of Daniel, was born at Leyden; and became as great a Latin poet as his father, and a greater critic. His poems have been several times printed, but the best edition is that of Amsterdam in 1666. He gave editions of several of the classics, with notes; his Claudium is dedicated in a Latin poem to queen Christina of Sweden, and his Ovid to Thuanus. He died in 1681.

HEIR, *n. s.* & *v. a.* } Fr. *heritier*; Lat. *hæres.*
Heir'ess, *n. s.* }
Heir'less, *adj.* } One that inherits any thing after the death of
Heir'ship, *n. s.* } its possessor; applied to
Heir'-loom, *n. s.* } males and females; as, heir; heiress: heirless, without an heir: heirship, the privilege of an heir. Heir-loom, from Sax. heir, and ȝeloma, goods. Any furniture or moveable decreed to descend by inheritance, and therefore inseparable from the freehold.

Being *heirs* together of the grace of life.
1 *Pet.* iii. 7.

He was of knighthode and of fredome flour;
Fortune him maked the *heir* of hir honour.
Chaucer. The Monkes Tale.

God made marriage in Paradis, in the estate of innocencie, to multiplie mankinde to the service of God, and therefore is the breking thereof the more grevous; of which breking, come false *heires*, oft time that wrongfully occupien folkes heritages.
Id. The Persones Tale.

I still think of
The wrong I did myself; which was so much,
That *heirless* it hath made my kingdom.
Shakspeare.

What lady is that?
The *heir* of Alanson, Rosaline her name. *Id.*

That I'll give my voice on Richard's side,
To bar my master's *heirs* in true descent,
God knows, I will not do it. *Id.*

An *heiress* she, while yet alive;
All that was her's to him did give. *Waller.*

His son in blooming youth was snatched by fate,
One only daughter *heired* the royal state. *Dryden.*

Æneas, though he married the *heiress* of the crown, yet claimed no title to it during the life of his father-in-law. *Id.*

An *heir* signifies the eldest, who is, by the laws of England, to have all his father's land. *Locke.*

A layman appoints an *heir* or an executor in his will, to build an hospital within a year, under pain of being deprived of his *heirship*. *Ayliffe's Par.*

Sunk is the hero, and his glory lost,
And I his *heir* in misery alone. *Pope.*

The *heirs* to titles and large estates have a weakness in their eyes, and a tenderness in their constitution.
Swift.

Achilles' sceptre was of wood,
Transmitted to the hero's line;
Thence through a long descent of kings
Came an *heirloom*, as Homer sings. *Id.*

The young extravagant *heir* had got a new steward, and was resolved to look into his estate.
Swift.

What race of chiefs and heroes did she bear:
What daughter of her beauties was the *heir*.
Byron. Childe Harold.

Heir, in law, signifies the person who succeeds another by descent to lands, tenements, and hereditaments, being an estate of inheritance, or an estate in fee; because nothing passes by right of inheritance but in fee. See Consanguinity, Descent, Inheritance, Succession, and Law. If land be given to a man for ever, or to him and his assigns for ever, this vests in him but an estate for life. This very great nicety about the insertion of the word heirs in all feoffments and grants, in order to vest a fee, is plainly a relic of the feudal strictness, by which it was required that the form of the donation should be punctually pursued; or that, as Craig expresses it, in the words of Baldus, donationes sint stricti juris, ne quis plus donasse præsumatur quam in donatione expresserit. And therefore, as the personal abilities of the donee were originally supposed to be the only inducements to the gift, the donee's estate in the land extended only to his own person, and subsisted no longer than his life; unless the donor, by an express provision in the grant, gave it a longer continuance, and extended it also to his heirs. But this rule is now softened by many exceptions. For, 1. It does not extend to devises by will; in which, as they were introduced at the time when the feudal rigor was apace wearing out, a more liberal construction is allowed; and therefore, by a devise to a man for ever, or to one and his assigns for ever, or to one in fee-simple, the devisee has an estate of inheritance; for the intention of the devisor is sufficiently plain from the words of perpetuity annexed, though he has omitted the legal words of inheritance. But if the devise be to a man and his assigns, without annexing words of perpetuity, there the devisee shall take only an estate for life; for it does not appear that the devisor intended any more. 2. Neither does this rule extend to fines or recoveries, considered as a species of conveyance; for thereby an estate in fee passes by act and operation of law without the word heirs; as it does also, for particular reasons, by certain other methods of conveyance which have relation to a former grant or estate, in which the word heirs was expressed. 3. In creations of nobility by writ, the peer so created has an inheritance in his title, without expressing the word heirs; for they are implied in the creation, unless it be otherwise specially provided: but in creations by patent, which are stricti juris, the word heirs must be inserted, otherwise there is no inheritance. 4. In grants of land to sole corporations and their successors, the word successor supplies the place of heirs; for, as heirs take from the ancestor, so does the successor from the predecessor. Nay, in a grant to a bishop or other sole spiritual corporation, in frank almoign, the words frank almoign supply the place of successors (as the word successors supplies the place of heirs) ex vi termini; and, in all these cases, a fee-simple vests in such sole corporation. But, in a grant of lands to a cor-

poration aggregate, the word successors is not necessary, though usually inserted: for, although such simple grant be strictly only an estate for life, yet, as that corporation never dies, such estate for life is perpetual, or equivalent to a fee-simple, and therefore the law allows it to be one. Lastly, in the case of the king, a fee-simple will vest in him, without the word heirs or successors in the grant; partly from prerogative royal, and partly from a reason similar to the last, because the king, in judgment of the law, never dies. But the general rule is, that the word heirs is necessary to create an estate of inheritance.

Heir Apparent is a person so called in the lifetime of his ancestor, at whose death he is heir at law.

Heir Presumptive is one who, if the ancestor should die immediately, would, in the present circumstances of things, be his heir; but whose right of inheritance may be defeated by some nearer heir being born.

Heir-Loom comprehends divers implements, as tables, presses, cupboards, bedsteads, furnaces, wainscot, and such like; which in some countries have belonged to a house for certain descents, and are never inventoried after the decease of the owner, as chattels are, but accrue by custom, not by common law, to the heir with the house itself. The ancient jewels of the crown are held to be heir-looms, and are not devisable by will, but descend to the next successor.

HEISTER (Laurence), a celebrated physician, surgeon, and anatomist, who also rendered himself conspicuous among botanists by his opposition to the system and principles of Linnæus, at a time when they were making the greatest progress in the general estimation, was born at Frankfort on the Maine, in 1683. He was educated at several German universities, and in the year 1706 spent some time in the study of anatomy and surgery at Amsterdam under Ruysch, then so famous for his dissections and anatomical preparations. In the following year he went to serve as a surgeon in the Dutch camp in Brabant; devoting the subsequent winter to further improvement, under Boerhaave and his eminent colleagues, who at that time attracted students from all parts to the university of Leyden, where Heister took his degree. Returning afterwards to the camp, he was, in 1709, appointed physician general to the Dutch military hospital. The experience he thus acquired raised him to a distinguished rank in the theory and practice of surgery. In 1710 he became professor of anatomy and surgery at Altorf, in the little canton of Uri, and rendered himself celebrated by his lectures and writings. Ten years afterwards a more advantageous situation offered itself to him at Helmstadt, where he became physician to the duke of Brunswick, with the title of Aulic counsellor, as well as professor of medicine, and afterwards of surgery and botany, in that university. Here he continued till his death, which happened in 1758, at the age of seventy-five. In August, 1741, our author came forward as the professed adversary of Linnæus, in the inaugural dissertation of one of his pupils named Goeckel, entitled Meditationes et Animadversiones in Novum Systema Botanicum sexuale Linnæi. Another dissertation of Heister's, published in October 1741, De Nominum Plantarum Mutatione utili ac noxia, is a more diffuse and elaborate attack on the nomenclature of the great Swedish teacher, whom however he terms 'a most diligent and most valuable botanist.' In 1748 he published a Systema Plantarum Generale ex Fructificatione, cui annectuntur regulæ ejusdem, de Nominibus Plantarum, a Celeb. Linnæi longè diversæ.

HEISTERIA, in botany, a genus of the monogynia order, and decandria class of plants; natural order twelfth, holoraceæ: cal. quinquefid, the petals five: the fruit is a plum on a very large colored calyx. Species three; natives of different tropical countries.

HEITERSHEIM, a town of Baden, on the borders of the Black Forest, long the residence of the grand prior of the order of St. John in Germany, who had a seat and a vote in the imperial diet. To this town, and its seven dependent villages, he added other possessions on the left bank of the Rhine: in 1806 the grand priory was suppressed. It is ten miles south of Brisac, and twenty N. N. E of Bale.

HELDER, or Helder Point, a town and fort of North Holland, opposite the Texel, seated on a cape on the coast of the Zuyder Zee, about twenty-four miles from Alkmaer. It was taken by the British, under the duke of York, August 30th, 1799, after a battle wherein about 1000 of the Dutch and 540 of the British were killed or wounded. It has a strong fort to defend the road of Mars Diep. Population about 2500. Near this place also Van Tromp fell in a naval action fought in 1653.

HELE (Thomas), a dramatic author of the eighteenth century, born in Gloucestershire in 1740. He acquired so complete a knowledge of the French language that he wrote it with all the ease and elegance of a native. After serving in the army during the German war, till the peace of 1763, he went to Italy, and thence to Paris; where he settled, and wrote comedies for the theatre which have been much admired. He died in 1780.

HELEN, or Helena, in fabulous history, the daughter of Tyndarus, or, according to the poets, of Jupiter and Leda, was married to Menelaus king of Sparta, but was stolen from him by Theseus, A. A. C 1235. She was restored soon after; but carried off again by Paris, which occasioned the famous Trojan war. See Paris and Troy.

Helena (St.), the wife of the emperor Constantius Chlorus, and mother of Constantine the Great, was a native of South Britain; but authors differ as to the rank she held when the emperor married her. Dr. Watkins, in his Biographical Dictionary, makes her of 'obscure birth;' but Dr. Anderson, in his Royal Genealogies, says that she was the daughter of king Coilus II. In her eightieth year she went to the Holy Land, where, the Roman Catholics say, she discovered the holy cross. She died soon after, about A. D. 321.

HELENA (St.), an island of the South Atlantic Ocean, discovered by the Portuguese commander, J. Nova Gallega, on the festival of St. Helena in 1501. It is a mass of detached rock in the midst of the ocean, being about 1200 miles from the nearest point of land, in 15° 55′ N. lat., and 5° 43′ W. long.

The Portuguese stocked it with goats, fowl, fruit, and stores, for the refreshment of their ships bound to India; but soon neglected it, and at the close of the sixteenth century the Dutch obtained it with scarcely any resistance on the part of its discoverers. Afterwards, establishing a colony at the Cape of Good Hope, they also abandoned the island, and the East India Company settled on it in the same year, 1651; ten years after they obtained the possession of it by a charter from king Charles II. They now took pains in stocking and improving it; and the island, it is said, received a considerable supply of inhabitants in consequence of the fire of London. The Dutch, indeed, recovered it again in 1665, but, in less than twelve months, the English regained the possession. No fortifications seem to have been constructed here either by the Portuguese or Dutch. The first fort was a triangular redoubt, erected in 1665, called Fort James, in compliment to the duke of York, afterwards king James II. The appellation of James's Valley is derived from this fort, and that of Chapel Valley from the Portuguese chapel, the ruins of which were visible when the island was first settled by the English. The Dutch, recovered it again, but it was retaken by Sir Richard Munden, and, upon his arrival in England, the possession and government of it were again assigned by the king to the East India Company, and a charter was granted December 16th, 1673, constituting them lords proprietors of the island, with the rights and powers of sovereignty.

Thus it remained until in 1815 it was selected as the final abode of the deposed emperor Napoleon. It was in consequence ceded at this time to government; an act of parliament regulating the intercourse of ships with the island was passed; and a governor appointed having special charge of this important state prisoner, who died here the 5th of May, 1821. See NAPOLEON.

St. Helena is about ten miles and a half long, and six and three quarters broad, or about twenty-eight miles in circuit. It rises abruptly from the sea, in vast masses varying from 600 to nearly 3000 feet in height: the whole coast being a perpendicular wall of solid rock, with four strongly fortified openings. The whole island, indeed, is but the summit of a mountain, and probably of volcanic origin. On entering the interior, however, the bleak appearance vanishes; verdant and beautiful small valleys occupy the interstices between the hills; and a plain, wholly free from large stones, extends about 1500 acres in an elevated part of the island. Here almost any grain or fruit will flourish. There is also another plain of about 200 acres, on a lower level; but the soil is impregnated with saline matter, and marine plants are its chief productions. Diana's Peak, the loftiest summit of the island, is about 2700 feet in height. In the south-west part there is another conspicuous conical hill called the High Knoll, but it is of inferior elevation. The shores present various rugged points and numerous caverns into which the sea breaks.

Its climate, from the elevation of the island, is mild, but moist, and remarkably uniform; so that at Plantation House, Fahrenheit's thermometer varies in the course of the year only from about 61° to 73°; at Longwood, which is still more elevated, it is generally 5° lower; while at James Town, it is about as much higher. Storms or hurricanes are rarely known: the trade winds blow steadily, but seldom to exceed a fresh breeze. The sky is, however, often enveloped in clouds. The quantity of rain that fell, in an average of four years, was 33·38 inches. Iron ore is said to be found in some parts of the island, and there are some appearances of gold and copper ore. Lime is plentiful and excellent. When first discovered St. Helena was covered with forests, but few traces of them now remain. Indeed the island is remarkably destitute of trees.

The scarcity of water is the principal impediment to the extension of agriculture, but this might probably be remedied by the planting timber on the hills. The oak of Europe has been introduced with success, and it is probable the teak of India would also succeed. Furze, the seeds of which were brought by the English, is tolerably abundant, and supplies the only fuel. The shrub called palma Christi seems indigenous to the island and can scarcely be rooted out; it has been supposed that it might be be made useful in the formation of hedges.

As a landing can only be effected on the lee side of the island, every accessible spot on that side is protected by fortifications, and the strictest military discipline has long been enforced throughout the island.

It possesses but one town on the north-west side, in James's Valley, which is entered from the shore by an arched gateway that leads into a parade of about 100 feet square. On the left is the government-house, or castle as it is sometimes called, and the principal guard-room. A handsome church is in front of this edifice, and a theatre on the right. The most respectable street extends from this part of the town, and contains about thirty houses. Two others branch from the upper part to the east and west; containing shops, well stored with European, and Indian goods. The principal inhabitants have houses and plantations in the interior. Ships anchor in the road opposite the town. English families to the amount of 300 or 400 are often found here; the whole population being about 2000, one-half of whom, perhaps, are soldiers or slaves.

The annual expenses of the island to the East India Company, before the cession, amounted to from £40,000 to £50,000. The only revenue was in the quit rent and rent of lands leased, which amounted to £1000 a year, and the profit on the monopoly of arrack, which commonly produced £10,000. In 1809 the island contained 1811 sheep, and 2887 goats. The value of provisions furnished to ships amounted in 1789, to £6569; in 1809, to £6346. The quan-

tity supplied at the latter period must have been little more than a third of that at the former, the prices of all the articles of produce having in that time nearly tripled. Beef and pork had risen from 6*d.* to 1*s.* 2*d.*; a sheep from £1 1*s.* to £2 or £3; fowls from 1*s.* 6*d.* to 7*s.* 6*d.* On the shore of St. Helena there is produced a considerable quantity of the marine plant called salsola, which yields fine barilla.

Round the island are a number of small rocky islets surrounding it, the principal of which are called Egg, Speery, and George Islands. The rocks, as in most of the African Islands, consist in a great measure of basalt, of which there are excellent quarries.

HELENIUM, bastard sun-flower, a genus of the polygamia superflua order, and syngenesia class of plants, natural order forty-ninth, compositæ. The receptacle is naked in the middle: under the radius paleaceous: the pappus consists of five short awns: CAL. is simple and multipartite: the florets of the radius semitrifid. The principal species are, H. autumnale, with spear-shaped narrow leaves: and, H. latifolium, with pointed, spear-shaped, sawed leaves. Both are natives of North America, where they grow wild in great plenty. They rise to the height of seven or eight feet in good ground. The roots, when large, send up a great number of stalks, which branch toward the top; the upper part of the stalk sustains one yellow flower, shaped like the sun-flower, but much smaller, having long rays, which are jagged pretty deep into four or five segments. These plants may be propagated by seeds, or by parting their roots; the latter is generally practised in this country. The best season to transplant and part the old roots is in October, when their leaves are past, or in the beginning of March, just before they begin to shoot. They delight in a soil rather moist than dry, provided it is not too strong, or does not hold the wet in winter.

HELEN'S (St.), a village, and road or bay in the Isle of Wight, on the northern coast. It is a place of rendezvous for the navy, and of great traffic in time of war. At the mouth of the bay is a cluster of rocks called the Mixen.

HELEN'S (St.), one of the Scilly Islands, about a mile north of Fresco, and containing the remains of one of the oldest churches in Britain. It comprises 100 acres of good soil, but is uninhabited.

HELENUS, a celebrated soothsayer, son of Priam and Hecuba. He was greatly respected by the Trojans. When Deiphobus was given in marriage to Helen, in preference to himself, he retired to mount Ida, where Ulysses took him prisoner by the advice of Calchas. The Greeks, by threats and promises, induced him to reveal the secrets of the Trojans; and either the fear of death, or gratification of resentment, led him to disclose to the enemies of his country, that Troy could not be taken whilst it was in possession of the Palladium, nor before Philoctetes came from his retreat at Lemnos and assisted in the siege. After the ruin of his country, he fell to the share of Pyrrhus the son of Achilles, and saved his life by warning him to avoid a dangerous tempest, which proved fatal to all those who set sail. This endeared him to Pyrrhus; from whom he received Andromache, the widow of his brother Hector, by whom he had a son called Cestrinus. He was the only one of Priam's sons who survived the ruin of his country. After the death of Pyrrhus he reigned over part of Epirus, which he called Chaonia, in memory of his brother Chaon, whom he had inadvertently killed. Helenus received Æneas as he sailed towards Italy, and foretold him some of the calamities which attended his fleet.

HELEPOLIS, in the ancient art of war, a machine for battering down the walls of a place, the invention of which is ascribed to Demetrius Poliorcetes. Diodorus Siculus says, that each side of the Helepolis was 405 cubits in breadth, and ninety in height; that it had nine stages, and was carried on four strong solid wheels eight cubits in diameter; that it was armed with large battering rams, and had two roofs capable of supporting them; that in the lower stages there were different sorts of engines for casting stones; and in the middle they had large catapultas for discharging arrows, and smaller ones in those above, with a number of expert men for working these machines.

HELI'ACAL, *adj.* } Fr. *heliaque*; from ἥλιος.
HE'LIACALLY, *adv.* } Emerging from the lustre of the sun, or falling into it.

Had they ascribed the heat of the season to this star, they would not have computed from its *heliacal* ascent. ***Browne.***

From the rising of this star, not cosmically, that is, with the sun, but *heliacally*, that is, its emersion from the rays of the sun, the ancients computed their canicular days. ***Id.***

He is tempestuous in the Summer, when he rises *heliacally*; and rainy in the Winter, when he rises achronically. ***Dryden.***

HELIACAL, in astronomy, is applied to the rising and setting of the stars. A star is said to rise heliacally, when, after having been in conjunction with the sun, and on that account invisible, it comes to be at such a distance from him as to be seen in the morning before sun-rising; the sun, by his apparent motion, receding from the star towards the east. The heliacal setting is when the sun approaches so near a star as to hide it with his beams, which prevent the fainter light of the star from being perceived; so that the terms apparition and occulation would be more proper than rising and setting.

HELIADES, in mythology, the daughters of Apollo and Clymene, who were so afflicted with the death of their brother Phaeton, that the gods, in compassion, transformed them into poplars on the banks of the Eridanus. Their names were Phaetusa, Lampetia, and Phœbe. See PHAETON.

HELIANTHUS, the great sun-flower, a genus of the polygamia frustanea order, and syngenesia class of plants: natural order forty-ninth, compositæ. Receptacle is paleaceous and plane: pappus diphyllous: CAL. imbricated: the scales standing a little out at the tops. There are twenty-one species, most of which are now common in our gardens, though all of them are natives of America. They are all very hardy, and prosper in almost any soil or situation. They

may be propagated either by seeds or by parting their roots.

HELIASTÆ, or HELIASTES, in antiquity, the judges of the court Heliæa. They were so called, according to Ulpian, from ἁλιζω, to assemble in a great number; or, according to others, from ηλιος, the sun, because they held their assemblies in an open place, and from sun-rise to sun-set. They composed the most numerous and important of the Athenian tribunals. Their province was to explain obscure laws, and to give authority to those which had been violated. The Thesmothetæ convoked the assembly of the Heliastæ, which sometimes amounted to 1000, sometimes to 1500 judges. Mr. Blanchard is of opinion, that, to make this number, the Thesmothetæ sometimes summoned those of each tribe who had last quitted the public offices which they had exercised in another court. The assemblies of the Heliastæ were not frequent, as they would have interrupted the jurisdiction of the stated tribunals and the common course of affairs. The Thesmothetæ paid to each member of this assembly, for his attendance, three oboli. Hence Aristophanes terms them the brothers of the triobulus. They were fined if they came too late, and, if the orators had begun to speak, they were not admitted. They were paid out of the public treasury, and their pay was called misthos heliasticus. The assembly met at first, according to Aristophanes, at the rising of the sun. If the judges were obliged to meet under cover, on account of frost and snow, they had a fire; but no ancient author informs us of the place where these assemblies were held. We only learn, that there was a double enclosure around the assembly, that it might not be disturbed. The first was a kind of arbor work, separated by doors, over which were painted in red the first ten or twelve letters of the Greek alphabet, which directed the entrance of the officers who composed the tribunal, each of them entering under the letter which distinguished his tribe. The beadles, to whom they showed the wands which had been sent them by the Thesmothetæ, examined the mark, to see if it was authentic, and then introduced them. The second enclosure, which was twenty feet from the former, was a rope or cord; that the people who stood round the first enclosure, and were desirous to see what passed within the second, might not be prevented from gratifying their curiosity at a proper distance. Thus the attention of the judges was not interrupted by the concourse of the multitude, many of whom were heated by views of interest or of party. To each member were given two pieces of copper; one of which was perforated. Sea shells were at first in use. The king was present at the assembly, at whose command it had been summoned. The Thesmothetæ read the names of those who were to compose it, and each man took his place as he was called. The Thesmothetæ were then sent for, whose function it was to observe prodigies and to superintend the sacrifices; and, if they gave their sanction, the deliberations were begun. The Exegetæ were often corrupted by those who were interested in the debates of the assembly, and even excited tumults. Of all the monuments extant, relating to the Heliastæ, the most curious is the oath which those judges took before the Thesmothetæ: Demosthenes preserved it in his oration against Timocrates, who, having been bribed by those who had been intrusted with the effects taken on board a vessel of Naucratis, and refusing to give an account of them, had a law passed, by which an enlargement was granted to prisoners for public debts on giving bail. Demosthenes, in making his oration against that law, ordered the oath of the Heliastæ to be read aloud, as a perpetual auxiliary to his arguments. This oath we quote, as it shows how important a tribunal that of the Heliastæ was:—'I will judge according to the laws and decrees of the people of Athens, and of the senate of 500. I will never give my vote for the establishment of a tyrant, nor of an oligarchy. Nor will I ever give my approbation to any opinion prejudicial to the liberty or to the union of the people of Athens. I will not second those persons who may propose a reduction of private debts, or a distribution of the lands or houses of the Athenians. I will not recal exiles, nor endeavour to procure a pardon for those who shall be condemned to die; nor will I force those to retire whom the laws and the suffrages of the people shall permit to remain in their country. I will not give my vote to any candidate for a public function, who gives not an account of his conduct in the office which he has previously filled; nor will I presume to solicit any trust from the commonwealth without subjecting myself to this condition, which I intend as obligatory to the nine archons, to the chief of religious matters, to those who are ballotted on the same day with the nine archons, to the herald, the ambassador, and the other officers of their court. I will not suffer the same man to hold the same office twice, or to hold two offices in the same year. I will not accept any present, either myself or by another, either directly or indirectly, as a member of the Heliastic assembly. I solemnly declare that I am thirty years old. I will be equally attentive and impartial to the accuser and the accused; I will give my sentence rigorously according to evidence. Thus I swear, by Jupiter, by Neptune, and by Ceres, to act. And if I violate any of my engagements, I imprecate from these deities ruin on myself and my family; and I intreat them to grant me every kind of prosperity, if I am faithful to my oath.' Here we have one of the motives of the meeting of this assembly. Aristotle informs us of another; which was by the public authority deputed to them, to elect a magistrate in the room of one dead. It is surprising, that Pausanias, who enters so often into details, gives us no particular account of this assembly. All that he says of it is, that the most numerous of the Athenian assemblies was called Heliæa. Diogenes Laertius, in his life of Solon, says, that it was before one of these Heliastic assemblies, that Pisistratus presented himself, covered with wounds and contusions, to excite the indignation of the people against his pretended enemies. As to the manner in which the judges gave their suffrages, there was a sort of vessel covered with an osier mat, in which were placed two urns, the one of copper, the

other of wood. In the lid of these urns was an oblong hole, large at the top, and narrower downwards. The suffrages which condemned the accused person were thrown into the wooden urn, called kyrios. That of copper, named akyros, received those which absolved him. Aristotle observes that Solon, whose aim was to make his people happy, and who found an aristocracy established by the election of the nine archons annual officers, whose power was almost absolute, tempered their sovereignty, by instituting the privilege of appealing from them to the people, who were to be assembled by lot to give their suffrages; after having taken the oath of the Heliastæ, in a place near the Panathenæum, where Hissus had, in former days, calmed a sedition of the people, and bound them to unanimity by an oath. It has likewise been remarked, that Apollo was not invoked in the oath of the Heliastæ, as in the oaths of the other judges. As all who took the oath of the Heliastæ, engaged not to be corrupted by solicitation or money, those who violated this part of their oath were condemned to pay a severe fine.

HEL'ICAL, *adv.* Fr. *helice;* from ἕλιξ. Spiral; with many circumvolutions.

The screw is a kind of wedge multiplied or continued by a *helical* revolution about a cylinder, receiving its motion not from any stroke, but from a vectis at one end of it. *Wilkins.*

HELICON, in ancient geography, a mountain in the neighbourhood of Parnassus and Cytheron, sacred to Apollo and the Muses. It is situated in Livadia, and now called Zagura or Zaguya. It was one of the most fertile and woody mountains in Greece. On it the fruit of the adrachnus, a species of the arbutus, or strawberry tree, was uncommonly sweet; and the inhabitants affirmed, that the plants and roots were all friendly to man, and that even the serpents had their poison weakened by the innoxious qualities of their food. Its north side was near Parnassus, where it touched on Phocis; and resembled that mountain in loftiness, extent, and magnitude. Here was the shady grove of the Muses and their images; with statues of Apollo and Bacchus, of Linus and Orpheus, and other illustrious poets. Among the tripods, in the second century, was that consecrated by Hesiod. On the left hand towards the grove was the fountain Aganippe; and about twenty stadia, or two miles and a half, higher up, the violet-colored Hippocrene. Round the grove were houses. A festival was celebrated there by the Thespians with games called musea. The valleys of Helicon are described by Wheeler as green and flowery in the spring; and enlivened by pleasing cascades and streams, and by fountains and wells of clear water. The Bœotian cities in general, two or three excepted, were reduced to inconsiderable villages in the time of Strabo. The grove of the Muses was plundered under Constantine the Great. The Heliconian goddesses were afterwards consumed in a fire at Constantinople, to which city they had been removed. See GREECE.

HELICONIA, in botany, a genus of the monogynia order, and pentandria class of plants. The spatha is universal and partial; there is no calyx: COR. has three petals, and the nectarium two leaves: CAPS. is three-grained.

HELICTERES, the screw-tree: a genus of the decandria order, and gynandria class of plants; natural order thirty-seventh, columniferæ: CAL. monophyllous and oblique; petals five; and the nectarium consists of five petal-like leaflets; CAPS. intorted or twisted inwards. There are ten species, all natives of warm climates. They are shrubby plants, rising from five to fourteen feet in height, adorned with flowers of a yellow color. They are propagated by seeds; but are tender, and in this country must be kept in a stove during the winter.

HELIER (St.), the capital of the island of Jersey, in the bay of St. Aubin, where it has a harbour, and a stone pier, having the sea on the south-west and hills on the north. Another large hill projects over the town, and has a pleasant walk, and an extensive prospect. It is defended by Elizabeth Castle, a strong fortress on a rock in the bay, about a mile from the town. The streets are wide and well paved. The inhabitants are about 6500. In the market-place is a statue of George II. in bronze, gilt. St. Helier, within the last twenty years, has been greatly improved: it profited largely by the late war. When properly lighted it will vie with most of the market-towns in England. It contains within itself nearly one-third of the population, and within its port nearly the whole trade of the island. A work-house and a public hospital have been established here for the use of the whole island; and in 1815 a new prison was completed in the vicinity of the sea-shore. Elizabeth Castle is a strong fortress, on a rocky island in St. Aubin's Bay, about a mile from St. Helier, of which it defends the entrance; and another fortification has recently been constructed on a high hill which overhangs the town: it will contain from 2000 to 3000 men. It has also a small theatre and a public library. Three gazettes are published here weekly in French, and one in English. Packets sail three times a week to Weymouth. See JERSEY. Long. 2° 13′ W., lat. 49° 13′ N.

HELIGOLAND (Holy Island), a group of islands nearly equidistant, or twelve leagues, from the mouths of the Elbe, Weser, and Eyder; formerly belonging to Denmark, but now to Great Britain, which took possession of it from the former power in the war of 1807. The action of the waves has reduced the principal island to a great rock, from two to three miles in circuit rising in the centre to a round elevation, the ascent to which is by 150 steps. What little soil it possesses is sand and clay: the shores rise perpendicularly, and the island is surrounded by reefs and banks, the remains of its ancient territory. It has long been diminishing in this way. The elevated part is sometimes called the Cliff, and the other the Low Land. At a short distance is the Doun, or Douns, a distinct island, but ever varying its form. To the east is a road where ships may find forty-eight feet of water. The inhabitants of Heligoland, who amount to upwards of 2000, are descended from the ancient Frieslanders, whose language and manners they

preserve; subsisting principally by fishing and pilotage. On the north end of the island is a light-house, and on the south a haven for boats.

Heligoland was in former ages the residence of a chief of the Sicambri, or North Frieslanders, and the seat of worship of the Saxon deity Phoseta. During the late war it was a considerable depôt for British merchandise, which was smuggled into the continent.

HELIOCARPUS, in botany, a genus of the digynia order, and dodecandria class of plants: natural order thirty-seventh, columniferæ: CAL. tetraphyllous: the petals four; the styles simple; CAPS. bilocular, compressed, and radiated lengthwise on each side.

HELIOCE'NTRIC, *adj.* Fr. *heliocentrique*; ἥλιος and κέντρον.

The *heliocentrick* place of a planet is said to be such as it would appear to us from the sun, if our eye were fixed in its centre. *Harris.*

HELIOCOMETES, a phenomenon sometimes observed about sun-setting; being a large luminous tail or column of light proceeding from the body of the sun, and dragging after it, like the tail of a comet, whence the name.

HE'LIOID PARABOLA, or the parabolic spiral, in mathematics, is a curve which arises from the supposition of the axis of the common Apollonian parabola being bent round into the periphery of a circle, and is a line then passing through the extremities of the ordinates, which do now converge towards the centre of the said circle.

HELIODORUS, bishop of Tricca, in Thessaly, and the father of romance writing, was born at Emmessa, in Phœnicia, in the end of the fourth century. In his youth he wrote a romance in ten books, the first work of its kind, entitled Æthiopics, relating the amours of Theagenes and Chariclea. He was deposed by a synod because he would not consent to suppress it. It has been repeatedly printed in Greek and Latin, particularly at Basil, in 1553. Professor Robison gives the following high character of this work, in his Proofs of a Conspiracy, p. 266. 'I think,' says he, 'that the first piece, in which woman is pictured as a respectable character, is the oldest novel that I am acquainted with, written by a Christian bishop, Heliodorus; I mean the adventures of Theagenes and Chariclea.' Heliodorus was also a good Latin poet. He flourished under Theodosius I. and Arcadius.

HELIOGABALUS (M. Aurelius Antoninus), one of the many monsters who reigned in Rome. See ROME. He was murdered, after a short and detestable reign of four years, A. D. 222. He took the name of Heliogabalus from having been a priest of Apollo, in Phœnicia.

HELIOMETER, from ηλιος, the sun, and μετρεω, to measure, an instrument called also astrometer, invented by M. Bouguer in 1747, for measuring with particular exactness the diameters of the stars, and especially those of the sun and moon. This instrument is a kind of telescope, consisting of two object glasses of equal focal distance, placed the one by the side of the other, so that the same eye glass serves for both. The tube is of a conic form, larger at the upper end, which receives the two object glasses, than at the lower, which is furnished with an eye-glass and micrometer. By the construction of this instrument two distinct images of an object are formed in the focus of the eye-glass, whose distance, depending on that of the two object glasses from one another, may be measured with great accuracy; nor is it necessary that the whole disc of the sun or moon come within the field of view; since, if the images of only a small part of the disc be formed by each object-glass, the whole diameter may be easily computed by their position with respect to one another; for, if the object be large, the images will approach, or perhaps lie even over one another; and, the object-glasses being moveable, the two images may always be brought to touch one another, and the diameter may be computed from the known distance of the centres of the two glasses. Besides, as this instrument has a common micrometer in the focus of the eye-glass, when the two images of the sun or moon are made in part to cover one another, that part which is common to both the images may be measured with great exactness, as being viewed upon a ground that is only one-half less luminous than itself; whereas, in general, the heavenly bodies are viewed upon a dark ground, and on that account are imagined to be larger than they really are. By a small addition to this instrument, provided it be of a moderate length, M. Bouguer thought it very possible to measure angles of three or four degrees, which is of particular consequence in taking the distance of stars from the moon. With this instrument M. Bouguer, by repeated observation, found, that the sun's vertical diameter, though somewhat diminished by the astronomical refraction, is longer than the horizontal diameter; and, in ascertaining this phenomenon, he also found, that the upper and lower edges of the sun's disc are not so equally defined as the other parts; on this account his image appears somewhat extended in the vertical direction. This is owing to the decomposition of light, which is known to consist of rays differently refrangible in its passage through our atmosphere. Thus the blue and violet rays, which proceed from the upper part of the disc at the same time with those of other colors, are somewhat more refracted than the others, and therefore seem to us to have proceeded from a higher point; whereas, on the contrary, the red rays proceeding from the lower edge of the disc, being less refracted than the others, seem to proceed from a lower point; so that the vertical diameter is extended, or appears longer, than the horizontal diameter. Mr. Servington Savery discovered a similar method of improving the micrometer, which was communicated to the Royal Society in 1743. See MICROMETER.

HELIOPOLIS, a city of Egypt, so called by Herodotus and Diodorus Siculus; by Moses On, and by Jeremiah Bethshemesh. It is one of the most ancient cities of the world of which any vestiges can now be traced. It lay south-east of the Delta, and east of Memphis; and was long famous for its temple of the sun. The most enlightened philosophers of Greece and Rome were attracted to this celebrated seat of learning. It was here that Herodotus became acquainted

with the sciences and mysteries of Egypt. Plato was here taught philosophy, and about thirty years before Christ its ruins were visited and described by Strabo. In this city was erected a temple to the sun, where a particular part was appropriated for the feeding of the sacred ox, which was here worshipped under the name of Mnevis. There was also another splendid temple, with avenues of sphinxes and superb obelisks, before the principal entrance. Out of the four obelisks, which were erected here by Sochis, two were carried to Rome; one was destroyed by the Arabs, and the fourth still remains. The obelisk, or pillar of On, which is now the only piece of antiquity that marks the site of Heliopolis, is about sixty-eight feet high, and six feet and a half wide on each side. According to Dr. Clarke, who has given a very correct engraving of it, it is one entire mass of reddish granite. Each of its four sides exhibits the same characters, and in the same order. Those which face the south have been the least affected by the decomposition of the substance of which they are hewn; and it is from the southern side that Dr. Clarke's engraving is taken. For a particular account of this obelisk, and the hieroglyphics which it contains, the reader is referred to Dr. Clarke's Travels in Egypt.—Near this city the French, under general Kleber, completely defeated the Turks under the grand vizier, and killed 8000 men, on the 18th of March, 1800, after the breach of the treaty of El-Arisch.

Heliopolis, a city of Cœlesyria, near the springs of the Orontes; so called from the worship of the sun; now named Balbec. See Balbec.

HE'LIOSCOPE, *n. s.* Fr. *helioscope*; ἥλιος and σκοπέω. A sort of telescope fitted so as to look on the body of the sun, without offence to the eyes.

HE'LIOTROPE, *n. s.* Fr. *heliotrope*; ἥλιος and τρέπω; Lat. *heliotropium*. A plant that turns towards the sun; but more particularly the turnsol, or sunflower.

'Tis an observation of flatterers, that they are like the *heliotrope*; they open only towards the sun, but shut and contract themselves at night, and in cloudy weather. *Government of the Tongue.*

Heliotrope, among the ancients, an instrument or machine for showing when the sun arrived at the tropics and the equinoctial line. This name was also used for a sun-dial.

Heliotrope, in lithology, a precious stone, of a green color, streaked with red veins. Pliny says it is thus called, because, when cast into a vessel of water, the sun's rays falling thereon seem to be of a blood color; and that, when out of the water, it gives a faint reflection of the figure of the sun; and is proper to observe eclipses of the sun as a helioscope. The heliotrope is also called the oriental jasper, on account of its ruddy spots. It is found in the East Indies, as also in Ethiopia, Germany, Bohemia, &c. According to Brandes and Firnhaber it contains, silica 96·55, oxide of iron 1·25, alumina 0·83, water 1·05, = 99·58. It is found in rocks belonging to the secondary trap formation. The finest heliotrope comes from Bucharia and Siberia. A variety is found in the island of Rume in Scotland. It is cut into seals and snuff-boxes. The Siberian wants the red spots.

HELIOTROPIUM, turnsol, a genus of the polygynia order, and pentandria class of plants: natural order forty-first, asperifoliæ: cor. salver-shaped and quinquefid, with smaller dents interjected alternately; the throat closed up by small arches formed in the corolla itself. There are many species, all natives of warm countries. Only one, viz. H. tricoccum, grows in Europe, and is a native of France, Spain, and Italy.

HE'LISPHERICAL, *adj.* Helix and sphere.

The *helispherical* line is the rhomb line in navigation, and is so called because on the globe it winds round the pole spirally, and still comes nearer and nearer to it, but cannot terminate in it. *Harris.*

HE'LIX, *n. s.* Fr. *helice*; Gr. ἕλιξ. Part of a spiral line: a circumvolution.

Find the true inclination of the screw, together with the quantity of water which every *helix* does contain. *Wilkins.*

Helix, in anatomy, is the whole circuit or extent of the auricle or border of the ear outwards; whence the inner protuberance surrounded thereby, and answering thereto, is called antihelix. See Anatomy.

Helix, in architecture. Some authors make a difference between the helix and the spiral. A stair-case, according to Daviler, is in a helix, or is helical, when the stairs or steps wind round a cylindrical newel; whereas the spiral winds round a cone, and is continually approaching nearer and nearer its axis. The word is also applied to the caulicules, or little volutes under the flowers of the Corinthian capital; called also urillæ.

Helix, in zoology, the snail, a genus in the class of vermes, and order of testacea. The shell consists of one spiral, brittle, and almost diaphanous valve; and the aperture is narrow. There are numerous species, principally distinguished by the figure of their shells. They are of various sizes, from that of a small apple to less than a grain of corn. Some of them live on land, frequenting woods and gardens, or inhabiting clefts of rocks and dry sand-banks. Others are aquatic, inhabiting ponds, deep rivers, and the ocean. The principal species are,

1. H. hortensis, the garden snail, is in form like the pomatia, but less, and not umbilicated, clouded, or mottled with brown. It abounds with a viscid slimy juice, which it readily gives out by boiling in milk or water, so as to render them thick and glutinous. The decoctions in milk are apparently very nutritious and demulcent, and have been recommended in a thin acrimonious state of the humors, in consumptive cases, and emaciations. The eyes of snails are lodged in their horns, one at the end of each horn, which they can retract at pleasure. The manner of examining these eyes, which are four in number, is this: when the horns are out, cut off nimbly the extremity of one of them; and, placing it before the microscope, you may discover the black spot at the end to be really a semiglobular eye. The dissection of this animal is very curious; for the microscope not only discovers the heart beating just against the

round hole near the neck, which seems the place of respiration, but also the liver, spleen, stomach, and intestines, with the veins, arteries, mouth, and teeth, are plainly observable. The guts of this creature are green, from its eating herbs, and are branched all over with fine capillary white veins: the mouth is like a hare's or rabbit's, with four or six needle teeth, resembling those of leeches, and of a substance like horn. Snails are all hermaphrodites, having both sexes united in each individual. They lay their eggs with great care in the earth, and the young ones are hatched with shells completely formed. Cutting off a snail's head, a little stone appears, which is supposed to be a great diuretic, and good in all nephritic disorders. Immediately under this stone the heart is seen beating; and the auricles are evidently distinguishable, are membraneous, and of a white color; as are also the vessels which proceed from them. Snails discharge their excrements at a hole in their neck; they also breathe by this hole, and their parts of generation are situated very near it. Snails are said to couple three times at the distance of about fifteen days, which lasts ten or twelve hours. At the end of about eighteen days they bring forth their eggs by the aperture of their neck. The snail is a small animal; it is not free from the plague of supporting other smaller animals on its body; and as in other animals we find these secondary ones either living on their surface, as lice, &c., or in the intestines, as worms, it is very remarkable that this creature infests the snail in both these manners; being found sometimes on the surface of its body, and sometimes within its intestines. There is a part of the common garden snail, and of other of the like kinds, commonly called the collar. This surrounds the neck of the snail, and is considerably thick, and is the only part that is visible when the animal is retired quietly into its shell. In this state of the animal these insects which infest it are usually seen in considerable numbers marching about very nimbly on this part; besides, the snail, every time it has occasion to open its anus, gives them a place by which to enter into its intestines, and they often seize the opportunity. Snails are great destroyers of fruit in gardens, especially the better sorts of wall-fruit. Lime and ashes sprinkled on the ground where they most resort will drive them away, and destroy the young brood of them: it is a common practice to pull off the fruit they have bitten; but this should never be done, for they will eat no other till they have wholly eaten up this if it be left for them.

2. H. janthina, with a violet-colored shell. This is remarkable for the extreme thinness of texture, which breaks with the least pressure, and seems therefore entirely calculated to keep the open sea, or at least to shun rocky shores. It inhabits the seas of Europe, especially the Mediterranean; those of Asia and Africa; and also the ocean. The living animal, when touched, exudes a juice which stains the hands of a violet color. Dr. Hawkesworth, in his account of Cook's voyage, mistakes this shell for that which yielded the purpura of the ancients. But whoever looks into Pliny cannot entertain the idea, that the thin shell aforementioned could be the same with it. They had several shells which yielded the purple dye; but these were all rock shells (see BUCCINUM, and MUREX), very different both in figure and hardness from the little helix janthina; which is not calculated for the neighbourhood of rocks.

3. H. pomatia, the exotic snail, with five spires, most remarkably ventricose, and fasciated with a lighter and deeper brown, is a native of France, where it inhabits the woods; but has been naturalised in England, where it inhabits the woods of the southern counties. It was introduced, as it is said, by Sir Kenelm Digby, whether for medical purposes, or as food, is uncertain: tradition says, that to cure his beloved wife of a decline, was the object. They are quite confined to our southern counties. An attempt was made to bring them into Northamptonshire, but they could not live there. They are used as food in several parts of Europe during Lent; and are preserved in an escargatoire, or a large place boarded in, with a floor covered half a foot deep with herbs, in which the snails nestle and fatten. They were also a favorite dish with the Romans, who had their cochlearia, a nursery similar to the above. Fulvius Hirpinus was the first inventor of this luxury, a little before the civil wars between Cæsar and Pompey. The snails were fed with sodden wine and bran. Its name is derived not from any thing relating to an orchard, but from πωμα, an operculum, it having a very strong one. This seems to be the species described by Pliny, lib. viii. c. 39, which he says was scarce; that it covered itself with the opercle, and lodged under ground; and that they were at first found only about the Maritime Alps, and more lately near Velitræ.

HELL, *n. s.* Sax. þele; Teut. *helle*, signifying originally the grave; as some think, from Goth. *hyla;* Sax. þelan, to cover, or conceal. The place of the devil and wicked spirits; the separate state, or invisible world; temporal death; the place at a running play to which those who are caught are carried; the place where the taylor throws his shreds; the infernal powers. By old writers it is a word used in composition.

I will go down to my son mourning to *hell*.
Genesis.

The pains of *hell* came about me; the snares of death overtook me. *Psa.* xviii. 4.

He descended into *hell*. *Apostle's Creed.*

Men shuld, eke, rembre hem of the shame
That is to come at the day of dome, to hem that ben
Not penitent in this present lif; for all the creatures
In heven, and in erthe, and in *helle*, shul
See apertly all that they hidden in this world.
Chaucer. The Persones Tale.

For it is a knell
That summons thee to heaven, or to *hell*.
Shakspeare.

If a man were a porter of *hell* gates, he should have old turning the key. *Id. Macbeth.*

Hell's black tyrant trembled to behold
The glorious light he forfeited of old. *Cowley.*

Let none admire
That riches grow in *hell*; that soil may best
Deserve the precious bane. *Milton.*

In Covent-garden did a taylor dwell,
Who might deserve a place in his own *hell*.
King's Cookery.

This trusty squire, he had as well
As the bold Trojan knight seen *hell*;
Not with a counterfeited pass
Of golden bough, but true gold lace.
Hudibras.

O dire ambition! what infernal power
Unchained thee from thy native depth of *hell*,
To stalk the earth with thy destructive train
Murder and Lust! to waste domestic peace,
And every heart-felt joy. *Browne.*

Then couples three be straight allotted there;
They of both ends the middle two do fly;
The two that in mid-place, *hell* called were,
Must strive with waiting foot and watching eye,
To catch of them, and them to *hell* to bear,
That they, as well as they, *hell* may supply.
Sidney.

But some his royal service (fools!) disdain;
So down were flung:—(oft bliss is double pain)
In heaven, they scorned to serve, so now in *hell* they reign. *Fletcher's Purple Island.*

——————— by a power,
Deeper than all yet urged, a tyrant-spell,
Which had its birth-place in a star condemned,
The burning wreck of a demolished world,
A wandering *hell* in the eternal space;
By the strong curse which is upon my soul,
The thought which is within me and around me,
I do compel ye to my will.
Byron. Childe Harold.

HELL. The hell of the ancient heathens was divided into two mansions; the one called ELYSIUM, on the right hand, pleasant and delightful, appointed for the souls of good men; the other called TARTARUS, on the left, a region of misery and torment, appointed for the wicked. The latter only was hell, in the present restrained sense of the word. (See these articles). The philosophers were of opinion, that the infernal regions were at an equal distance from all the parts of the earth; nevertheless it was the opinion of some, that there were certain passages which led thither, as the river Lethe near the Syrtes, and the Acherusian cave in Epirus. At Hermione it was thought that there was a very short way to hell; for which reason the people of that country never put the fare into the mouths of the dead to pay their passage. The Jews placed hell in the centre of the earth, and believed it to be situated under waters and mountains. According to them, there are three passages leading to it: the first is in the wilderness, and by that Korah, Dathan, and Abiram, descended into hell; the second in the sea, because Jonah, who was thrown into the sea, cried to God out of the belly of hell; the third is in Jerusalem, because it is said the fire of the Lord is in Zion, and his furnace is in Jerusalem. They likewise maintained seven degrees of pain in hell, because they find this place called by seven different names in scripture. Though they believed that infidels, and persons eminently wicked, will continue for ever in hell; yet they held, that every Jew who is not infected with some heresy, and has not acted contrary to the points mentioned by the rabbies, will not be punished therein for any other crimes above a year at most.

The Mahommedans believe the eternity of rewards and punishments in another life. In the Koran it is said that hell has seven gates; the first for the Mussulmans, the second for the Christians, the third for the Jews, the fourth for the Sabians, the fifth for the Magians, the sixth for the Pagans, and the seventh for hypocrites of all religions. The locality of hell, and the reality of its fire, began first to be controverted by Origen. That father, interpreting the Scripture account metaphorically, makes hell to consist, not in external punishments, but in a consciousness or sense of guilt, and a remembrance of past pleasures. Among the moderns, Mr. Whiston advanced a new hypothesis. The comets, he thinks, are so many hells appointed in their orbits alternately to carry the damned into the confines of the sun, there to be scorched by its violent heat, and then to return with them beyond the orb of Saturn, to starve them in those cold and dismal regions. Another modern author supposes the sun to be the local hell. See THEOLOGY.

HELL, VALLEY OF, a valley of Suabia, in the Black Forest, through which, for many leagues, there is scarcely room for fifty men to march in front, the mountains rise so high on each side. Through this formidable defile, though defended by numerous bodies of Austrian troops, general Moreau, in 1798, forced a passage with his army, through a hostile country of 300 miles in extent: and daily gave battle to the Austrians, while flushed with victory; and even took several thousands of them prisoners, with many of their colors and cannons, during his desperate but masterly retreat, which many think has not been equalled since the days of Xenophon.

HELL'-BLACK, *adj.*
HELL'-BRED, *adj.*
HELL'-BROTH, *n. s.*
HELL'-DOOMED, *adj.*
HELL'-GOVERNED, *adj.*
HELL'-HATED, *adj.*
HELL'-HAUNTED, *adj.*
HELL'-HOUND, *n. s.*
HELL'-KITE, *n. s.*
HEL'LISH, *adj.*
HEL'LISHLY, *adv.*
HEL'LISHNESS, *n. s.*
HELL'WARD, *adv.*

Compounds now rarely used; their meaning is for the most part obvious: hell-broth, a composition boiled up for infernal purposes: hell-haunted, frequented by the devil: hell-hound, a dog or agent of hell: hell-kite, a kite of the infernal breed: hellish, any thing having the qualities of hell; infernal; diabolical; wicked: hellward, towards hell. The term hell prefixed to any word notes detestation.

Heart cannot think what courage and what cries,
With foul enfouldered smoak and flashing fire,
The *hell-bred* beast threw forth into the skies.
Spenser.

Adder's fork, and blind worm's sting,
Lizard's leg, and owlet's wing;
For a charm of powerful trouble,
Like a *hell-broth* boil and bubble.
Shakspeare. Macbeth.

Did you say all? What all? Oh, *hell-kite!* all?
What, all my pretty chickens, and their dam,
At one fell swoop? *Id.*

Earth gape open wide and eat him quick,
As thou dost swallow up this good king's blood,
Which his *hell-governed* arm hath butchered.
Shakspeare.

The sea, with such a storm as his bare head
In *hell-black* night endured, would have boiled up,
And quenched the stelled fires. *Id. King Lear.*

Back do I toss these treasons to thy head,
With the *hell-hated* lie o'erwhelm thy heart.
Shakspeare.

From forth the kennel of thy womb hath crept
A *hell-hound* that doth hunt us all to death. *Id.*

And reckonest thou thyself with spirits of heaven,
Hell-doomed! and breathest defiance here and scorn,
Where I reigned king? *Milton.*

Victory and triumph to the Son of God,
Now entering his great duel, not of arms,
But to vanquish by wisdom *hellish* wiles. *Id.*

I called
My *hell-hounds* to lick up the draff, and filth,
Which man's polluting sin with taint had shed
On what was pure. *Id.*

O thou celestial or infernal spirit of love, or what other heavenly or *hellish* title thou list to have, for effects of both I find in myself, have compassion of me. *Sidney.*

Now the *hell-hounds* with superior speed
Had reached the dame, and, fastening on her side,
The ground with issuing streams of purple dyed.
Dryden.

Fierce Osmond closed me in the bleeding bark,
And bid me stand exposed to the bleak winds,
Bound to the fate of this *hell-haunted* grove. *Id.*

No benefits shall ever allay that diabolical rancour that ferments in some *hellish* breasts, but that it will foam out at its foul mouth in slander. *South.*

Be next thy care the sable sheep to place
Full o'er the pit, and *hellward* turn their face.
Pope.

HELL GATE, a strait near the west end of Long Island Sound, opposite to Harlem, in York Island, and about eight miles north-east of New York city, remarkable for its whirlpools, and a bed of rocks which extend quite across it. There is a sufficient depth of water for any vessel; but the passage of large ships can only be accomplished with the most skilful pilots.

HELLANICUS of Mitylene, a celebrated Greek historian, born before Herodotus, flourished about A. A. C. 480. He wrote a history of the ancient kings and founders of cities, but it has not come down to us.

HELLAS, in ancient geograpny, an appellation comprising, according to the ancient Greeks and Romans, Achaia and Peloponnesus, but afterwards restrained to Achaia. It was bounded on the west by the Achelous, on the north by mounts Othrys and Octa, on the east by the Ægean Sea, and on the south by the Saronic and Corinthian Bays, and by the Isthmus which joins it to Peloponnesus. It was called Hellas from Hellen the son of Deucalion; and it is now called Livadia.

HELLE, in fabulous history, a daughter of Athamas, king of Thebes, by Nephele. She fled from her father's house with her brother Phryxus, to avoid the cruelty of her step-mother Ino. According to some, she was carried through the air on a ram with a golden fleece, which her mother had received from Neptune, and in her passage became giddy, and fell into that part of the sea which from her received the name of Hellespont. Others say that she was carried on a cloud, or rather upon a ship, from which she fell into the sea and was drowned. See PHRYXUS.

HEL'LEBORE, *n. s.* Lat. *helleborus*. Christmas flower.

HELLEBORE, BASTARD. See SERAPIAS.

HELLEBORE, BLACK. See HELLEBORUS.

HEL'LEBORE, WHITE, *n s.* Lat. *veratrum*. A plant. See VERATRUM.

There are great doubts whether any of its species be the true *hellebore* of the ancients. *Miller.*

HELLEBORUS, HELLEBORE, a genus of the polygynia order, and pentandria class of plants: natural order twenty-sixth, multisiliquæ. CAL. none: petals five or more: the nectaria are bilabiated and tubular: CAPS. polyspermous, and a little erect. The most remarkable species is the

H. niger, black hellebore, or Christmas rose. It has roots composed of many thick fleshy spreading fibres, crowned by a large cluster of lobed leaves, consisting each of seven or eight obtuse fleshy lobes, united to one foot-stalk; and between the leaves several thick fleshy flower-stalks three or four inches high, surmounted by large beautiful white flowers of five roundish petals, and numerous filaments, appearing in winter, about or soon after Christmas. It may be propagated either by seeds or parting the roots. It prospers in open borders, or may be planted in pots to move when in bloom, in order to adorn any particular place; but it always flowers fairest and most abundantly in the front of a warm sunny border. The plants may be removed, and the roots divided for propagation, in September, October, or November; but the sooner in autumn it is done, the stronger will the plants flower at their proper season. The root was anciently used as a cathartic. The taste is acrid and bitter. Its acrimony is felt on the tip of the tongue, and then spreads itself immediately to the middle, without being much perceived in the intermediate part. On chewing the root for a few minutes, the tongue seems benumbed, and affected with a kind of paralytic stupor, as when burnt by eating any thing too hot. The fibres are more acrimonious than the head of the root from whence they issue. Black hellebore root, taken from fifteen to thirty grains, proves a strong cathartic; and, as such, has been celebrated for the cure of maniacal and other disorders proceeding from what the ancients called the atra bilis; in which cases, medicines of this kind are doubtless occasionally of use, though they are by no means possessed of any specific power. It does not however appear that our black hellebore acts with so much violence as that of the ancients; whence many have supposed it to be a different species of plant: and indeed the descriptions which the ancients have left us of their hellebore do not agree with those of any of the sorts usually taken notice of by modern botanists. Vauquelin ascribes its acrimony to a peculiar oil, which he separated from the infusion in alcohol, by distilling off the latter. It is very poisonous. Orfila says, on the contrary, that the poisonous quality of hellebore root resides in a principle soluble in water;

that the powdered root is more certainly fatal, when applied to a wound, than when swallowed; that the white hellebore is more active than the black; and that the alkaline extract, which forms a part of the tonic pills of Bacher, is also very powerful. Vomiting is the only antidote.

H. niger orientalis is a species discovered in the eastern countries, which Tournefort distinguishes thus: amplissimo folio, caule prælto, flore purpurescente, and he supposes it to be the true ancient hellebore, from its growing in plenty about mount Olympus, and in the island of Anticyra, celebrated of old for the production of this antimaniacal drug: he relates, that a scruple of this sort, given for a dose, occasioned convulsions.

HELLEN, the son of Deucalion, who is said to have given the name of Hellenus to the Greeks A A.C. 1521.

HEL'LENISM, *n. s.* Ἑλληνισμὸς. A Greek idiom.

Hellenism is only used when speaking of the authors who, writing in a different language, express themselves in a phraseology peculiar to the Greek.

HELLENISTIC Language, that used by the Grecian Jews who lived in Egypt and other parts where the Greek tongue prevailed. In this language it is said the Septuagint was written, and also the books of the New Testament; and that it was thus denominated to show that it was Greek filled with Hebraisms and Syriacisms.

HELLENISTS, Hellenistæ, a term occurring in the Greek text of the New Testament, and which in the English version is rendered Grecians. The critics are divided as to the signification of the word. Œcumenius, in his Scholia on Acts vi. 1, observes, that it is not to be understood as signifying those of the religion of the Greeks, but those who spoke Greek, τους ελληνιστι φθεγξαμενους. The authors of the Vulgate version, indeed, render it like ours, Græci; but Messieurs Du Port Royal more accurately Juifs Grecs, Greek or Grecian Jews; the Jews who spoke Greek being here treated of, and hereby distinguished from the Jews called Hebrews, that is who spoke the Hebrew tongue of that time. These Hellenists, or Grecian Jews, were those who lived in Egypt and other parts where the Greek tongue prevailed. It is to them we owe the Greek version of the Old Testament commonly called the Septuagint, or that of the LXX. Salmasius and Vossius, however, are of a different opinion, with regard to the Hellenists. The latter will only have them to be those who adhered to the Grecian interests. Scaliger is represented, in the Scaligerana, as asserting the Hellenists to be the Jews who lived in Greece and other places, and who read the Greek Bible in their synagogues, and used the Greek language in sacris; and thus they were opposed to the Hebrew Jews, who performed their public worship in the Hebrew tongue. In this sense St. Paul speaks of himself as a Hebrew of the Hebrews (Phil. iii. 5.), i. e. a Hebrew both by nation and language. The Hellenists are thus properly distinguished from the Hellenes or Greeks, mentioned John xii. 20, who were Greeks by birth and nation, and yet proselytes to the Jewish religion.

HELLENODICÆ, Ἑλληνοδικαι, in antiquity the directors of the Olympian games. At first there was only one, afterwards the number increased to two and three, and at length to nine. They assembled in a place called Ἑλληνοδικαιον, in the Elean forum, where they were obliged to reside ten months before the celebration of the games, to take care that such as offered themselves to contend, performed their προγυμνασματα, or preparatory exercises; and to be instructed in all the laws of the games by certain men called νομοφυλακες, i. e. keepers of the laws. To prevent all unjust practices, they were obliged to take an oath, that they would act impartially, would take no bribes, nor discover the reason for which they disliked or approved of any of the contenders. At the solemnity they sat naked, having before them the victorial crown till the exercises were finished, and then it was presented to whomsoever they adjudged it. Nevertheless, there lay an appeal from the hellenodicæ to the Olympian senate.

HELLESPONT, a narrow strait between Asia and Europe, near the Propontis, so named from Helle. It is celebrated for the love and death of Leander, and for the bridge of boats which Xerxes built over it when he invaded Greece. It is now called the Dardanelles. It is about thirty-three miles long, and in the broadest parts the Asiatic coast is about one mile and a half distant from the European, and only half a mile in the narrowest, according to modern investigation.

HELM, *n. s.* & *v. a.* } Helm denotes defence:
Helm'ed, *adj.* } as, Eadhelm happy de-
Hel'met, *n. s.* } fence; Sighelm victorious defence; Berthelm eminent defence; like Amyntas and Boetius among the Greeks.—Gibson's Camden. A covering for the head in war; a helmet; the part of a coat of arms that bears the crest; the upper part of the retort; the rudder of a vessel; the station of government; a steersman; to helm, to steer, guide, or conduct.

Of which every-first on a short truncheon
His lordes *helmet* bore so richly dight,
That the worst of hem was worth the ransoune
Of any king.
Chaucer. The Floure and the Leafe.

What so I spake, I ment it nought but wele,
By Mars the god that *helmed* is of stele.
Id. Troilus and Creseide.

More might be added of *helms*, crests, mantles, and supporters. *Camden's Remains.*

The very stream of his life, and the business he hath *helmed*, must give him a better proclamation.
Shakspeare.

France spreads his banners in our noiseless land!
With plumed *helm* the slayer begins his threats.
Id.

I saw him down; thrice up again, and fighting;
From *helmet* to the spur all bleeding o'er. *Id.*

You slander
The *helms* o' the state, who care for you like fathers,
When you curse them as enemies. *Id.*

They did not leave the *helm* in storms;
And such they are make happy states.
Ben Jonson.

More in prosperity is reason tost
Than ships in storms, their *helms* and anchors lost.
Denham.

The *helmed* cherubim
Are seen in glittering ranks with wings displayed.
Milton.

With them arose
A forest huge of spears, and thronging *helms*
Appeared, and serried shields in thick array
Of depth immeasurable. *Id.*

The vulgar chemists themselves pretend to be able, by repeated cohobations, and other fit operations, to make the distilled parts of a concrete bring its own caput mortuum over the *helm*. *Boyle.*

Seven darts are thrown at once, and some rebound
From his bright shield, some on his *helmet* sound.
Dryden.

Mnestheus lays hard load upon his *helm*. *Id.*

Fair occasion shews the springing gale,
And interest guides the *helm*, and honour swells the sail *Prior.*

I may be wrong in the means; but that is no objection against the design: let those at the *helm* contrive it better. *Swift.*

Where my wrecked desponding thought
From wave to wave of fancied misery
At random drove, her *helm* of reason lost.
Young's Night Thoughts.

Sense is our *helmet*, wit is but a plume,
The plume exposes, 'tis our *helmet* saves. *Id.*

The HELM, in nautical affairs, is a long and flat piece of timber, or an assemblage of several pieces, suspended along the hind part of a ship's stern-post, where it turns upon hinges to the right or left, serving to direct the course of the vessel, as the tail of a fish guides the body. The helm is usually composed of three parts, viz. the rudder, the tiller, and the wheel, except in small vessels, where the wheel is unnecessary. As to the form of the rudder, it becomes gradually broader in proportion to its distance from the top, or to its depth under the water. The back, or inner part of it, which joins to the stern-post, is diminished into the form of a wedge throughout its whole length, so as that the rudder may be more easily turned from one side to the other, where it makes an obtuse angle with the keel. It is supported upon hinges; of which those that are bolted round the stern-post to the after extremity of the ship, are called googings, and are furnished with a large hole in the after-part of the stern-post. The other parts of the hinges, which are bolted to the back of the rudder, are called pintles, being strong cylindrical pins, which enter into the googings, and rest upon them. The length and thickness of the rudder is nearly equal to that of the stern-post. The rudder is turned upon its hinges by means of a long bar of timber, called the tiller, which is fixed horizontally in its upper end within the vessel. The movements of the tiller to the right and left, accordingly, direct the efforts of the rudder to the government of the ship's course as she advances; which, in the sea language, is called steering. The operations of the tiller are guided and assisted by a sort of tackle, communicating with the ship's side, called the tiller-rope, which is usually composed of untarred rope-yarns, for the purpose of traversing more readily through the blocks or pulleys.

To facilitate the management of the helm, the tiller-rope, in all large vessels, is wound about a wheel, which acts upon it with the powers of a crane or windlass. The rope employed in this service being conveyed from the fore-end of the tiller to a single block on each side of the ship, is farther communicated to the wheel, by two blocks suspended near the mizen-mast, and two holes immediately above, leading up to the wheel, which is fixed upon an axis on the quarter-deck, almost perpendicularly over the fore-end of the tiller. Five turns of the tiller-rope are usually wound about the barrel of the wheel; and, when the helm is amidship, the middle turn is nailed to the top of the barrel, with a mark by which the helmsman readily discovers the situation of the helm, as the wheel turns it from the starboard to the larboard side. The spokes of the wheel generally reach about eight inches beyond the rim or circumference, serving as handles to the person who steers the vessel. As the effect of a lever increases in proportion to the length of its arm, it is evident that the power of the helmsman to turn the wheel will be increased according to the length of the spokes beyond the circumference of the barrel. When the helm, instead of lying in a right line with the keel, is turned to one side or the other, it receives an immediate shock from the water, which glides along the ship's bottom in running aft, and this fluid pushes it towards the opposite side, whilst it is retained in this position: so that the stern, to which the rudder is confined, receives the same impression, and accordingly turns about whilst the head of the ship passes in the opposite direction. It must be observed, that the current of water falls upon the rudder obliquely, and only strikes it with that part of its motion which acts according to the sine of incidence, pushing it with a force which not only depends on the velocity of the ship's course, by which this current of water is produced, but also upon the extent of the sine of incidence. This force is by consequence composed of the square of the velocity with which the ship advances, and the square of the sine of incidence, which will necessarily be greater or smaller according to circumstances; so that if the vessel runs three or four times more swiftly, the absolute shock of the water upon the rudder will be nine or sixteen times stronger under the same incidence: and if the incidence is increased, it will yet be augmented in a greater proportion, because the square of the sine of incidence is more enlarged. This impression, or power of the helm, is always very feeble, when compared with the weight of the vessel; but, as it operates with the force of a long lever, its efforts to turn the ship are extremely advantageous. For the helm being applied to a great distance from the centre of gravity, or from the point about which the vessel turns horizontally, if the direction of the impression of the water upon the rudder be prolonged, it is evident that it will pass widely distant from the centre of gravity: thus the absolute effort of the water is very powerful. It is not therefore surprising, that this machine impresses the ship with a considerable circular movement; and even much farther whilst she sails with rapidity, because the effect of the helm always keeps pace with the velocity with which the vessel advances. Amongst the several angles that the rudder makes with the keel, there is always one position more

favorable than any of the others, as it more readily produces the desired effect of turning the ship, in order to change her course.

Geometricians have determined the most advantageous angle made by the helm with the line prolonged from the keel, and fixed it at 54° 44′, presuming that the ship is as narrow at her floating line, or at the line described by the surface of the water round her bottom, as at the keel. But as this supposition is absolutely false, inasmuch as all vessels augment their breadth from the keel upward to the extreme breadth, where the floating-line or the highest water-line is terminated; it follows, that this angle is too large by a certain number of degrees. For the rudder is impressed by the water, at the height of the floating-line, more directly than at the keel, because the fluid exactly follows the horizontal outlines of the bottom; so that a particular position of the helm might be supposed necessary for each different incidence which it encounters from the keel upwards. But, as a middle position may be between all these points, it will be sufficient to consider the angle formed by the sides of the ship, and her axis, or the middle line of her length, at the surface of the water, in order to determine afterwards the mean point, and the mean angle of incidence. It is evident that the angle 54° 44′ is too open, and very unfavorable to the ship's headway, because the water acts upon the rudder there with too great a sine of incidence, as being equal to that of the angle which it makes with the line prolonged from the keel below: but above, the shock of the water is almost perpendicular to the rudder, because of the breadth of the bottom, as we have already remarked. If then the rudder is only opposed to the fluid, by making an angle of 45° with the line prolonged from the keel, the impression, by becoming weaker, will be less opposed to the ship's head-way; and the direction of the absolute effort of the water upon the helm, drawing nearer to the lateral perpendicular, will be placed more advantageously, for the reasons above mentioned. On the other hand, experience daily testifies, that a ship steers well when the rudder makes the angle equal to 35° only. It has been already remarked, that the effect of moving the wheel to govern the helm increases in proportion to the length of the spokes; and so great is the power of the wheel, that, if the helmsman employs a force upon its spokes equivalent to thirty pounds, it will produce an effect of ninety or 120 lbs. upon the tiller. On the contrary, the action of the water is collected into the middle of the breadth of the rudder, which is very narrow in comparison with the length of the tiller; so the effort of the water is very little removed from the fulcrum upon which it turns; whereas the tiller forms the arm of a lever ten or fifteen times longer, which also increases the power of the helmsman in the same proportion that the tiller bears to the lever upon which the impulse of the water is directed. This force then is by consequence ten or fifteen times stronger; and the effort of 30 lbs., which at first gave the helmsman a power equal to 90 lbs. or 120 lbs. becomes accumulated to one of 900 lbs. or 1800 lbs. upon the rudder. This disadvantage then arises from the shortness of the lever upon which the action of the water is impressed, and the great comparative length of the tiller, or lever, by which the rudder is governed; together with the additional power of the wheel that directs the movements of the tiller, and still farther accumulates the power of the helmsman over it. Such a demonstration ought to remove the surprise with which the prodigious effect of the helm is sometimes considered, from an inattention to its mechanism: for we need only to observe the pressure of the water, which acts at a great distance from the centre of gravity, about which the ship is supposed to turn, and we shall easily perceive the difference there is between the effort of the water against the helmsman, and the effect of the same impulse against the vessel. With regard to the person who steers, the water acts only with the arm of a very short lever: on the contrary, with regard to the ship, the force of the water acts upon a very long lever, which renders the action of the rudder extremely powerful in turning the vessel; so that, in a large ship, the rudder receives a shock from the water of 2700 lbs. or 2800 lbs., which is frequently the case when she sails at the rate of three or four leagues by the hour; and this force, being applied perhaps 100 or 110 feet distant from the centre of gravity, will operate upon the ship to turn her about, with 270,000 lbs. or 308,000 lbs.; whilst, in the latter case, the helmsman acts with an effort which exceeds not 30 lbs. upon the spokes of the wheel. From what has been said, it is plain that the more a ship increases her velocity, with regard to the sea, the more powerful will be the effect of the rudder; because it acts against the water with a force which increases as the square of the swiftness of the fluid, whether the ship advances or retreats.

The HELMET was anciently worn by horsemen both in war and in tournaments. It covered both the head and face, only leaving an aperture in the front secured by bars, which was called the visor. See ARMOUR. In achievements it is placed above the escutcheon for the principal ornament, and is the true mark of chivalry and nobility. Helmets vary according to the different degrees of those who bear them. They are also used as a bearing in coats of arms. See HERALDRY.

HELMI'NTHIC, *adj.* From ἕλμινθος. Relating to worms.

HELMINTHOLITHUS, in natural history, a name given by Linnæus to petrified bodies resembling worms.

HELMONT (John Baptist Van), a celebrated Flemish gentleman, born at Brussels in 1577. He acquired such skill in natural philosophy, physic, and chemistry, that he was accounted a magician, and thrown into the inquisition: but, having with difficulty justified himself, as soon as he was released he retired to Holland; where he died in 1644. He published 1. De Magnetica Corporum Curatione. 2. Febrium Doctrina Inaudita. 3. Ortus Medicinæ. 4. Paradoxa de aquis Spadanis: and other works, printed together in 1 vol. folio.

HELOISE, or ELOISA, the mistress and afterwards the wife of Abelard, famous for her Latin

letters to him, after they had retired from the world. She died abbess of Paraclete in 1163. See ABELARD.

HELONIAS, in botany, a genus of the trigynia order and hexandria class of plants; natural order tenth, coronariæ: COR. hexapetalous: CAL. none: CAPS. trilocular.

HELOS, in ancient geography, a maritime town of Laconia, between Trinasus and Acriæ, in the district of Helotea. In Pausanias's time it was in ruins. The people, being subdued by the Lacedæmonians, were all reduced to a state of the most abject slavery. Hence the term ἁλωτευειν, in Harpocration, for being in a state of slavery; and hence also the Lacedæmonians called the slaves of all nations whatever helotes. Heloticus is the epithet.

HELOTÆ, HELOTES, or HELOTS, called also Helei and Heleatæ by Stephanus, and Ilotæ by Livy, the inhabitants of Helos and the slaves of the Spartans. See HELOS. The Spartans were forbidden the exercise of any mean or mechanical employment, and therefore the whole care of supplying the city with necessaries devolved upon the Helots. These Helots farmed the lands of the Spartans; and, in order to attach them to the service of their masters by the allurement of gain, they only paid a fixed rent, inferior to the produce, and which it would be disgraceful in any proprieter of land to advance. They were also skilful in mechanics: in time of war they served as sailors on board the fleet; and in the army every oplites, or heavy armed soldier, was accompanied by one or more of them.

HELP, *v. a., v. n.* & *n. s.*
HELP'ER, *n. s.*
HELP'FUL, *adj.*
HELP'LESS, *adj.*
HELP'LESSLY, *adv.*
HELP'LESSNESS, *n. s.*

Preter. helped, or holp; part. helped, or holpen. Saxon þelpan; Goth. *hilpan*; Gr. οφελλω. The idea of communicating to the advantage of another is common to all these words: as to assist, support, relieve, prevent, avoid; to promote or forward; to supply to, or furnish with, and to present at table: it is used with other words expressive of its particular meaning, as to help up, help out, help over, help off: help is aid, assistance, remedy: a helper is the agent: helpful, useful, wholesome, salutary: helpless, wanting power or aid; irremediable.

But who shal *helpen* me nowe to complaine,
Or who shal nowe my life gie or lede?
O Niobe! let nowe thy teres rayne
Into my penne, and *helpe* me eke in need.
Chaucer. Complaint of the Blacke Knight.

Mariage is a ful gret sacrament;
He which that hath no wif I hold him shent;
He liveth *helples*, and all desolat:
(I speke ef folke in secular estat),
And herkeneth why; I say not this for nought,
That woman is for mannes *helpe* ywrought.
Id. The Merchantes Tale.

I know how to deceive myself withouten *help*,
And how the lion chastised is, by beating of the whelp. *Earl of Surrey.*

Such *helpless* harms it's better hidden keep,
Than rip up grief, where it may not avail. *Spenser.*

Muleasses, despairing to recover the city, hardly escaped his enemies' hands by the good *help* of his uncle. *Knolles.*

Heaven
Hath brought me up to be your daughter's dower,
As it hath fated her to be my motive,
And *helper* to a husband. *Shakspeare.*

Let's fight with gentle words,
Till time lend friends, and friends their *helpful* swords. *Id.*

Sir, how comes it you
Have *holp* to make this rescue? *Id.*

Cease to lament for that thou can'st not *help*;
And study *help* for that which thou lamentest. *Id.*

Love doth to her eyes repair,
To *help* him of his blindness. *Id.*

A skilful chymist can as well, by separation of visible elements, draw *helpful* medicines out of poison, as poison out of the most healthful herbs. *Raleigh.*

If you make the earth narrower at the bottom than at the top, in fashion of a sugar-loaf reversed, it will *help* the experiment. *Bacon.*

Coral is in use as an *help* to the teeth of children. *Id.*

Discreet followers and servants *help* much to reputation. *Id.*

Let us work as valiant men behoves;
For boldest hearts good fortune *helpeth* out. *Fairfax.*

It is impossible for that man to despair who remembers that his *helper* is omnipotent. *Taylor's Rule of Holy Living.*

Though these contrivances increase the power, yet they proportionably protract the time; that which by such *helps* one man may do in a hundred days, may be done by the immediate strength of a hundred men in one day. *Wilkins.*

Compassion, the mother of Tears, is not always a mere idle spectator, but an *helper* oftentimes of evils. *More.*

There is no *help* for it, but he must be taught accordingly to comply with the faulty way of writing. *Holder on Speech.*

A man reads his prayers out of a book, as a means to *help* his understanding and direct his expressions. *Stillingfleet.*

Bennet's grave look was a pretence,
And Danby's matchless impudence
Helped to support the knave. *Dryden.*

One dire shot
Close by the board the prince's main-mast bore;
All three now *helpless* by each other lie. *Id.*

This he conceives not hard to bring about,
If all of you should join to *help* him out. *Id.*

Those closing skies may still continue bright;
But who can *help* it, if you make it night. *Id.*

She, betwixt her modesty and pride,
Her wishes, which she could not *help*, would hide. *Id.*

He orders all the succours which they bring;
The *helpful* and the good about him run,
And form an army. *Id.*

Naked he lies and ready to expire,
Helpless of all that human wants require. *Id.*

The man that is now with Tiresias, can *help* him to his oxen again. *L'Estrange.*

It is a high point of ill nature to make sport with any man's imperfections that he cannot *help*. *Id.*

Having never learned any laudable manual art, they have recourse to those foolish or ill ways in use, to *help off* their time. *Locke.*

He may be beholden to experience and acquired notions, where he thinks he has not the least *help* from them. *Id.*

Help and ease them, but by no means bemoan them. *Id.*

Wherever they are at a stand, *help* them presently over the difficulty without any rebuke. *Id.*

Another *help* St. Paul himself affords us towards the attaining the true meaning contained in his epistles. *Id.*

Virtue is a friend and an *help* to nature; but it is vice and luxury that destroys it, and the diseases of intemperance are the natural product of the sins of intemperance. *South.*

The God of learning and of light,
Would want a God himself to *help* him out.
Swift.

I live in the corner of a vast unfurnished house: my family consists of a steward, a groom, a *helper* in the stable, a footman, and an old maid. *Id.*

Those few who reside among us, only because they cannot *help* it. *Id.*

Some, wanting the talent to write, made it their care that the actors should *help* out where the muses failed. *Rymer.*

A generous present *helps* to persuade as well as an agreeable person. *Garth.*

So great is the stupidity of some of those, that they may have no sense of the *help* administered to them. *Smalridge.*

What I offer is so far from doing any diskindness to the cause these gentlemen are engaged in, that it does them a real service, and *helps* them out with the main thing whereat they stuck. *Woodward.*

Let our enemies rage and persecute the poor and the *helpless*; but let it be our glory to be pure and peaceable. *Rogers.*

He cannot *help* believing, that such things he saw and heard. *Atterbury.*

In that dread moment, how the frantic soul
Raves round the walls of her clay tenement,
Runs to each avenue and shrieks for *help*,
But shrieks in vain. *Blair's Grave.*

In plenty starving, tantalized in state,
And complaisantly *helped to* all I hate;
Treated, caressed, and tired, I take my leave.
Pope.

I cannot *help* remarking the resemblance betwixt him and our author in qualities, fame, and fortune. *Id.*

How shall I then your *helpless* fame defend?
'Twill then be infamy to seem your friend. *Id.*

At evening to the setting sun he turns
A mournful eye, and down his dying heart
Sinks *helpless*. *Thomson's Seasons.*

If they take offence when we give none, it is a thing we cannot *help*, and therefore the whole blame must lie upon them. *Sanders.*

I mean the man who, when the distant poor
Need *help*, denies them nothing but his name.
Cowper's Task.

And he had learned to love,—I know not why,
For this, in such as him, seems strange of mood,—
The *helpless* looks of blooming infancy,
Even in its earliest nurture. *Byron. Childe Harold.*

HELSINGFORS, a town and naval station in the south of Finland, at the mouth of the Wanna. It has a very good harbour, and 3200 inhabitants; who carry on a trade in corn, fish, logs, and deals: the latter articles being exported sometimes to the Mediterranean. It is defended by several forts, the principal of which is Sweaborg. It was built by Gustavus I., but burnt down in 1741 by the Russians: who, however, now have much encouraged it. It is 104 miles S. S. E. of Abo.

HELSINGIA, or HELSINGLAND, a province of Sweden, bounded on the north by Jempterland and Medalpadia, on the east by the Bothnian Gulf, on the south by Gestricia, and on the south-west and west by Dalecarlia. It is full of mountains and forests. The principal towns are Hudwicksvald, Alta, and Dilsbo. The rivers and lakes abound with fish. Its chief trade is in wood, flax, linen, iron, butter, tar, tallow, &c. It is 120 miles long, and ninety broad.

HELSTON, a populous borough of Cornwall, seated on the Cober, near its influx into the sea. It is one of those appointed for the coinage of tin, and the place of assembly for the west division of the shire. By a grant of Edward III. it has a market on Monday, and eight fairs. It had formerly a priory and a castle, and sent members to parliament in the reign of Edward I.; but was not incorporated till the 27th of queen Elizabeth, who appointed a mayor, four aldermen, and twenty-four assistants. It was re-incorporated August 16th 1774, and still sends two members to parliament. It has a large market-house, a guild-hall, and four streets in the form of a cross, with a channel of water running through each. The steeple of the church, with its spire, is ninety feet high, and a sea-mark. King John exempted Helston from paying toll any where but in London; and the citizens from being impleaded any where except in their own borough. It is twelve miles east of Penzance, and 274 W. S.W. of London. In the neighbourhood was formerly one of those curiosities called rocking-stones, which was thrown down by the governor of Pendennis Castle under Oliver Cromwell. Near the town is a curious heap of stones, piled loosely up, in the form of a circle, called Earth Castle, used anciently as a fortification.

HELTER-SKELTER, *adv.* From Saxon þeolſteꝛ ſceaðo, as Skinner fancies, the darkness of hell; hell, says he, being a place of confusion; in a hurry; without order; tumultuously.

Sir John, I am thy Pistol, and thy friend;
And *helter-skelter* have I rode to England,
And tidings do I bring. *Shakspeare.*

He had no sooner turned his back but they were at it *helter-skelter*, throwing books at one another's heads. *L'Estrange.*

HELVE, *n. s* & *v. a.* Sax. þelfe, the handle of an axe: to fit with a handle.

The slipping of an axe from the *helve*, whereby another is slain, was the work of God himself. *Raleigh's History.*

HELVETIA, or CIVITAS HELVETIÆ, in ancient geography, the country of the Helvetii, which was divided into four pagi or cantons, situated to the south and west of the Rhine, by which they were divided from the Germans; and extending towards Gaul, from which they were separated by Mount Jura on the west, and by the Rhodanus and Lacus Lemanus on the south, and therefore called a Gallic nation. It was formerly a part of Celtic Gaul, but by Augustus assigned to Gallia Belgica. The modern name is Switzerland.

HELVETIC REPUBLIC. See SWITZERLAND

HELVETII, a people of Gallia Belgica, near the country of the Allobroges and the Provincia Romana; famed for bravery. See GALLIA.

HELVETIUS (Adrian), an eminent physician, born in Holland in 1656. After having studied physic at Leyden he went to Paris, where he acquired great reputation in his profession by discovering a cure for the dysentery, then prevalent. Louis XIV. gave him 1000 louis d'ors for publishing his method; made him inspector-general of the hospitals in Flanders, physician to the duke of Orleans, &c. He died at Paris in 1721, aged sixty-five. He wrote a treatise on the most common diseases, and their remedies (the best edition is that of 1724, in 2 vols. 8vo.) and other works.

HELVETIUS (John Claude), son of the preceding, was born in 1685. He was first physician to the queen; inspector-general of the military hospitals; a member of the Academy of Sciences at Paris, of the Royal Society in London, and of the Academies of Prussia, Florence, and Bologne. He was author of 1. Idée Générale de l'economie animale, 1722, 8vo. 2. Principia Physico-Medica, in tyronum medicinæ gratiam conscripta, 2 vols. 8vo. He died in 1755, aged seventy.

HELVETIUS (Claude Adrian), son of the preceding, was born at Paris in 1715, and in 1758 published a celebrated book De L'Esprit. Voltaire calls him 'a true philosopher;' but his book was stigmatised by the authors of the Journal de Trevoux, and suppressed by the government, on account of its atheistical principles. Upon this he came over to England in 1764, and went afterwards to Berlin, where he was well received by Frederick II. He wrote also 1. Le Bonheur, a poem in six cantos; 2. Of Man, a philosophical work; and, 3, The Child of Nature improved by Chance, an indecent romance. He died at Paris in 1771.

HELVICUS (Christopher), D. D., professor of divinity, Greek, and the oriental tongues, in the university of Gessen, was born near Frankfort in 1581, educated at Marpurg, and died in 1617. He published several Latin poems, lexicons, and grammars of different languages. The Hebrew language was so familiar to him that he spoke it as fluently as his mother tongue. His Chronological Tables have been greatly esteemed.

HELVII, an ancient people of Gallia Narbonensis, who possessed the country since called the Vivarais. Cæsar calls them Helvii; Pliny Helui. Their chief city was Alba, now Albi, or as others think Viviers.

HELVOETSLUYS, a sea-port town of Holland, in the department of Delft, island of Voorn. It has a handsome quay; is well fortified, and esteemed the safest harbour in the country. The largest men of war may come up to the middle of the town, and the English packet boats frequent it. In January, 1795, it surrendered to the French, under Pichegru. It is twelve miles west of Dort, and fifteen south-west of Rotterdam.

HEM, *n. s.*, *interj.*, *v. a.*, & *v. n.* Sax. þem; Dut. *hemmen;* Lat. *hem!* The edge or border of a garment; and the verb signifies to border, or edge; to enclose; confine, and then used with a particle: hem, the interjection, the noise uttered by violent expiration of the breath.

All the skirt about
Was *hemed* with golden fringe. *Faerie Queene.*

Along the shoar of silver streaming Thames,
Whose rushy bank, the which his river *hems.*
Spenser.

I would try if I could cry *hem,* and have him.
Shakspeare.

What lets us then the great Jerusalem
With valiant squadrons round about to *hem?*
Fairfax.

Why, Neptune, hast thou made us stand alone,
Divided from the world for this, say they;
Hemmed in to be a spoil to tyranny,
Leaving affliction hence no way to fly? *Daniel.*

So of either side, stretching itself in a narrow length, was it *hemmed in* by woody hills, as if indeed nature had meant therein to make a place for beholders. *Sidney.*

He loves to clear his pipes in good air, and is not a little pleased with any one who takes notice of the strength which he still exerts in his morning *hems.*
Addison.

Rowlers must be made of even cloth, white and gentle, without *hem,* seam, or thread hanging by.
Wiseman.

I hurry me in haste away,
And find his honour in a pound,
Hemmed by a triple circle round,
Chequered with ribbons, blue and green. *Pope.*

Pronounce a text
Cry *hem;* and, reading what they never wrote.
Cowper's Task

Oh! dearest father, in this agony
Of pleasure and of pain—even while I kiss
Thy garment's *hem* with transport, can it be
That doubt should mingle with my filial joys?
Byron. Don Juan.

HEMATIN, the coloring principle of logwood, the hematoxylon campechianum of botanists. On the watery extract of logwood, digest alcohol for a day, filter the solution, evaporate, add a little water, evaporate gently again, and then leave the liquid at rest. Hematin is deposited in small crystals, which, after washing with alcohol, are brilliant, and of a reddish-white color. Their taste is bitter, acrid, and slightly astringent. Hematin forms an orange-red solution with boiling water, becoming yellow as it cools, but recovering, with increase of heat, its former hue. Excess of alkali converts it first to purple, then to violet, and lastly to brown: in which state the hematim seems to be decomposed. Metallic oxides unite with hematin, forming a blue-colored compound. Gelatin throws down reddish flocculi. Peroxide of tin, and acid, merely redden it.

HEMELAR (John), an eminent antiquarian, and canon of Antwerp, in the seventeenth century, born at the Hague. He wrote a work entitled, Expositio Numismatum imperatorum Romanorum â Julio Cæsare ad Heraclium; which is very scarce, though it has had several editions. He died in 1640.

HEMEROBAPTISTS, a sect among the ancient Jews, thus called from their washing and bathing daily in all seasons; and performing this custom with the greatest solemnity, as a religious rite necessary to salvation. Epiphanius says, they denied the resurrection in common with the Sadducees, and entertained some other opinions of theirs. See SABIANS.

HEMEROBIUS, in zoology, a genus of insects of the neuroptera order; the characters of which are these: The mouth is furnished with two teeth; the palpi are four, the wings are deflected, but not plaited; and the antennæ are bristly, and longer than the breast. There are fifteen species, principally distinguished by their colors. They are named hemerobii from the shortness of their lives, which, however, continue several days. In the state of larva they are great devourers of plant-lice, for which it has had the name of the lion of the plant-lice. They are also cannibals, and devour each other after their transformation. The eggs are born on small gummy pedicles, spun by the insects from their abdomen. These eggs are deposited upon leaves, and set in the form of bunches. They have been taken for parasitic plants. In fifteen or sixteen days the larva attains to its full growth. With its spinning-wheel, at its tail, it makes itself a small, round, white, silky cod, of a close texture. In summer, at the end of three weeks, the hemerobius issues forth with its wings; but, when the cod has not been spun till autumn, the chrysalis remains in it the whole winter, and does not undergo its final metamorphosis till the next spring. The flight of this insect is heavy: some species have an excrementitious smell. One is named the water hemerobius, because it lives mostly at the water side. See Entomology.

HEMEROCALLIS, day-lily, or lily asphodel: a genus of the monogynia order, and hexandria class of plants; natural order tenth, coronariæ: cor. campanulated, tube cylindrical; the stamina declining downwards.

H. flava, the yellow day-lily, has strong fibrous roots, sending up large hollow keel-shaped leaves, two feet long, upright, leafless, firm stalks, two feet high; dividing at top into several foot-stalks, each terminated by one large liliaceous yellow flower of an agreeable odor.

H. fulva, the reddish or copper-colored day-lily, has roots composed of strong fleshy fibres and large oblong tubes; radical, keel-shaped, hollow, pointed leaves, a yard long, reflected at top; with leafless stalks three or four feet high, and large copper-colored liliaceous flowers. These have large stamina, charged with a kind of brown-colored farina; which, on being touched or smelled to, is discharged in great plenty all over the hands and face. Both these species are hardy, and may be easily propagated by parting their roots.

HEMERODROMI, from *ημερα*, day, and *δρομος*, course, &c., among the ancients, were guards appointed for the security of cities and other places. They went out of the city every morning, as soon as the gates were opened, and kept all day patrolling round the place; sometimes also making excursions farther into the country, to see that there were no enemies lying in wait to surprise them. Hemerodromi were also a sort of couriers, who only travelled one day, and delivered their despatches to a fresh man, who run his day, and so on to the end of the journey. The Greeks had also these sorts of couriers, which they derived from the Persians, who first used them, as appears from Herodotus.

HEMEROTROPHIS, from *ημερα*, a day, and *τροφη*, food, in antiquity, a measure of capacity, the same with the chœnix; so called from its containing one day's food.

HEMI, from *ημισυς*, half, a word used in the composition of various terms, signifying the same with semi or demi, half.

HEM'ICYCLE, *n. s.* Gr. *ἡμίκυκλος*. A half round.

Hemicycle, of *ημισυς*, half, and *κυκλος*, circle, is particularly applied, in architecture, to vaults in the cradle form; and arches or sweeps of vaults, constituting a perfect semicircle. To construct an arch of hewn stone, they divide the hemicycle into so many voissoirs; taking care to make them an uneven number, and that there be no joint in the middle, where the key-stone should be. See Bridge.

HEMIMERIS, in botany, a genus of the angiospermia order, and didynamia class of plants: caps. bilocular, with one of the cells more gibbous than the other: cor. is wheel-shaped; with one division greater, and inverse heart-shaped; the interstice of the divisions nectar-bearing.

The HEMINA, in Roman antiquity, was a liquid measure, which, according to Arbuthnot, was equal to half a wine-pint English measure; its contents being 2·818 solid inches.

HEMIOBOLON, a weight often mentioned by the ancient writers in medicine, signifying the half of the obolus, or the twelfth part of a dram, i. e. five grains.

HEMIONITES, from hemionus, a mule, in botany, mule's fern; a genus of the natural order of filices, belonging to the cryptogamia class of plants. The fructifications are in lines decussating or crossing each other.

HEMIPTERA, from *ημισυς*, half, and *πτερον*, wing, in the Linnæan system, the second order of insects, comprehending twelve genera, viz. the blatta, mantis, gryllus, fulgora, cicada, notonecta, nepa, cimex, aphis, chermes, coccus, and thrips; and a great number of species. See Entomology and Zoology.

HEM'ISPHERE, *n. s.* } Fr. *hemisphere*; Gr.
Hemispher'ic, *adj.* } *ἡμισφεαῖριον*. The
Hemispher'ical, *adj.* } half of a globe when it is supposed to be cut through its centre in the plane of one of its greatest circles.

Night with his mantel, that is derke and rude,
Gan oversprede the *hemisperie* about.
Chaucer. The Marchantes Tale.

The sun is more powerful in the northern *hemisphere*, and in the apogeum; for therein his motion is slower. *Browne.*

Night and her ugly subjects thou dost fright,
And sleep the lazy owl of night,
Ashamed and fearful to appear,
They screen their horrid shapes with the black *hemisphere*. *Cowley.*

That place is earth, the seat of man: that light
His day, which else, as the' other *hemisphere*,
Night would invade. *Milton.*

A hill
Of Paradise, the highest from whose top
The *hemisphere* of earth, in clearest ken
Stretched out to the' amplest reach of prospect lay.
Id.

The thin film of water swells above the surface of the water it swims on, and commonly constitutes *hemispherical* bodies with it. *Boyle.*

In open prospect nothing bounds our eye,
Until the earth seems joined unto the sky;
So in this *hemisphere* our utmost view
Is only bounded by our king and you. *Dryden.*

A pyrites, placed in the cavity of another of an *hemispherick* figure, in much the same manner as an acorn in its cup. *Woodward.*

HEMISPHERE, in astronomy, is particularly used for one half of the mundane sphere. The equator divides the sphere into two equal parts, called the northern and southern hemispheres. The horizon also divides the sphere into two parts, called the upper and the lower hemispheres. Hemisphere is also used for a map, or projection of half the terrestrial globe, or half the celestial sphere, on a plane. Hemispheres are frequently called planispheres.

HEMISTICH, *n. s.* Fr. *hemistiche*; *ἡμιστίχιον*. Half a verse.

He broke off in the *hemistick*, or midst of the verse; but seized, as it were, with a divine fury, he made up the latter part of the *hemistick*. *Dryden.*

HEMISTICH denotes also a verse not completed. Of this there are frequent examples in Virgil's Æneid; but whether they were left unfinished by design or not, is disputed: such are,

Ferro accinta vocat. Æn. II. v. 614.

And

Italiam non sponte sequor. Æn. IV. 361.

In common English verses, a short pause is required at the end of each hemistich or half verse.

HEM'LOCK, *n. s.* Sax. þemloc. An herb.

He was met even now,
Crowned with rank fumiter and furrow-weeds,
With hardocks, *hemlock*. *Shakspeare. King Lear.*

And I ha' been plucking (plants among)
Hemlock, henbane, adder's tongue,
Night-shade, moon-wort, libbard's-bane,
And twice by the dogs was like to be ta'en.
Ben Jonson.

We cannot with certainty affirm, that no man can be nourished by wood or stones, or that all men will be poisoned by *hemlock*. *Locke.*

Be air, thou *hemlock* drinker.
Byron. The Deformed Transformed.

HEMLOCK. See CICUTA and CONIUM.

HEMLOCK DROP-WORT. See OENANTHE.

HEMLOCK LAKE, a lake in the state of New York, United States, in Ontario county, about five miles long, north and south, and one mile wide. It empties its waters northward, joining with Honeoy Creek.

HEMLOCK, LESSER. See ÆTHUSA.

HEMLOCK, WATER. See CICUTA.

HEMMINGFORD (Walter de), an English historian of the fourteenth century. He was an ecclesiastic in Gisborough Abbey, in Yorkshire, and wrote an English Chronicle, which comprehends the period between 1066 and 1308. He died in 1347.

HEMODES, in ancient geography, seven islands of Denmark, now called Zealand, Funen, Langlandt, Muen, Falster, Lalandt, and Femeren.

HEM'ORRHAGE, *n. s.* } Fr. *hemorragie*;
HEM'ORRHAGY, *n. s.* } Gr. *αἱμορῥαγία*. A violent flux of blood.

Great *hemorrhagy* succeeds the separation. *Ray.*

Twenty days fasting will not diminish its quantity so much as one great *hemorrhage*. *Arbuthnot.*

HEM'ORRHOIDS, *n. s.* } Fr. *hemorrhoids*;
HEMORRHOID'AL, *adj.* } Greek *αἱμορῥοΐδες*. The piles; the emrods.

Besides there are hemorrhages from the nose and *hemorrhoidal* veins, and fluxes of rheum. *Ray.*

Embost upon the field a battle stood
Of leeches, spouting *hemorrhoidal* blood.
Garth.

I got the *hemorrhoids*. *Swift.*

HEMORRHOIDAL. See HÆMORRHOIDAL.

HEMORRHOIDS. See MEDICINE.

HEMP, *n. s.* } Sax. þænep; Dan. *hamp*;
HEMP'EN, *adj.* } Dut. *hampe*. A fibrous plant of which coarse linen and ropes are made. It hath digitated leaves opposite to one another; the flowers have no visible petals; it is male and female in different plants. Its bark is useful for cordage and cloth.—*Miller.*

In foul reproach of knighthood's fair decree,
About his neck a *hempen* rope he wears.
Spenser. Faerie Queene.

Behold
Upon the *hempen* tackle ship-boys climbing.
Shakspeare.

Let gallows go for dog; let man go free.
And let not *hemp* his windpipe suffocate. *Id.*

Ye shall have a *hempen* caudle then, and the help of a hatchet. *Id.*

Hemp and flax are commodities that deserve encouragement, both for their usefulness and profit. *Mortimer.*

I twitched his dangling garter from his knee;
He wist not when the *hempen* string I drew. *Gay.*

HEMP. See CANNABIS. It does not appear that the ancients were acquainted with the use of hemp, in respect of the thread it affords. Pliny, who speaks of the plant in his Natural History, lib. xx. cap. 23, says not a word of this; but extols the virtues of its stem, leaves, and root. In effect, what some writers on the Roman antiquities remark, viz. that the hemp necessary for the use of war was all stored up in two cities of the western empire, viz. at Ravenna and Vienne, under the direction of two procurators, called procuratores linificii, must be understood of linum or flax.

The use of hemp is so extensive and important, that vast quantities of it are annually imported into this and other kingdoms, from those countries where it grows in greatest plenty, of which Russia is one. Sir John Sinclair informs us, that in 1785, the quantity exported from St. Petersburg in British ships was as follows:—

Clean hemp . .	1,038,791 poods.
Outshot . . .	37,382
Half-clean . .	18,374
Hemp-eodile . .	19,251
	1,113,798

Allowing sixty-three poods to a ton, the above quantity will amount to 17,695 tons; and, supposing it to take five acres to produce a ton of

hemp, the whole quantity of ground requisite to this purpose would amount to 88,475 acres. The annual import of hemp to Britain and Ireland in 1799 was estimated at 121,213 tons, which, at an average of £40 per ton, amounts to £4,848,520. This circumstance will enable the reader to form some idea of the distress into which so many laboring manufacturers were thrown in 1800, by the edicts of Paul I. prohibiting the exportation of Russian produce to any part of this kingdom.

The important uses of hemp, and the superiority of that produced in Britain to other kinds, have rendered the culture of it an object of attention to government. Accordingly, in 1787, a bounty of 3*d*. per stone was allowed on all the hemp raised in England; and, probably with a view to encourage the growth of English hemp, duties have been laid on that which comes from abroad.

Hemp, Chinese, a newly discovered species of cannabis, of which an account is given in the Philosophical Transactions, vol. lxxii. p. 46. In that paper, Mr. Fitzgerald, vice-president of the Society for Encouraging Arts, mentions his having received the seeds from the late Mr. Elliot; which being sown, according to his directions, produced plants fourteen feet high, and nearly seven inches in circumference. These being pulled in November, and steeped for a fortnight in water, were placed against a southern wall to dry. After this the hemp was found to separate easily from the woody part; and so great was the produce, that thirty-two plants yielded 3¼lbs. In consequence of this success, Mr. Fitzgerald applied to the directors of the India Company to procure some of the seeds from China; which being obtained, the society were furnished, in 1785, with some of the seeds, which were distributed to several of the members. Two of the species, tried by the duke of Northumberland, rose to the height of fourteen feet seven inches, and would even have risen higher had they not been hurt by a high wind. The result of Dr. Hinton's experiments is related under the article Cannabis. See Cannabis Satura. In Italy hemp is generally cultivated, though the Bolognese only can pretend to any superiority in the management of it. It is there sown upon the best lands, which are rich strong loams; and on which they are at all possible pains to procure a fine friable surface. For manure they use dung, pieces of rotten cloth, feathers, and horns brought from Dalmatia. The plant, however, may be cultivated upon ground of every kind; the poorer land producing that which is finer in quality, though in smaller quantity; whereas strong and rich land produces a great quantity, but coarser. It does not exhaust the land on which it grows, like flax. A Sussex manufacturer, who writes on this subject in the Annals of Agriculture, informs us, that it may be raised for many years successively on the same ground, provided it be well manured. An acre requires from nine to twelve pecks, according to the nature of the soil: the latter being the most usual, though a variation in the quality of the soil makes an alteration both in the quantity and quality of the hemp. An acre produces on an average thirty-six or thirty-eight stone. The season for sowing it extends from the 25th of March to the 15th of June. The seed ought always to be sown thin, not exceeding two bushels to an acre; and with a drill plough still less will answer. The male and female being distinct plants, of which the latter only produces seed, regard must be had to this circumstance. In Sussex the male and female are pulled together about thirteen weeks after the sowing, but in the fens are often separated. This last method is recommended by the abbé Brulle, who directs that little paths should be made length-wise through the field, about seven feet distant, to allow a passage for the person who pulls up the male hemp, from among the females, which require to stand more than a month after, to ripen the seeds. The male hemp, or, as it is commonly but improperly called, the female hemp, is known to be ripe by the fading of the flowers, the falling of the farina fecundans, and some of the stalks turning yellow. After the whole of this kind is pulled, it must be manufactured, and ought to be worked if possible while green; the hemp thus produced being much finer than that which is previously dried. The male hemp, however, is always in smaller quantity than the female; and, therefore, where the crop is large, it will be impossible to work the whole as fast as it is pulled or cut. It is known to be ripe by the stems becoming pale; but it must be remembered that hemp of any kind will be much less injured by pulling the plants before they are ripe than by letting them stand too long. The female hemp, being stripped of its leaves, &c., will soon be dry for storing by the heat of the atmosphere, though sometimes it may be necessary to use artificial means; but, where these are used, the utmost care must be taken, the hemp when dry being exceedingly inflammable. The stored or dried hemp must be steeped and treated in every other respect as if it had been green; whence it is evident that this operation ought never to be used but in cases of necessity. It is likewise impossible to make hemp which has been dried previous to its being steeped, so white as that which has been worked green. With regard to the perfecting of hemp-seed for a subsequent season, it would seem proper to set apart a piece of ground for this purpose; for M. Almen, from forty plants raised in the common way, had only 1½lb. of seed, though the plants from which it was taken might be deemed fine; whereas, from a single plant which grew by itself, he had 7½lbs. Some are of opinion, that, by putting the clusters which contain the hemp-seed to heat and sweat, the quality is improved: as many of those seeds which would otherwise wither and die may thus arrive at perfection. But this seems problematical, as there are no experiments which show that seeds, when separated from the vegetable producing them, have any power of meliorating themselves.

After hemp is pulled, it must be taken in large handfuls, cutting off the roots (though this is not absolutely necessary), the leaves, seeds, and lateral branches being dressed off with a wooden sword or ripple. It is then to be made

up into bundles of twelve handfuls each, in order to be steeped, like flax, in water. This, or something similar, is absolutely necessary, in order to separate the bark, which is properly the hemp, from the reed or woody part. In Suffolk, this operation is called water-retting; but sometimes it is merely exposed to the air, turning the hemp frequently during the time it is exposed. This is called dew-retting; but the former method is universally deemed preferable. Such hemp as is designed for seed is seldom water-retted, though, in the opinion of the manufacturer already quoted, it would be better if it were so. Dew-retted hemp is generally stacked and covered during the winter; in January and February it is spread upon meadow land, and whitens with the frost and snow; though it is always much inferior to the other, and proper for coarser yarns only. The length of time required for steeping hemp is various, and a complete knowledge of it can only be attained by practice. In Suffolk it is usual to continue the immersion four, five, or six days; standing water is preferred, and the same water will steep hemp three times during the season, but the first has always the best color. The abbé Brulle prefers clear and running water, especially if overhung with trees. The bundles are to be laid crosswise upon each other, taking particular notice of the manner in which they lie when put in, that they may be taken out without difficulty. His time of steeping is from six to eleven days; and it is much better to let it remain too long in the water than too short a time. The slenderest hemp requires the most soaking. The operation is known to be finished by the reed separating easily from the bark. The next operation is to separate the bark from the reed or woody part; and this may be done two ways, viz. either pulling out the reed from every stalk with the hand, or drying and breaking it like flax. The abbé Brulle is very particular in his directions for this last operation, which he calls reeding, and which may be performed either in a trough under water, or upon a table. The whole, however, may be reduced to the following, viz. pressing down the bundles either in the trough or on a table by proper weights, to keep the hemp steady on the middle and top end. Then beginning at the upper part of the bundle, pull out the reeds one by one. The rind which remains will press closely upon the remaining unreeded hemp, and keep it more steady; so that two, four, or even six stalks, may be taken at a time. The weight is then to be removed from the top, and all the pieces of reed which remain there, having been broken off in the former operation, are to be taken out. Lastly, the middle weight is to be taken off, and any small pieces which remain taken out. If the reeding is performed on a table, the bundle must be weeded frequently, though slightly; a continual dropping of water would perhaps be the best method. The hemp must next be freed from the mucilaginous matter with which it abounds. This is done by pouring water through it, squeezing out the liquid after every effusion, but taking care not to let the threads twist or entangle each other, which they will be very apt to do. The abbé is of opinion, that soft soap should be dissolved in the last water, in the proportion of 1 oz. to 3lbs. of dry hemp, as it contributes much to soften and render the hemp easy to dress. Hemp is broken by machinery, after being steeped, in a manner similar to flax; but the instruments used for this purpose in Suffolk are all worked by the hand. That which breaks in the operation is called shorts, and is about half the value of the long hemp. The best water-retted hemp sells for about 8*s*. 6*d*. per stone; the other kind from one to two shillings lower. Beating is the next operation, which formerly was performed entirely by hand (see BEATING), but now in most places by a water-mill, which raises three heavy beaters that fall upon it alternately; the hemp being turned all the while by a boy to receive the strokes equally. The finer it is required to make the tow, the more beating is necessary. It is then dressed or combed by drawing it through heckles formed like the combs of wool manufacturers, only fixed. Sometimes it is divided into two or three sorts of tow, and sometimes the whole is worked together into one sort; the prices varying from 6*d*. to 1*s*. 6*d*. per pound.

The usual height of the plant when growing is from five to six feet. In Catalonia they generally rise to seven; but in Alsace they are sometimes twelve feet high, and three inches in circumference.

Only the coarser kinds of hemp are employed in making cordage, the better sorts being used for linen, which, though it can never be made so fine as that from flax, is yet incomparably stronger, and equally susceptible of bleaching both in the old and new way. Cloths made of hemp have also this property, that their color improves by wearing, while that of linen decays. The English hemp is much superior in strength to that which grows in any other country. Next to it is the Russian, from which sacking is usually made, as it is sometimes also from the offal of the English kind, but none of the Suffolk hemp is ever made into cordage on account of its fineness. A considerable quantity of Russia sheeting is imported into England merely on account of its strength, and is much coarser at the price than any other foreign linen. Hemp is also said to possess a property as a plant which renders it almost invaluable; viz. that of driving away almost all insects that feed upon other vegetables. Hence, in some places of the continent, they secure their crops from these mischievous vermin, by sowing a belt of hemp round their gardens, or any particular which they wish to preserve.

HEMP AGRIMONY. See EUPATORIUM.

HEMP AGRIMONY, BASTARD. See AGERATUM.

HEMP AGRIMONY, NAKED HEADED. See VERBESINA.

HEMP, BASTARD. See DATISCA.

HEMPSTEAD, a post town of Queen's county, New York, on the south side of Long Island; twenty-two miles E.S.E. from New York. Population 5804. Hempstead Plains, an elevated tract of wild savannah, fifteen miles long and five broad, are chiefly in this township. These plains are naturally bare of trees; but produce

neath and some grass, and afford pasture for numerous flocks of sheep and herds of cattle. Hempstead Hill is 319 feet high.

HEMS, a city of Syria (the ancient Emesa), on the borders of the desert. Under the Roman empire this was a considerable town, and the birth-place of Heliogabalus. Its walls are about three miles in circumference; and it has often changed masters. The present town stands in a plain, watered by a small river. Its ill-arranged and ill-built houses occupy about a fourth only of the space within the walls. To the south is a large ruined castle. About a furlong to the west is a piece of Roman architecture, partly Doric and partly Ionic, called the sepulchre of Caius Cæsar, and Pococke supposes the designation to be just: or at least that it was a monument erected to his honor. 120 miles south of Aleppo, and eighty-five north of Damascus. Long. 37° 20′ E., lat. 34° 25′ N.

HEMSKERCK (Egbert), THE OLD, a celebrated Flemish painter of drolls and conversations, of whom, though his works are much esteemed, we have no information as to the time in which he flourished, or the school in which he was taught.

HEMSKERCK (Egbert), THE YOUNG, was the disciple of Peter Grebber, but imitated the manner of Brower and of the elder Hemskerck. He was born at Haerlem in 1645, but settled at London, where for a long time his works were exceedingly esteemed, though now much sunk in their value. He died in 1704.

HEMSKERCK, or HEMSKIRK (Martin), an eminent Dutch painter born at Hemskirk in 1498, and educated at Rome. He settled at Haerlem, where he died in 1574, aged seventy-six.

HEMSTERHUIS, or HEMSTERHUSIUS (Tiberius), a learned critic born at Groningen, in 1685. In 1704 he was appointed professor of mathematics and philosophy at Amsterdam; in 1717 professor of Greek and history at Franeker; and in 1740 he filled the same offices at Leyden. He published 1. The last three books of Julius Pollux's Onomasticon, in 1706: 2. Colloquies, &c., of Lucian; 3. Aristophanes's Plutus; and other learned works.

HEN, *n. s.*
HEN-DRIVER, *n. s.*
HEN-HARM, *n. s.*
HEN-HARRIER, *n. s.*
HEN-HEARTED, *adj.*
HEN-PECKED, *adj.*
HEN-ROOST, *n. s.*
HEN-COOP, *n. s.*

} Sax. and Dut. penne; Germ. *han*, a cock. The female of a house cock, or any other land fowl: hendriver, a kind of hawk: hen-harm, hen-harrier, a kind of kite so called from destroying chickens: hen-hearted, cowardly; dastardly: hen-pecked, governed by the wife: hen-roost, the place where poultry rest.

> This gentil cok had in his governance
> Seven *hennes*, for to don all his plesance,
> Which were his sisters and his paramoures,
> And wonder like to him as of coloures
> Of which the fairest hewed in the throte,
> Was cleped faire Damoselle Pertelote.
> *Chaucer. The Nonnes Preestes Tale.*

> The peacock, pheasant, and goldfinch cocks have glorious colours; the *hens* have not. *Bacon.*

> The *hen-driver* I forbear to name. *Walton.*

> A step-dame too I have, a cursed she,
> Who rules my *hen-pecked* sire, and orders me.
> *Dryden.*

> Many a poor devil stands to a whipping post for the pilfering of a silver spoon, or the robbing of a *hen-roost*. *L'Estrange.*

> Whilst the *hen* bird is covering her eggs, the male generally takes his stand upon a neighbouring bough within her hearing, and by that means diverts her with his songs during the whole time of her sitting. *Addison.*

> If a man prosecute gypsies with severity, his *hen-roost* is sure to pay for it. *Id.*

> The neighbours reported that he was *hen-pecked*, which was impossible, by such a mild-spirited woman as his wife. *Arbuthnot.*

> They oft have sallied out to pillage
> The *hen-roosts* of some peaceful village. *Tickell.*

> Her house is frequented by a company of rogues, whom she encourageth to rob his *hen-roosts*. *Swift.*

> O'er the trackless waste
> The heath *hen* flutters. *Thomson.*

> At half-past eight o'clock, booms, *hen-coops*, spars,
> And all things, for a chance, had been cast loose,
> That still could keep afloat the struggling tars,
> For yet they strove, although of no great use.
> *Byron. Don Juan.*

HEN. See PHASIANUS.

HEN, GUINEA. See NUMIDA.

HEN AND CHICKENS ISLES, a cluster of small islands in the South Pacific, near the coast of New Zealand. One of them terminates in two high peaks. Long. 180° 1′ W., lat. 35° 53′ S. Also a group of small islands in the Eastern Seas; in long. 118° 3′ E., lat. 5° 30′ S.

HENARES, a river of Spain, which rises near Siguença, and runs into the Xarama, ten miles above Toledo.

HENAULT (Charles John Francis), son of John Remi Henault, lord of Moussy, was born at Paris in 1685. Claude de Lisle, father of the celebrated geographer, taught him geography and history. On quitting college Henault entered the oratory, which he left two years after, and his father bought for him the lieutenance des chasses, and the government of Corbeil. At M. Villeroi's he formed connexions with many of the nobility, and associated with the wits till the dispute between Rousseau and De la Motte disgusted him. In 1707, he gained the prize of eloquence at the French Academy; and another next year at the Academy des Jeux Floraux. In 1713 he brought a tragedy on the stage under the disguised name of Fuselier. As he was known to the public only by some slighter pieces, Cornelia the Vestal met with no great success. In his old age Mr. Horace Walpole being at Paris in 1768, and having formed a friendship with him, obtained the MS. of this piece, and had it printed. In 1715 M. Henault, under a borrowed name, brought out a second tragedy, entitled Marius, which was well received and printed. He had been admitted counsellor in parliament in 1706, and in 1710 president of the first chamber of inquests. These important places, which he determined to fill in a proper manner, engaged him in the most solid studies. He made himself master of the Roman law, and the French ordonnances, customs, &c. M. de Morville, procureur general of the great council, being appointed ambassador to the Hague in

1718, engaged M. Henault to accompany him. On the death of Card du Bois, in 1723, he succeeded him at the French Academy. Cardinal Fleury recommended him to succeed himself as director, and he pronounced the eloge of M. de Malezieux. History was M. Henault's favorite study. In 1744 he published an Essay on Chronology, the success of which exceeded his expectations. He improved it, and it not only passed through nine editions, but was translated into English, Italian, German, and even Chinese. He next determined to reduce into the form of a regular drama one of the periods of French history, viz. the reign of Francis II. It accordingly went through five editions; the harmony of dates and facts is exactly observed in it, and the passions interested without offence to historic truth. In 1755 he was chosen an honorary member of the Academy of Belles Lettres, being previously a member of the academies of Nanci, Berlin, and Stockholm. The queen appointed him superintendant of her house. He composed three comedies: La Petite Maison, La Jaloux de Soi meme, and Le Reveil d'Epimenide. The subject of the last was the Cretan philosopher who is pretended to have slept twenty-seven years. Epimenides is introduced, supposing that he had slept but one night, and astonished at the change in the age of all around him; he mistakes his mistress for her mother; but, discovering his mistake, offers to marry her, which she refuses, though he still continues to love her. The queen was particularly pleased with this piece, and on the place of superintendant becoming vacant, by the death of M. Bernard de Conbert, she bestowed it on Henault, and consented that he should divide the profits with his predecessor's widow. On the queen's death he held the same place under the dauphiness. He made several journeys to the waters of Plombieres: in one of these he visited the deposed king Stanislaus at Luneville; and in another accompanied his friend the marquis de Pauliny ambassador to Switzerland. He died December 24th 1771, in his eighty-sixth year.

Henault, or Henaut (John D'), a French poet of the seventeenth century, the son of a baker in Paris. Being patronised by the superintendant, Fouquet, he was appointed receiver of the taxes at Forez. He wrote a satirical poem on Colbert, and several other pieces of merit; printed at Paris, under the title of Oeuvres Diverses in 12mo. 1670; but his conduct was irregular, and his principles atheistical. He travelled into England, and went to Holland, on purpose to visit Spinoza, who, however, did not much esteem him; considering him as one of those fashionable sceptics with which every country abounds who adopt new opinions in religion not from rational conviction, but from a profligate spirit. He translated three books of Lucretius, but, falling sick, burnt them, the fear of death having put his atheistical principles to flight; and, having now become a convert, he proposed to his confessor, as a proof of his penitence, to take the sacrament with a halter about his neck. He died in 1682.

HEN-BANE, *n. s.* Lat. *hyoscyamus*; a plant. It is very often found growing upon the sides of banks and old dunghills. This is a very poisonous plant.—*Miller.*

That to which old Socrates was cursed,
Or *henbane* juice, to swell 'em 'till they burst.
Dryden.

Henbane. See Hyosciamus.

HE'N-BIT, *n. s.* *Alsine foliis hederaceis*; a plant.

In a scarcity in Silesia a rumour was spread of its raining milletseed; but it was found to be only the seeds of the ivy-leaved speedwell, or small *henbit.*
Derham's Physico-Theology.

HENCE, *adv.* or *interj.* Sax. þeonan; probably of Goth. *hen*, here; *hennes*, old English.

From this place to another.

Discharge my followers; let them *hence* away,
From Richard's night to Bolingbroke's fair day.
Shakspeare.

The Almighty hath not built
Here for his envy; will not drive us *hence.*
Milton.

A sullen prudence drew thee *hence*
From noise, fraud, and impertinence.
Roscommon.

Away; to a distance. A word of command.

Be not found here; *hence* with your little ones.
Shakspeare.

Hence with denial vain, and coy excuse.
Milton.

At a distance; in other places. Not in use.

Why should I then be false, since it is true
That I must die here, and live *hence* by truth.
Shakspeare.

All members of our cause, both here and *hence*,
That are insinewed to this action. *Id.*

From this time; in the future.

He who can reason well to-day about one sort of matters, cannot at all reason to-day about others, though perhaps a year *hence* he may. *Locke.*

Let not posterity a thousand years *hence* look for truth in the voluminous annals of pedants.
Arbuthnot.

For this reason; in consequence of this.

'Tis *hence* you lord it o'er your servile senates;
How low the slaves will stoop to gorge their lusts,
When aptly baited. *Brooke's Gustavus Vasa.*

Hence perhaps it is, that Solomon calls the fear of the Lord the beginning of wisdom. *Tillotson.*

From this cause; from this ground.

By too strong a projectile motion the aliment tends to putrefaction: *hence* may be deduced the force of exercise in helping digestion.
Arbuthnot on Aliments.

From this source; from this original; from this store.

My Flora was my sun: for as
One sun, so but one Flora was;
All other faces borrowed *hence*
Their light and grace, as stars do thence.
Suckling.

From hence is a vicious expression, which crept into use, even among good authors, as the original force of the word hence was gradually forgotten. Hence signifies from this.

An ancient author prophesied *from hence*,
Behold on Latian shores a foreign prince!
Dryden.

Hence, *v. a.* From the adverb. To send off; to despatch to a distance. Obsolete.

Go, bawling cur! thy hungry maw go fill
On yon foul flock, belonging not to me;
With that his dog he *henced*, his flock he cursed.
Sidney.

HENCEFORTH, *adv.* Sax. þenonforð. From this time forward.

But *hennesforth* I wol my processe hold
To speke of aventures, and of batailles,
That yet was never herd so gret mervailles.
Chaucer. The Squieres Tale.

Thanes and kinsmen,
Henceforth be earls. *Shakspeare. Macbeth.*

Never *henceforth* shall I joy again;
Never, oh never, shall I see more joy. *Id.*

Happier thou may'st be, worthier can'st not be;
Taste this, and be *henceforth* among the gods,
Thyself a goddess. *Milton*

I never from thy side *henceforth* will stray,
'Till day droop. *Id*

If we treat gallant soldiers in this sort,
Who then *henceforth* to our defence will come?
Dryden.

HENCEFOR'WARD, *adv.* Hence and forward. From this time to all futurity.

Henceforward will I bear
Upon my target three fair shining suns.
Shakspeare.

Pardon, I beseech you;
Henceforward I am ever ruled by you. *Id.*

The royal academy will admit *henceforward* only such who are endued with good qualities. *Dryden.*

HENCH'MAN, *n. s.* Sax. þync, a servant, and man—Skinner; þengrt, a horse, and man—Spelman. A page; an attendant.

And every knight had, after him riding,
Three *henchmen*, still upon him awaiting.
Chaucer. The Floure and the Leafe.

Why should Titania cross her Oberon.
I do but beg a little changeling boy,
To be my *henchman*. *Shakspeare.*

Three *henchmen* were for ev'ry knight assigned,
All in rich livery clad, and of a kind. *Dryden.*

HEND, *v. a.* Sax. þendan, from *hendo*, low Lat. which seems borrowed from hand or hond, Teutonic. To seize; to lay hold upon; to crowd or surround.

For er the bishop *hent* hem with his crook,
They weren in the archedekens book.
Chaucer. The Freres Tale.

The generous and gravest citizens
Have *hent* the gates, and very near upon
The duke is entering. *Shakspeare.*

With that the sergeants *hent* the young man stout
And bound him likewise in a worthless chain.
Fairfax.

HENDEC'AGON, *n. s.* Gr. ἕνδεκα and γωνία. A figure of eleven sides or angles.

HENDERSON (John), an eminent English actor, born in London March 8th, 1746. His mother having put into his hands a volume of Shakspeare, when very young, he became enamoured with the stage; and, in 1768, applied to Mr. Garrick, but met with no encouragement till 1770, when Garrick gave him a letter to Palmer, manager of the theatre at Bath, where he first exhibited, with uncommon applause, in the character of Hamlet, October 6th, 1772. In the course of that and the four subsequent seasons he represented Richard III., and other principal characters, with increasing reputation. All this time, however, Garrick and Foote refused to admit him on the London theatre. But in 1777 Coleman, having purchased Foote's patent, engaged him, and he was well repaid by the public; for in the first thirty-four nights no less than £4500 was drawn. The Haymarket was crowded every night even during the heat of summer, and Coleman, as an acknowledgment, gave Henderson a free benefit, which produced a large sum. In winter he was engaged by Mr. Sheridan at £10 a-week for two years at Drury Lane. In 1778 and 1779 he went to Ireland, and was introduced to most of the literati there. On the 13th of January, 1779, he married. He was now as much courted by the managers as he had formerly been slighted; but his drama drew fast to a close. His last performance was in the character of Horatius, in the Roman Father, November 3rd, 1785. He was soon after seized with a fever, which carried him off on the 25th of that month. He was interred in Westminster Abbey. He left a few poems which are esteemed.

HENDERSON, a town and county of the United States, in Kentucky, bounded north by the Ohio; east by Green and Muddy rivers, which separate it from Ohio and Mecklenburg counties; west by Tradewater River, which divides it from Livingstone county; and south by Christian county. The staple product is tobacco: but coffee is also raised. The town is seventy-five miles below Louisville.

HENEAGO, or HENEAGUAS ISLANDS, two of the most southern of the Bahamas. They are separated from each other by a passage of about five miles, and the navigation near them is very dangerous. The largest, called Great Heneagua, is of very considerable magnitude. Little Heneagua is not inhabited, and lies about twenty-eight miles W. S. W. from Pequeno, the most westerly of the Caycos Islands, and about seven miles north by east from the north-east point of the Great Heneagua. The latter island is forty-five miles in length, and nineteen wide at its greatest breadth. There are extensive salt ponds here, but the interior has scarcely ever been explored. The most westerly extremity is called Middle or Devil's Point; there is an anchorage to the south, in Fisher's Bay (between Devil's Point and the south-west point), and also to the north of it, in Ocean Blight, towards the north-west point. From this latter point a dangerous reef runs to the east about a mile from the shore, for many leagues.

HENED PENNY, in old writers, a customary payment of money instead of hens at Christmas. It is mentioned in a charter of king Edward III. Mon. Ang. tom. ii. p. 327. Du Cange is of opinion it may be hen-penny, gallinagium, or a composition for eggs; but Cowel thinks it is misprinted hened-penny for heved-penny, or head-penny.

HENERY, or HUNDRY, an island ten miles south of Bombay, on the coast of Hindostan, and 1200 yards distant from the mainland. It is not more than 600 yards in circumference, and can only be approached on the north side; but it is thickly inhabited and fortified. In 1790 it was in possession of a Mahratta chief named Rogojee Augria, and was the rendezvous of pirates. Of

late it has been a free government, but is still a Mahratta possession.

HENETI, an ancient people of Illyria, mentioned by Herodotus, whose marriage laws were similar to those of the ancient Babylonians. Livy says, that they came originally from Paphlagonia, mixed with a number of Trojans, under Antenor, and having settled on the coast of the Adriatic Gulf, were afterwards called Veneti.

HENGTCHEOU, a city of the first rank in China, in the province of Houquang, on the river Heng. It has a considerable manufacture of paper, and there are said to be silver mines in the neighbourhood. Long. 112° E., lat. 26° 36′ N.

HENLEY (Anthony), Esq. of Grange, in Hants, the son of Sir Robert Henley, was born about the middle of the seventeenth century, and educated at Oxford, where he distinguished himself by his proficiency in the classics, and his poetical talents. Being a zealous whig, he was chosen M. P. for Andover in 1698, and in several successive parliaments for other boroughs. Inheriting a fortune of £3000 a year, which was increased by the addition of £30,000 obtained with his wife, Mary Bertie, sister to the countess of Pawlett, he was very generous to contemporary authors, many of whom dedicated their works to him. He wrote many anonymous pieces, besides the opera of Alexander, and several papers in the Tatler and Medley. He died in 1712.

HENLEY (John), M. A., commonly called orator Henley, a very singular character, was born at Melton Mowbray, Leicestershire, in 1691. His father, the Rev. Simon Henley, and his maternal grandfather, John Dowel, M. A., were both vicars of that parish. Having passed his exercises at Cambridge, and obtained the degree of B. A., he returned to his native place, where he was desired by the trustees to take the direction of the school, which he soon raised to a flourishing condition. Here he began his Universal Grammar; and wrote his poem Esther, which was well received. He was ordained a deacon by Dr. Wake, then bishop of Lincoln; and having taken his degree of M. A. was admitted to priest's orders by Dr. Gibson. After preaching many occasional sermons, he went to London, recommended by above thirty letters from the most considerable men in the country, both of the clergy and laity. He there published translations of Pliny's Epistles, of several works of Abbe Vertot, of Montfauçon's Italian Travels in folio; and many original lucubrations. His most generous patron was the earl of Macclesfield, who gave him a benefice in the country, the value of which to a resident would have been above £80 a-year; he had likewise a lecture in the city; and was as popular as any other preacher, except the celebrated George Whitefield. He soon however gave up his benefice and lecture, believing the public would be a more hospitable protector of learning and science, than some of the higher ranks in his own order. He declaimed several years against persons of the highest rank, and occasionally, says Warburton, did Pope that honor. The poet retaliated as follows:—

'Imbrowned with native bronze, lo Henley stands,
Tuning his voice and balancing his hands.
How fluent nonsense trickles from his tongue!
How sweet the periods, neither said nor sung!
Still break the benches, Henley! with thy strain,
While Kennet, Hare, and Gibson preach in vain,
O great restorer of the good old stage,
Preacher at once and zany of thy age!'

Instead of tickets this extraordinary person struck medals, which he dispersed among his subscribers: a star rising to the meridian, with this motto, Ad summa; and below, Inveniam viam aut faciam. Each auditor paid 1s. He was author of a weekly paper, called The Hyp Doctor, for which he had £100 a year. In his advertisements and lectures he often introduced satirical and humorous remarks on the public transactions of the times. He died on the 14th of October, 1756.

HENLEY HOUSE, a station of New South Wales, belonging to the Hudson's Bay Company. It is on the north bank of Albany River, 150 miles south-west from Albany fort, and 110 north-west by west from Brunswick House.

HENLEY-UPON-THAMES, a market town of Oxfordshire, seven miles S. S. E. from Marlow, and thirty-five west from London. It is a place of great antiquity, though but few relics of its ancient condition are now to be discovered, as most of the houses are modern buildings, and the streets are wide, paved, and well lighted. A handsome stone bridge has been erected over the Thames. The church is an ancient building, having a handsome lofty tower, said to have been erected by Cardinal Wolsey, with a peal of eight bells. Here are three free schools, and many other charitable institutions. The principal trade is in corn, flour, malt, and beech-wood, which is sent to the metropolis by water. This town was formerly a borough, and sent members to parliament. It is now a corporate town, governed by a high steward, recorder, mayor, ten aldermen, and sixteen burgesses. The market on Thursday is always abundantly supplied with malt and grain.

HENLEY-IN-ARDEN, a market-town of Warwickshire, seven miles and a half N. N. W. from Stratford-on-Avon, and 101 from London. The town was burnt down about the time of the battle of Evesham. It is named from its situation in the ancient forest of Arden, and stands near the little river Arrow. The church, or chapel of ease, is a neat building. Market on Tuesday.

HENLOPEN, CAPE, in North America, a cape on the south-west side of the entrance of Delaware Bay, opposite to Cape May. The two capes are eighteen miles apart. Cape Henlopen is in W. long. 75° 26′, N. lat. 38° 50′, and has a stone light-house, 115 feet high: its foundation is nearly as much above the level of the sea. The lantern, seven or eight feet square, has eight lamps, and may be seen in the night ten leagues off. The light shortly after its erection attracted so many birds that 110 of different kinds were found dead at the top of the building one morning, and a wild duck in particular flew against it with such force as to penetrate through both the wire which guards the lamps and the glass

HENNEBERG, a tract of land in Saxony, situated to the north of the principality of Wurzburg. It has a superficial extent of 850 square miles, and about 196,000 inhabitants.

HENNIKER (Sir Frederick), an English baronet, descended of a noble family, was the eldest son of general Sir Brydges Trecothic Henniker, of Newton Hall, Essex, and born November the 1st, 1793. He received his education at Eton, and St. John's College, Cambridge, succeeding his father in his title and estates in 1816. He travelled, on quitting the university, through France, Italy, Egypt, Nubia and Palestine, from which latter country he narrowly escaped with his life, from the hands of banditti, being in fact, 'wounded and left half dead' between Jerusalem and Jericho. He published in 1822 an amusing journal, entitled Notes during a Visit to Egypt, Jerusalem, &c., and died at his chambers in the Albany, after a short illness, August 6th 1825.

HENNINGES (Jerome), a Saxon genealogist, native of Lunéberg, who studied under Melancthon. He applied with zeal to historical and antiquarian researches, and produced as the result of his studies Genealogiæ Familiarum Saxonicarum, Hamburgh, 1596, folio. He died in 1597. After his decease appeared a compilation entitled Theatrum Genealogicum, omnium Ætatum et Monarchiarum Familias complectens, Magdeburgh, 4 vols. folio.

HENNUYER (John), a celebrated French Roman Catholic bishop, who saved the lives of all the Protestants in his diocese of Lisieux, during the massacre of St. Bartholomew's day, in spite of the inhuman order of Charles IX. He died in 1577, universally beloved and regretted.

HENRICIANS, in ecclesiastical history, a sect so called from Henry its founder, who, though a monk and a hermit, undertook to reform the vices of the clergy. For this purpose he left Lausanne in Switzerland, and, after visiting different places, at length settled at Thoulouse in 1147, where he exercised his ministerial function; till being opposed by Bernard, abbot of Clairval, and condemned by pope Eugenius III. at a council assembled at Rheims, he was committed to a close prison in 1148, where he died. He rejected the baptism of infants; severely censured the corrupt manners of the clergy, and treated the festivals and ceremonies of the church with contempt.

HENRICO, a county of Virginia, United States; about thirty miles long and seven broad. It is bounded by Hanover, Charles city, and Goochland counties, and James's River. A number of coal mines have been opened here, and worked to considerable profit. Coals are found 200 feet above the level of the river, and three or four feet below the surface of the ground. The chief town is Richmond. Population 12,000, including 5000 slaves.

HENRIQUELLE, a remarkable salt lake in the island of St. Domingo, about twenty-two leagues in circuit. It is inhabited by very large lizards, alligators, and land tortoises. The water is deep, clear, and bitter, having a disagreeable smell. Near the middle is an island about two leagues long, and a league wide, in which is a spring of fresh water, stocked with cabritoes, and thence called Cabrito Island. It is eleven miles east from Port au Prince.

HENRY. Of the numerous emperors and princes of this name we can only afford room for one or two, who cannot be so well comprised in any of our general historical sketches.

Henry IV. emperor of Germany, styled the Great, was born in 1050, and succeeded his father Henry III. in 1056, under the tutelage of his mother Agnes. In 1063 he assumed the reins of government; but soon after quarrelled with pope Gregory II., whom at one time he deposed for having presumed to judge his sovereign; but at another, dreading the effects of the papal anathemas, he had the weakness to submit to the most humiliating personal solicitations and penances to obtain absolution; which impolitic measure increased the power of the pope, and alienated the affections of his own subjects. Thus circumstanced, he re-assumed the hero, but too late; marched with an army to Rome, expelled Gregory, deposed him, and set up another pope. Gregory died soon after; but Urban II. and Paschal II. successively excited his ambitious sons, Conrad and Henry, to rebel against him, and the latter, being crowned emperor in 1106, had the monstrous inhumanity to arrest his father, and to deprive him, not only of all his dignities, but even of the necessaries of life! The unfortunate Henry IV. was reduced to such extremities (after having fought sixty-two battles in defence of the German empire), that he solicited the bishop of Spire to grant him an underchaunter's place in his cathedral, but was refused! He died the same year at Liege, aged fifty-five, a martyr to the ignorance and superstition of the age, and to his own blind confidence in favorites and mistresses. See Germany.

Henry VIII. king of England. See England.

Henry, prince of Wales, eldest son of king James VI. of Scotland, by his queen Anne, sister of the queen of Denmark, one of the most accomplished princes of the age in which he lived, was born on the 19th of February, 1594. His birth was announced by embassies to many foreign powers, with invitations to be present at the ceremony of his baptism, which was thus delayed for a considerable time. All these ambassadors were cordially received, and others appointed in return, except by the court of France. Henry IV., then king of France, neither made any present, nor appointed an ambassador. The young prince was committed to the care of the earl of Mar, who was assisted in this important charge by Annabella, countess dowager of Mar, daughter of William Murray of Tullibardine, paternal ancestor of the duke of Athol. In his sixth year he was committed to the care of Mr. Adam Newton, a Scotsman, eminently skilled in most branches of literature. Under his tutorage the prince soon made great progress in the Latin language, as well as in other branches of knowledge; insomuch that, before he had completed his sixth year, his father wrote for his use the treatise entitled

Basilikon Doron, thought to be the best of all his works. In his seventh year prince Henry began his correspondence with foreign powers. At this early period he also began to add to his literary accomplishments some of the martial kind, such as riding, the exercise of the bow and pike, the use of fire arms, &c., as well as singing, dancing, &c. On his ninth birth-day he sent a letter in Latin to the king, informing him that he had read over Terence's Hecyra, the third book of Phædrus's Fables, and two books of Cicero's Epistles; and that now he thought himself capable of performing something in the commendatory kind of epistles. His accomplishments were soon spoken of in foreign countries; and these, along with the general suspicion that James favored the Catholic party, probably induced pope Clement VIII. to propose, that, if James would entrust him with the education of the young prince, he would advance such sums of money as would effectually establish him on the throne of England. This happened a little before the death of Elizabeth; but James, notwithstanding his ambition to possess the crown of England, of which he was not yet altogether certain, withstood the temptation. On the death of queen Elizabeth James left Scotland in such haste that he had no time to take a personal leave of his son, and therefore did so by letter, which was answered by the prince in Latin. In July 1603 prince Henry was invested with the order of the garter. Being obliged to leave London, on account of the plague, he retired to Oatlands, a royal palace near Weybridge in Surrey, where a separate household was appointed for him and his sister Elizabeth. In his tenth year he applied himself to naval and military affairs. In 1606 the prince waited on his uncle Frederick III. king of Denmark, who had come to England on a visit to king James; and who was so much pleased with his company, that he presented him at parting with his vice-admiral and best ship of war, and a rapier and hanger, valued at 2000 marks. In July, 1607, the Dutch ambassadors came recommended to prince Henry by the States. He had a great regard for his grand aunt lady Arabella Stewart, sister of Henry lord Darnley; and there is still extant a letter from her, acknowledging some kindness he had bestowed on a kinsman at her recommendation: and he particularly patronised Joseph Hall, afterwards bishop of Exeter. The courage, intrepidity, and martial turn of this prince, were manifest from his infancy. In August, 1607, he visited the royal navy at Woolwich, and repeatedly went to the dock-yards at Woolwich, Chatham, &c. Among his papers a list of the royal navy was found after his death, with an account of all the expenses of fitting out, manning, &c., which must now be accounted a valuable addition to the naval history of those times. His passion for naval affairs naturally led him to a desire of making geographical discoveries; of which two instances are recorded. One was in 1607, when he received from Mr. Tindal his gunner, who had been employed by the Virginia Company, a draught of James's River in that country, with a letter dated 22d June the same year. The other was in 1612, when he employed Mr. Thomas Button, an eminent mariner, to go in quest of a north-west passage, but who did not return till after prince Henry's death. His martial disposition was displayed on occasion of his being invested in the principality of Wales, and duchy of Cornwall, June 4th, 1610; when, at the tournaments given, according to the romantic taste of the times, he gave and received thirty-two pushes of the lance, performing his part to the admiration of all who saw him, being then not sixteen years of age. In 1611 a proposal was made for a double marriage betwixt the prince of Wales and the eldest princess of Savoy, and between the prince of Savoy and lady Elizabeth; but these overtures were very coolly received by the nation. In his nineteenth year his constitution underwent a remarkable change; he began to appear pale and thin, and forebodings of a dangerous malady appeared, but were totally neglected, even after he began to be seized at intervals with fainting fits. Notwithstanding these alarming symptoms, he continued his usual employments. On the 1st of November he was blooded, the impropriety of which was manifest by the thin and dissolved state of the blood which was taken away. He expired on the 6th of November, 1612, at the age of eighteen years, eight months, and seventeen days. On opening his body, the lungs were found black, spotted, and full of corrupt matter. His funeral was not solemnised till the 7th of December. His early death concurring with the public apprehensions of the papists, and the ill opinion which the nation then had of the court, gave rise to suspicions of its being hastened by poison, which were heightened by the very little concern shown by some persons in great stations. With these notions his mother the queen was peculiarly impressed, according to Dr. Welwood; who informs us, that, when he fell into his last illness, the queen sent to Sir Walter Raleigh for his cordial, which she herself had taken some time before in a fever. Raleigh sent it, with a letter to the queen, wherein he expressed a tender concern for the prince; and, boasting of his medicine, said 'that it would certainly cure him or any other of a fever, except in case of poison.' As the prince took this medicine, and died, notwithstanding its virtues, the queen, in the agony of her grief, showed Raleigh's letter; and laid so much weight on the expression about poison, that as long as she lived she could never be persuaded but that the prince had died by that means. It is sufficient however to oppose to all such suggestions the unanimous opinion of the physicians who attended the prince, and opened his body after his death; from which, as Dr. Welwood observes, there can be no inference drawn that he was poisoned. To this may be added the authority of Sir Charles Cornwallis.

HENRY (Philip), a pious and learned nonconformist minister, was the son of Mr. John Henry, page to James, duke of York, and was born at Whitehall in 1631. He was admitted into Westminster school at twelve years of age; became the favorite of Dr. Busby, and was employed by him, with some others, in collecting materials for the Greek grammar he afterwards

published. Thence he removed to Christ Church, Oxford; where, having obtained the degree of M. A., he was taken into the family of judge Puleston, at Emeral in Flintshire, as tutor to his sons, and to preach at Worthenbury. He soon after married the only daughter of Mr. Daniel Matthews of Broad-oak, near Whitchurch, by whom he became possessed of a competent estate. On the Restoration, he refused to conform, was ejected, and retired with his family to Broad-oak; where he lived about twenty-eight years.

HENRY (Matthew), an eminent dissenting minister, the son of the above, was born in 1662. He continued under his father's care till he was eighteen years of age; in which time he became well skilled in the learned languages, especially in the Hebrew, which his father had rendered familiar to him from his childhood. He was afterwards entered in Gray's Inn for the study of the law. But at length, resolving to devote his life to divinity, in 1686 he retired into the country, and was chosen pastor of a congregation at Chester, where he lived about twenty-five years, greatly esteemed and beloved by his people. He had several calls to London, which he constantly declined; but was at last prevailed upon to accept a unanimous invitation from a congregation at Hackney. He wrote, 1. Expositions of the Bible, in 5 vols. folio. 2. Directions for Daily Communion with God. 3. A Method for Prayer. 4. Four Discourses against Vice and Immorality. 5. The Communicant's Companion. 6. Family Hymns. 7. A Scriptural Catechism; and, 8. A Discourse concerning the Nature of Schism. He died of an apoplexy at Nantwich in 1714; and was interred at Trinity church in Chester.

HENRY, or BLIND HARRY, or HENRY THE MINSTREL, an ancient Scottish author, distinguished by no particular surname, but well known as the composer of an historical poem reciting the achievements of Sir William Wallace. This poem continued for several centuries to be in great repute; but afterwards sunk into neglect, until 1790, when it was again released from its obscurity by a very neat and correct edition published at Perth, under the inspection and patronage of the earl of Buchan. It is difficult to ascertain the precise time in which this poet lived, or when he wrote his history, as the two authors who mention him speak somewhat differently. Dempster, who wrote in the beginning of the seventeenth century, says that he lived in 1361: but Major, who was born in 1446, says that he composed his book during the time of his infancy, which we must therefore suppose to have been a few years posterior to 1446; for, if it had been composed that very year, the circumstance would probably have been mentioned.

HENRY (Robert), D. D., author of a History of Great Britain, was born 18th of February, 1718; educated at St. Ninians and Stirling; afterwards completed his education at the university of Edinburgh, and was some time master of the grammar-school of Annan. He was licensed 27th March, 1746, and was the first licenciate of the presbytery of Annan after its erection. In November, 1748, he was ordained a minister of a dissenting congregation at Carlisle; and on the 13th of August, 1760, was called to another at Berwick-upon-Tweed, where, in 1763, he married. He was removed to the new Gray Friars' church, Edinburgh, in November, 1768, by the influence of provost Laurie, who had married Mrs. Henry's sister; and in November, 1776, to the Old Church, where he continued till his death. In 1770 the degree of D. D. was conferred on him by the university of Edinburgh, and in 1774 he was unanimously elected moderator of the general assembly, and is the only person on record who obtained that honor the first time he was a member. While he was in Berwick he published a scheme for raising a fund for the widows and orphans of Protestant dissenting ministers in the north of England. By his activity he overcame many difficulties, and had the pleasure of seeing the scheme commence in 1762. Dr. Henry published the first five volumes of his history at his own risk. But it certainly required more than a common share of literary courage to attempt, on so large a scale, a subject so intricate and extensive as the history of Britain, from the invasion of Julius Cæsar. That Dr. Henry neither over-rated his powers nor his industry was proved by the success and reputation of his work. The first volume of his history, in 4to., was published in 1771, the second in 1774, the third in 1777, the fourth in 1781, and the fifth (which brings down the history to the accession of Henry VII.) in 1785. He did not profess to study the ornaments of language; but his arrangement is uniformly regular and natural, and his style simple and perspicuous. He believed that the time which might be spent in polishing a sentence was more usefully employed in ascertaining a fact: and as a book of facts and solid information, supported by authentic documents, his history will stand a comparison with any other of the same period. His profits upon the whole amounted to about £3300; a striking proof of the merit of the work. In its progress it also proved the means of introducing Dr. Henry to more extensive patronage, and in particular to that of the earl of Mansfield. That venerable nobleman thought the merit of Dr. Henry's history so considerable, that, without solicitation, after the publication of the fourth volume, he applied personally to his majesty, to bestow on the author some mark of his royal favor. In consequence of this Dr. Henry was informed, by a letter from lord Stormont, of his majesty's intention to confer on him an annual pension for life of £100, 'considering his distinguished talents and great literary merit, and the importance of the very useful and laborious work in which he was so successfully engaged, as titles to his royal countenance and favor.' The warrant was issued on the 28th of May, 1781; and his right to the pension commenced from the 5th of April preceding, and continued till his death. From the earl of Mansfield he received many other testimonies of esteem, which he was often heard to mention with the most affectionate gratitude. The 8vo. edition of his history,

published in 1788, was inscribed to his lordship. The 4to. edition had been dedicated to the king. From the year 1785 his bodily strength was sensibly impaired. Notwithstanding this he persisted steadily in preparing his sixth volume, which brings down the history to the accession of Edward VI., and left it in the hands of his executors almost completed. Scarcely any thing remained unfinished but the two short chapters on arts and manners; and even for these he left materials and authorities so distinctly collected, that there was no great difficulty in supplying what was wanting. This volume was published in 1792; and met with the same favorable reception from the public which had been given to the former volumes. Till the summer of 1790 he was able to pursue his studies, though not without interruptions. But he then lost his health entirely; and, with a constitution quite worn out, died on the 24th of November, in the seventy-third year of his age. He was buried in the church-yard of Polmont.

Henry of Huntingdon, an English historian of the twelfth century, canon of Lincoln, and afterwards archdeacon of Huntingdon. He wrote, 1. A history of England, which ends with the year 1154; 2. A continuation of that of Bede; 3. Chronological tables of the kings of England; 4. A small treatise on the contempt of the world; 5. Several books of epigrams and love verses; and, 6. A poem on herbs; all in Latin.

Henry of Susa, a famous civilian and canonist of the thirteenth century, who acquired such reputation that he was called the source and splendor of the law. He was archbishop of Embrun about 1258, and cardinal bishop of Ostia in 1262. He wrote A Summary of the Canon and Civil Law; and A Commentary on the Book of the Decretals, composed by order of Alexander IV.

Henry, a mountainous county of Virginia, bounded on the north by Franklin, south and south-east by Patrick, south-west by Grison, and west and north-west by Montgomery counties. It is forty miles long, and fifteen broad.

Henry, Cape, the south cape of Virginia, at the entrance of Chesapeake Bay. Long. 76° 16′ W., lat. 37° 0′ N.

HENSHALL (Samuel), an ingenious Saxon scholar of modern times. He was educated at Oxford, where he became a fellow of Brazennose. In 1798 he published a quarto volume, entitled Specimens and Parts of a Topographical, Commercial, Civil, and Nautical History of South Britain. He was also the author of The Saxon and English Languages, illustrative of each other, the impractibility of acquiring an accurate knowledge of Saxon literature through the medium of Latin phraseology, exemplified in the errors of Hickes, Wilkins, Gibson, and other scholars; and a new mode suggested of radically studying the Saxon and English languages, 4to.; Actual Survey of South Britain, by the Commissioners of William the Conqueror, completed in 1086; faithfully translated, with an Introduction, Notes, and Illustrations of S. Henshall and John Wilkinson, 4to. 1799; The Etymological Organic Reasoner; with one Sheet of the Gothic Gospel of St. Matthew; and another of the Saxon Durham Book, in Roman Characters; and a literal English Version, 1807. Both the latter works were imperfect; the author, who was rector of St. Mary, Stratford-le-Bow, Essex, having died soon after the publication of the first number of his Organic Reasoner in 1807.

Henting, in agriculture, a term used by the farmers for a particular method of sowing before the plough; the corn, being cast in a straight line just where the plough is to come, is by this means presently ploughed in. By this way of sowing they save a great deal of seed and other charges, a dexterous boy being as capable of sowing this way out of his hat as the most skilful seedsman. Henting is also a term used by the ploughmen, and others, to signify the two furrows that are turned from one another at the bottom, in the ploughing of a ridge. The word seems to be a corruption of ending, because these furrows made an end of plowing the ridges. The tops of the ridges they call verrings.

HEPAR Sulphuris, alkaline sulphur, or liver of sulphur, a combination of alkali and sulphur. By the fume arising on the decomposition of hepar sulphuris by an acid, Sir T. Bergman found a method of imitating the hot or sulphureous mineral waters, to as great perfection as the cold ones are now imitated by fixed air. The process consists simply in adding the vitriolic acid to hepar sulphuris, and impregnating water with the peculiar species of air that arises from this mixture, in the same manner as when water is impregnated with the fixed air arising from the mixture of that on any other acid with chalk. The hepatic air, as Bergman calls it, is very readily absorbed by water; to which it gives the smell, taste, and all the other sensible qualities of the sulphureous waters. A Swedish cantharus of distilled water, containing twelve Swedish inches and a-half, will absorb about sixty cubic inches of this hepatic air; and, on dropping into it the nitrous acid, it will appear, that a real sulphur is contained, in a state of perfect solution, in this water, to the quantity of eight grains. When any particular sulphureous water is to be imitated, we scarcely need to observe, that the saline, or other contents peculiar to it, are to be added to the artificial hepatic water. Instead of the liver of sulphur, the operator may use a mixture of three parts of filings of iron, and two parts of sulphur melted together. It may perhaps be thought that water thus prepared does not differ from that in which a portion of the hepar sulphuris has been dissolved; but it appears evidently to differ from it in this material circumstance, that in the solution of hepar sulphuris, the sulphur is held in solution by the water, by means of the alkali combined with it: whereas, in Bergman's process, it does not appear probable that the hepar sulphuris rises substantially in the form of air; for, in that case, its presence in the hepatic water might be detected by the weakest of the acids (even the mephitic) which would precipitate the sulphur from it. Nor can it be supposed that any portion or constituent part of the alkali itself, except a part of its remaining fixed air,

can come over. The water, therefore, must owe its impregnation to the sulphur, raised, in some peculiar manner, into the state of an elastic vapor; permanent when the experiment is made in quicksilver; but condensable in water, and rendered soluble in that fluid.

HEPAT'ICAL, *adj.* } Lat. *hepaticus;* Fr.
HEPAT'IC, *adj.* } *hepatique,* from ἡπαρ. Belonging to the liver.

If the evacuated blood be florid, it is stomach blood; if red and copious, it is *hepatick.* *Harvey.*

The cystick gall is thick, and intensely bitter; the *hepatick* gall is more fluid, and not so bitter.
Arbuthnot on Aliments.

HEPATIC, or hepatic air, a permanently elastic fluid, of a very disagreeable odor, obtained in plenty from combinations of sulphur with earths, alkalies, metals, &c., and sometimes from combinations of alkalies with substances which do not appear to contain any sulphur. See CHEMISTRY. Its specific gravity is to that of common air as 10,000 to 9038. The nature of this fluid has been particularly examined by Kirwan, of whose experiments an account is given in the seventy-sixth volume of the Philosophical Transactions. From the results, that gentleman concludes, that hepatic air consists merely of rarefied sulphur. Some have supposed that it consists of liver of sulphur itself volatilised; but this Kirwan denies, for the following reasons: 1. It is evidently, though weakly, acid; reddening litmus, and precipitating acetous baro-selenite, though none of the other solutions of earths do so. 2. It may be extracted from materials which either contain no alkali at all, or next to none; as iron, sugar, oil, charcoal, &c. 3. It is not decomposed by marine or fixed air; by which, nevertheless, liver of sulphur may be decomposed. Kirwan says, he was formerly of opinion that sulphur was held in solution in hepatic air, either by means of vitriolic or marine air: but neither of these is essential to the constitution of hepatic air as such, since it is producible from materials that contain neither of these acids; and from whatever substance it is obtained, it always affords the same character, viz. that of the vitriolic acid exceedingly weakened, such an acid as we may suppose sulphur itself to be. This substance indeed, even in its concrete state, manifests the properties of an acid, by uniting with alkalies, calcareous and ponderous earths, as well as with most metals, which a very weak acid might be supposed to do. See CHEMISTRY.

HEPATITIS, in medicine, inflammation of the liver. See MEDICINE.

HEPATOSCOPIA, from ἡπαρ, liver, and σκοπεω, I consider, in antiquity, a species of divination, wherein predictions were made by inspecting the livers of animals. The word was also used for divination by entrails.

HEPBURN (James Bonaventura), a celebrated Scottish author, of the sixteenth century, born at Oldhamstocks, in East Lothian, 1573. His father, Thomas Hepburn, who was rector of that parish, and was a convert of the celebrated John Knox, bred him up a Protestant; notwithstanding which, he had hardly completed his academical education at St. Andrews, when, either from persuasion or views of interest, he became a Roman Catholic, and travelled into France and Italy. After this he set out on a more extensive peregrination through Turkey, Persia, Syria, Palestine, Egypt, Ethiopia, and most other countries of note in the East. Upon his return to Europe he entered into a convent of Minims, an order of Franciscans, at Avignon, and afterwards removed to the monastery of the Holy Trinity at Rome. Pope Paul V., hearing of his great acquisitions in oriental learning, drew him from this retirement, by appointing him keeper of the oriental books and MSS. in the Vatican; in which office he continued six years. He afterwards went to Venice to translate some Hebrew, Syriac, and Chaldaic writings; and died in that city in 1620 or 1621. His works are very numerous. The most important are, 1. A Hebrew and Chaldaic Dictionary, and an Arabic grammar; printed at Rome, in 1 vol. 4to., 1591. 2. A Translation of the Psalms from the Hebrew into Latin with a Commentary: 3. An Abridged Chronicle of the Affairs of the Romans: 4. A Collection of all the Synonymous words in the Bible: 5. A Treatise on Mystical Numbers; from the Hebrew of Eben Ezra: 6. Sepher Jetzira, or the Book of the Creation; said to have been written by the patriarch Abraham: 7. The Book of Enoch: all translated, with many similar works, into Latin. His merit, however, as a linguist, is unquestionable.

HEPHÆSTIA, in antiquity, an Athenian festival in honor of Vulcan, the chief ceremony of which was a race with torches. The antagonists were three young men, one of whom, by lot, took a lighted torch in his hand, and began his course; if the torch was extinguished before he finished the race, he delivered it to the second, and he, in like manner, to the third: the victory was his who first carried the torch lighted to the end of the race; and to this successive delivering of the torch we find many allusions in ancient writers.

HEPHTHEMIMERIS, of επτα, seven, ημιους, half, and μερος, part, in the Greek and Latin poetry, a sort of verses consisting of three feet and a syllable; that is, of seven half-feet; called also trimetri catalectici. Such are most of the verses in Anacreon.

Θελω	λεγειν	Ατρει	δας
Θελω	δε Καδ	μον α	δειν, &c.

HEPHTHEMIMERIS, or HEPHTHEMIMERES, is also a cæsura after the third foot; that is, on the seventh half foot. It is a rule that this syllable, though it be short in itself, must be made long on account of the cæsura, or to make it an hephthemimeris. As in that verse of Virgil

Et furiis agitatus amor, et conscia virtus

HEPS, *n. s.* Hawthorn berries: commonly written hips.

——— swete as is the bramble flour,
That bereth the red *hepe.*
Chaucer. The Rime of Sire Thopas.

In hard Winters there is observed great plenty of *heps* and haws, which preserve the small birds from starving. *Bacon.*

HEPS, or HIPS. See ROSA.

HEP TREE. See ROSA.

HEPTACAP'SULAR, *adj.* Gr. ἑπτα and capsula. Having seven cavities or cells.

HEPTACHORD, in ancient poetry, signified verses that were sung or played on seven chords, i. e. on seven different notes. In this sense it was applied to the lyre when it had but seven strings. One of the intervals is also called an heptachord, as containing the same number of degrees between the extremes.

HEPTAGON, *n. s.* } Fr. *heptagone;* Gr.
HEPTAG'ONAL. } ἑπτα and γωνία. A figure with seven sides or angles.

HEPTAGYNIA, from επτα, seven, and γυνη, a female, an order of plants consisting of such as have seven styles. See BOTANY.

HEPTANDRIA, in botany, from επτα, seven, and ανηρ, a man, the seventh class in Linnæus's sexual method, consisting of plants with hermaphrodite flowers, which have seven stamina or male organs. See BOTANY.

HEPTARCHY, *n. s.* Fr. *heptarchie;* Gr. ἑπτα and ἀρχη. A sevenfold government.

In the Saxon *heptarchy* I find little noted of arms, albeit the Germans, of whom they descended, used shields. *Camden.*

England began not to be a people, when Alfred reduced it into a monarchy; for the materials thereof were extant before, namely, under the *heptarchy.*
Hale's Origin of Mankind.

The next returning planetary hour
Of Mars, who shared the *heptarchy* of power,
His steps bold Arcite to the temple bent. *Dryden.*

HEPTARCHY signifies a government composed of seven persons, or a country governed by seven persons, or divided into seven kingdoms.

HEPTARCHY, THE SAXON, included all England, which was cantoned out into seven independent kingdoms, peopled and governed by different clans and colonies, viz. those of Kent, the South Saxons, West Saxons, East Saxons, Northumberland, the East Angles, and Mercia. The heptarchy was formed gradually from A. D. 455, when first the kingdom of Kent was erected, and Hengist assumed the title of king of Kent immediately after the battle of Eglesford; and it terminated in 827 or 828, when Egbert reunited them into one, turned the heptarchy into a monarchy, and assumed the title of king of England. See ENGLAND.

HER, *pron.* } In Sax. þeɼa, þeɼ, stood for
HERS, } their, or of them, which at length became the female possessive. Belonging to a female; of a she; of a woman: her is the oblique case of she; and hers is used when it refers to a substantive going before.

——— Nature held on *hire* hond
A formell egle, of shape the gentillest
That ever she among *hire* workes fonde,
The most benigne, and eke the godeliest;
In *hire* was every vertue at his rest,
So far for the, that Nature *hireself* had blisse
To loke on *hire*, and oft *hire* becke to kisse.
Chaucer. The Assemblie of Foules.

About his neck
A green and gilded snake had wreathed itself,
Who with *her* head, nimble in threats, approached
The opening of his mouth.
Shakspeare. As You Like It.

England is so idly kinged,
Her sceptre so fantastically borne,
That fears attend *her* not. *Id. Henry.*

This pride of *hers,*
Upon advice, hath drawn my love from *her.*
Shakspeare.

Still new favourites she chose,
'Till up in arms my passion rose,
And cast away *her* yoke. *Cowley.*

One month, three days, and half an hour,
Judith held the sovereign power;
Wonderous beautiful *her* face;
But so weak and small *her* wit,
That she to govern were unfit,
And so Susanna took *her* place. *Id.*

She cannot seem deformed to me,
And I would have *her* seem to others so. *Id.*

The moon arose clad o'er in light,
With thousand stars attending on *her* train;
With *her* they rise, with *her* they set again. *Id.*

Thine own unworthiness,
Will still that thou art mine, not *hers,* confess.
Id.

The pleasing sight he often does prolong;
Her mast erect, tough cordage, timber strong;
Her moving shape, all these he doth survey,
And all admires, but most his easy prey.
Marvell.

Some secret charm did all *her* acts attend,
And what his fortune wanted, *hers* could mend.
Dryden.

Her daughter, tempered with a milder ray,
Like summer clouds all silvery, smooth, and fair,
Till slowly charged with thunder they display
Terror to earth, and tempest to the air,
Had held till now *her* soft and milky way;
But, overwrought with passion and despair,
The fire burst forth from *her* Numidian veins,
Even as the simoom sweeps the blasted plains.
Byron. Don Juan.

HERACLEA, an ancient city and sea-port of Romania, Northern Greece, on a promontory of the gulf of Salonica, near Mount Olympus. The town at present standing on this site is called Peatamona, twenty-four miles north-east of Lanisa, and forty-three S. S. W. of Salonica.

HERACLEONITES, a sect of heretics, the followers of Heracleon, who refined upon the Gnostic system, and maintained that the world was not the immediate production of the son of God, but that he was only the occasional cause of its being created by the Demiurgus. The Heracleonites denied the authority of the Old Testament, maintained that they were mere random sounds in the air; and that St. John the Baptist was the only true voice that directed to the Messiah.

HERACLEUM, madness, a genus of the digynia order, and pentandria class of plants; natural order forty-fifth, umbellatæ. The fruit is elliptical, emarginated, compressed, and striated, with a thin border: cor. difform, inflexed, and emarginated; the involucrum dropping off. There are thirteen species, of which the most remarkable is—H. spondylium, the cow parsnip. It is common in many parts of Britain, and other northern parts of Europe and Asia. Gmelin, in his Flora Siberica, p. 214, tells us, that the inhabitants of Kamtschatka, about the beginning of July, collect the foot-stalks of the radical leaves of this plant, and, after peeling off the rind, dry them separately in the sun, and then, tying them in bundles, dry them carefully in the shade: in a short time afterwards these dried

stalks are covered over with a yellow saccharine efflorescence, tasting like liquorice; and in this state they are eaten as a great delicacy. The Russians not only eat the stalks thus prepared, but procure from them a very intoxicating spirit. They first ferment them in water with the greater bilberries (vaccinium uliginosum), and then distil the liquor to what degree of strength they please; which, Gmelin says, is more agreeable to the taste than spirits made from corn. This may therefore prove a good succedaneum for whiskey, and lessen the consumption of barley. Swine and rabbits are very fond of this plant. In Norfolk it is called hogweed.

HERACLIDÆ, the descendants of Hercules, greatly celebrated in ancient history. Hercules at his death left to his son Hyllus all the rights and demands which he had upon Peloponnesus, and ordered him to marry Iole, the daughter of Eurytus, as soon as he came of age. The posterity of Hercules were not more kindly treated by Eurystheus than their father had been, and they were obliged to retire for protection to the court of Ceyx, king of Trachinia. Eurystheus pursued them thither, and Ceyx, afraid of his resentment, begged the Heraclidæ to depart from his dominions. From Trachinia they came to Athens, where king Theseus, who had accompanied their father in some of his expeditions, received them with great humanity, and assisted them against Eurystheus. Eurystheus was killed by Hyllus himself; his children perished with him, and all the cities of Peloponnesus became the undisputed property of the Heraclidæ. Their triumph, however, was short; their numbers were lessened by a pestilence; and the oracle informed them that they had taken possession of Peloponnesus before the gods permitted their return. Upon this they abandoned Peloponnesus, and came to settle in Attica, where Hyllus married Iole. Soon after he consulted the oracle, anxious to recover the Peloponnesus; and the ambiguity of the answer determined him to make a second attempt. He challenged to single combat Atreus, the successor of Eurystheus on the throne of Mycenæ; and it was mutually agreed that the undisturbed possession of Peloponnesus should be ceded to the victor. Echemus accepted the challenge for Atreus; Hyllus was killed, and the Heraclidæ departed from Peloponnesus a second time, about twenty years before the Trojan war. Cleodæus, the son of Hyllus, made a third attempt, and was equally unsuccessful; and his son Aristomachus some time after met with the same unfavorable reception, and perished in the field of battle. Aristodemus, Temenus, and Chresphontes, the three sons of Aristomachus, encouraged by the more express word of an oracle, and desirous to revenge the death of their progenitors, assembled a numerous force, and with a fleet invaded all Peloponnesus. Their expedition was attended with much success; and, after some decisive battles, they became masters of all the peninsula. The recovery of Peloponnesus by the Heraclidæ forms an interesting epoch in ancient history, which is universally believed to have happened eighty years after the Trojan war, or A. A. C. 1190. This conquest was totally achieved about 120 years after the first attempt of Hyllus, who was killed about twenty years before the Trojan war. As it occasioned many changes and revolutions in the affairs of Greece, the return of the Heraclidæ is the epocha of the beginning of profane history: all the time that preceded it is reputed fabulous. Accordingly Ephorus, Cumanus, Callisthenes, and Theopompus, begin their histories from this era.

HERACLIDES, a Greek philosopher of Pontus, the disciple of Speusippus, and afterwards of Aristotle, flourished about A. A. C. 336. His vanity prompted him to desire one of his friends to put a serpent into his bed just as he was dead, in order to raise a belief that he was ascended to the heavens among the gods; but the cheat was discovered. All his works are lost.

HERACLITUS, a famous Ephesian philosopher, who flourished about the sixty-ninth Olympiad, in the time of Darius Hystaspis. He is said to have continually bewailed and wept for the wicked lives of men; contrary to Democritus, who made the follies of mankind a subject of laughter. He retired to the temple of Diana, and played at dice with the boys there; saying to the Ephesians who gathered round him, 'Worst of men, what do you wonder at? Is it not better to do thus than to govern you?' Darius invited him to come and live with him, but he refused. At last, out of hatred to mankind, he retired to the mountains, where he contracted a dropsy, by living on herbs, which killed him at sixty years of age. His writings gained him great reputation. Laertius mentions a Treatise upon Nature, divided into three books, one concerning the universe: the second on politics: the third on theology. This book he deposited in the temple of Diana; and it is said that he affected to write obscurely, lest it should be read by the vulgar, and become contemptible. The fundamental doctrine of his philosophy was, that fire is the principle of all things.

HERACLIUS, an emperor of the east, a renowned warrior, who dethroned and succeeded Phocas in 610. At this time the empire was at war with Chosroes II., king of Persia. Heraclius proposed terms of peace, but the haughty Persian refused it, unless he would renounce Christianity. Heraclius thereupon mustered his forces, and, after repeated victories, obliged him to beg for that peace he had refused. He was, however, not so successful in his wars with the Saracens. He died in 641, aged sixty-six.

HERACLIUS CONSTANTINE, son of the above, succeeded him in conjunction with his brother Heracleonas; but reigned only a few months, being poisoned by his stepmother Martina, in 641.

HERALDRY.

HER'ALD, *n. s.* & *v. a.* } Fr. *herault*; Teut.
HER'ALDRY, *n. s.* } *herald*; Swed. and Dan. *herold*. An officer whose business it is to register genealogies, adjust ensigns armorial, regulate funerals, and, anciently, to carry messages between princes, and proclaim war and peace; a precursor; forerunner; a harbinger; a proclaimer or publisher: heraldry, the art or office of a herald; a science; registry of genealogies; blazonry: the verb is now out of use.

And after hem, came a grete company
Of *heraudes* and pursevauntes eke,
Arrayed in clothes of white velvet.
Chaucer. The Floure and the Leafe.

We are sent from our royal master,
Only to *herald* thee into his sight,
Not pay thee. *Shakspeare.*

After my death I wish no other *herald*,
No other speaker of my living actions,
But such an honest chronicler as Griffith. *Id.*

When time shall serve let but the *herald* cry,
And I'll appear again. *Id. King Lear.*

It is the part of men to fear and tremble,
When the most mighty gods, by tokens, send
Such dreadful *heralds* to astonish us. *Shakspeare.*

It was the lark, the *herald* of the morn. *Id.*

May none, whose scattered names honour my book,
For strict degrees of rank or title look;
'Tis 'gainst the manners of an epigram,
And I a poet here, no *herald* am. *Ben Jonson.*

I am writing of *heraldry*. *Peacham.*

Metals may blazon common beauties; she
Makes pearls and planets humble *heraldry*.
Cleaveland.

'Twas no false *heraldry* when madness drew
Her pedigree from those who too much knew.
Denham.

Embassador of peace, if peace you chuse;
Or *herald* of a war, if you refuse. *Dryden.*

Please thy pride, and search the *herald's* roll,
Where thou shalt find thy famous pedigree. *Id.*

Grant her, besides, of noble blood that ran
In ancient veins, ere *heraldry* began. *Id.*

The boast of *heraldry*, the pomp of power,
And all that beauty, all that wealth e'er gave,
Await alike the' inevitable hour;
The paths of glory lead but to the grave.
Gray's Elegy.

Pluck the others, but still remember
Their *Herald* out of dim December—
The morning star of all the flowers,
The pledge of day-light's lengthened hours;
Nor midst the roses e'er forget
The virgin, virgin violet.
Byron. The Deformed Transformed.

HERALD, says Verstegan, is derived from the Saxon word Herehault, and by abbreviation heralt, which in that language signifies the champion of an army; and, growing to be a name of office, it was given to him who, in the army, had the special charge to denounce war, to challenge to battle and combat, to proclaim peace, and to execute martial messages. But the business of heralds, now, is as follows, viz. to marshal, order, and conduct all royal cavalcades, ceremonies at coronations, royal marriages, installations, creations of dukes, marquises, earls, viscounts, barons, baronets, and dubbing of knights; embassies, funeral processions, declarations of war, proclamations of peace, &c.: to record and blazon the arms of the nobility and gentry; and to regulate any abuses therein through the British dominions, under the authority of the earl marshal, to whom they are subservient. The office of the Windsor, Chester, Richmond, Somerset, York, and Lancaster heralds, is to be assistants to the kings at arms, in the different branches of their office: and they are superior to each other, according to creation, in the above order. Heralds were anciently held in much greater esteem than they are at present; and were created by the king, who, pouring wine from a gold cup on their head, gave them the herald name: but this is now done by the earl marshal. They could not arrive at the dignity of herald without being seven years pursuivant; nor quit the office of herald, but to be made king at arms. Richard III. was the first who formed them, in this kingdom, into a college; and afterwards great privileges were granted them by Edward VI. and Philip and Mary.

HERALDRY is a science which teaches how to blazon, or explain in proper terms, all that belongs to armorial bearings; and how to marshal, or dispose regularly, divers arms on a coat or shield. It also teaches whatever relates to the marshalling of solemn cavalcades, processions, and other public ceremonies at coronations, installations, creations of peers, nuptials, christenings of princes, funerals, &c.

Arms, or coats of arms, are hereditary marks of honor, made up of fixed and determined colors and figures, granted by sovereign princes, as a reward for military valor, or some signal public service; and serve to denote the descent and alliance of the bearer, or to distinguish states, cities, societies, &c., civil, ecclesiastical, and military.

Heraldry, according to Sir George Mackenzie, 'as digested into an art, and subjected to rules, must be ascribed to Charlemagne and Frederick Barbarossa, for it did begin and grow with the feudal law.' Sir John Ferne is of opinion, that we borrowed arms from the Egyptians; meaning from their hieroglyphics! Sir William Dugdale mentions, that arms, as marks of honors, were first used by great commanders in war, necessity requiring that their persons should be notified to their friends and followers. The learned Alexander Nisbet, in his System of Heraldry, says, that signs and marks of honor were made use of in the first ages of the world, and by all nations, however simple and illiterate, to distinguish the noble from the ignoble. We find in Homer, Virgil, and Ovid, that their heroes had divers figures on their shields, whereby their persons were distinctly known.

In all ages, men have made use of symbolical signs, to denote the bravery and courage either of their chief or nation, to render themselves more terrible to their enemies, and even to distinguish themselves or families, as names do individuals. The famous C. Agrippa, in his

treatise of the Vanity of Sciences, cap. 81, has collected many instances of these marks of distinction, anciently borne by kingdoms and states that were any way civilised. As to hereditary arms of families, William Camden, Sir Henry Spelman, and other judicious heralds, agree, that they did not begin till towards the end of the eleventh century. According to F. Menestrier, a French writer, whose authority is great in this matter, Henry l'Oiseleur (or the Falconer), who was raised to the imperial throne of the West in 920, by regulating tournaments in Germany, gave occasion to the establishment of family arms, or hereditary marks of honor, which undeniably are more ancient and better observed among the Germans than in any other nation. This last author also asserts, that with tournaments first came up coats of arms; which were a sort of livery, made up of several lists, fillets, or narrow pieces of stuff of divers colors, from whence came the fess, the bend, the pale, &c., which were the original charges of family arms; for they who never had been at tournaments had not such marks of distinction. They who inlisted in the crusades took up also several new figures formerly unknown in armorial ensigns; such as allerions, bezants, escalop-shells, martlets, &c. but more particularly crosses of different colors and shapes. From this it may be concluded, that heraldry, like most human inventions, was introduced and established gradually; and that, after having been rude and unsettled for many ages, it was at last methodised, perfected, and fixed by the crusades and tournaments.

These marks of honor are called arms, from their being principally and first worn by military men at war and tournaments, who had them engraved, embossed, or depicted on shields, targets, banners, or other martial instruments. They are also called coats of arms, from the custom of the ancients embroidering them on the coats they wore over their arms, as heralds do to this day.

Arms are distinguished by different names, to denote the causes of their bearing: such as, arms of dominion, of pretension, of concession, of community, of patronage, of family, of alliance, of succession.

Arms of dominion, or sovereignty, are those which emperors, kings, and sovereign states, constantly bear; being, as it were, annexed to the territories, kingdoms, and provinces they possess. Thus the three lions are the arms of England, the fleur-de-lis those of the French, &c.

Arms of pretension are those of such kingdoms, provinces, or territories, to which a prince or lord has some claim, and which he adds to his own, although the said kingdoms or territories be possessed by a foreign prince or other lord. Thus the kings of England quartered the arms of France with their own, ever since Edward III. laid claim to the kingdom of France in 1330, on account of his being son to Isabella, sister to Charles IV. or the Fair, who died without issue; till the union with Ireland, when his majesty's arms were altered, and the French arms were thrown out.

Arms of concession, or augmentation of honor, are either entire arms, or else one or more figures, given by princes as a reward for some great service. We read in history, that Robert Bruce, king of Scotland, allowed the earl of Wintoun's ancestor to bear, in his coat armour, a crown supported by a sword, to show that he, and the clan Seaton, of which he was the head, supported his tottering crown. The late queen Anne granted to Sir Cloudesly Shovel, rear-admiral of Great Britain, a cheveron between two fleurs-de-lis in chief, and a crescent in base, to denote three great victories he had gained: two over the French, and one over the Turks.

Arms of community are those of bishoprics, cities, universities, academies, societies, companies, and other bodies corporate.

Arms of patronage are such as governors of provinces, lords of manors, patrons of benefices, &c., add to their family arms, as a token of their superiority, rights, and jurisdiction. These arms have introduced into heraldry, castles, gates, wheels, ploughs, rakes, harrows, &c.

Arms of family, or paternal arms, are those that belong to one particular family, that distinguish it from others, and which no person is suffered to assume without committing a crime, which sovereigns have a right to restrain and punish.

Arms of alliance are those which families or private persons take up and join to their own, to denote the alliances they have contracted by marriage. This sort of arms is either impaled, or borne in an escutcheon of pretence, by those who have married heiresses.

Arms of succession are such as are taken up by those who inherit certain estates, manors, &c., either by will, entail, or donation, and which they either impale or quarter with their own arms; which multiplies the titles of some families out of necessity, and not through ostentation, as many imagine.

These are the eight classes under which the various sorts of arms are generally ranged; but there is a sort which blazoners call assumptive arms, being such as are taken up by the caprice or fancy of upstarts, though of ever so mean extraction, who, being advanced to a degree of fortune, assume them without a legal title. This, indeed, is a great abuse of heraldry, and common only in Britain, for on the continent no such practice takes place.

We now proceed to consider the essential and integral parts of arms, which are these:—The escutcheon; the charges; the tinctures; the ornaments.

Of the Shield or Escutcheon.

The shield or escutcheon is the field or ground whereon are represented the figures that make up a coat of arms: for these marks of distinction were put on bucklers or shields before they were placed on banners, standards, flags, and coat-armour; and, wherever they may be fixed, they are still on a plane, or superficies, whose form resembles a shield.

Shields, in heraldry called escutcheons, or scutcheons, have been, and still are, of different forms, according to different times and nations.

Amongst ancient shields, some were almost like a horse-shoe (see plate I. HERALDRY), others triangular, somewhat rounded at the bottom. The people who inhabited Mesopotamia, now called Diarbeck, made use of this sort of shield, which it is thought they had of the Trojans. Sometimes the shield was heptagonal, that is, had seven sides. The first of this shape is said to have been used by the famous triumvir M. Antony. That of knights banneret was square, like a banner. As to modern escutcheons, those of the Italians, particularly of ecclesiastics, are generally oval. The English, French, Germans, and other nations, have their escutcheons formed different ways, according to the carver's or painter's fancy: see the various examples in the plates. But the escutcheons of maids, widows, and of such as are born ladies, and are married to private gentlemen, is in the form of a lozenge. Sir G. M'Kenzie mentions one Muriel, countess of Strathern, who carried her arms in a lozenge, anno 1284, which shows how long we have been versant in heraldry.

Armorists distinguish several parts or points in escutcheons, in order to determine exactly the position of the bearings they are charged with; they are here denoted by the first nine letters of the alphabet, ranged in the following manner:—

A—the dexter chief
B—the precise middle chief.
C—the sinister chief.
D—the honor point.
E—the fess point.
F—the nombril point.
G—the dexter base.
H—the precise middle base.
I—the sinister base.

The knowledge of these points is of great importance, for they are frequently occupied with several bearings of different kinds. The dexter side of the escutcheon is opposite to the left hand, and the sinister side to the right hand of the person that looks upon it.

OF TINCTURES, FURS, LINES, AND DIFFERENCES.

By tinctures is meant that variable hue of arms which is common both to shields and their bearings. According to the ci-devant French heralds, there are but seven tinctures in armory; of which two are metals, the other five are colors.

The proper Colors.	By tinctures for Commoners.	By precious stones for Peers.	By planets for princes, kings, and emperors.
Yellow	Or	Topaz	Sol
White	Argent	Pearl	Luna
Red	Gules	Ruby	Mars
Blue	Azure	Sapphire	Jupiter
Purple	Purpure	Amethyst	Mercury
Black	Sable	Diamond	Saturn
Green	Vert	Emerald	Venus

When natural bodies, such as animals, plants, celestial bodies, &c., are introduced into coats of arms, they frequently retain their natural colors, which are expressed in this science by the word proper.

Besides the colors above-mentioned, the English writers on heraldry admit two others, viz.

Orange, Blood-color, } termed { Tenny, Sanguine.

But these two are rarely to be found in British bearings.

These tinctures are represented in engravings and drawings (the invention of the ingenious Silvester Petra Sancta, an Italian author of the last century), by dots and lines.

Or is expressed by dots. Argent needs no mark, and is therefore plain. Azure, by horizontal lines. Gules, by perpendicular lines. Vert, by diagonal lines from the dexter chief to the sinister base points. Purpure, by diagonal lines from the sinister chief to the dexter base points. Sable, by perpendicular and horizontal lines crossing each other. Tenny, by diagonal lines from the sinister chief to the dexter base points, traversed by horizontal lines. Sanguine, by lines crossing each other diagonally from dexter to sinister, and from sinister to dexter.

The English heralds give different names to the roundlet, according to its color. Thus, if it is Or, it is called a Bezant; Argent, a Plate; Azure, a Hurt; Gules, a Torteux; Vert, a Pomey; Purpure, a Golpe; Sable, a Pellet; Tenny, an Orange; and Sanguine, Guze. See COLORS.

Other nations do not admit such a multiplicity of names to this figure; but call them Bezants, after an ancient coin struck at Constantinople, once Byzantium, if they are Or and Torteaux; if of any other tincture expressing the same. See plate I.

Furs represent the hairy skin of certain beasts, prepared for the doublings or linings of robes and garments of state; and, as shields were anciently covered with furred skins, they are therefore used in heraldry, not only for the linings of the mantles, and other ornaments of the shields, but also in the coats of arms themselves. There are six different kinds in use, viz.—

1. Ermine; which is a field argent, powdered with black spots, their tails terminating in three hairs.

2. Erminitis, or counter-ermine, where the field is sable, and the powdering white.

3. Erminois: the field Or, the powdering sable.

4. Vair, which is expressed by blue and white skins, cut into the forms of little bells, ranged in rows opposite to each other, the base of the white ones being always next to that of the blue ones. Vair is usually of six rows; if there be more or fewer the number ought to be expressed; and, if the colors are different from those above mentioned, they must likewise be expressed.

5. Pean; the field is sable, the powdering Or. The French used no such term: but they called all furs or doublings des pannes, or pennes; which term has possibly given rise to this mistake and many others, in those who do not understand the French language.

6. Potent, anciently called Vairy-cuppy, as when the field is filled with crutches or potents counter-placed. Vair and Potent may be any two colors.

The use of the tinctures took its rise from the

several colors used by warriors whilst they were in the army, which S. de Petra Sancta proves by many citations; and because it was the custom to embroider gold and silver on silk, or silk on cloth of gold and silver, the heralds appointed, that, in imitation of the clothes so embroidered, color should never be used upon color, nor metal upon metal.

Escutcheons are either of one tincture, or more than one. Those that are of one only, that is when some metal, color, or fur, is spread all over the surface or field, such a tincture is said to be predominant: but in such as have on them more than one, as most have, the field is divided by lines, which, according to their divers forms, receive various names.

Lines may be either straight or crooked. Straight lines are carried evenly through the escutcheon: and are of four different kinds, viz. a perpendicular line |; a horizontal, —; a diagonal dexter, \; a diagonal sinister, /.

Crooked lines are those which are carried unevenly through the escutcheon with rising and falling. French armorists reckon eleven different sorts of them; Guillim admits of seven only; the figures and names of which are to be seen in plate I. of HERALDRY.

The principal reason why lines are thus used in heraldry is to difference bearings which would be otherwise the same; for an escutcheon charged with a chief engrailed, differs from one charged with a chief wavy, as much as if the one bore a cross and the other a saltier. As the forementioned lines serve to divide the field, if the division consists of two equal parts made by the perpendicular line, it is called parted per pale; by the horizontal line, parted per fess; by the diagonal dexter, parted per bend; by the diagonal sinister, parted per bend sinister; examples of which will be given in the sequel of this treatise.

If a field is divided into four equal parts, by any of these lines, it is said to be quartered; which may be done two ways, viz.

Quartered or parted per cross: which is made by a perpendicular and horizontal line, which, crossing each other at the centre of the field, divide it into four equal parts called quarters.

Quartered or parted per saltier; which is made by two diagonal lines, dexter and sinister, that cross one another in the centre of the field, and likewise divide it into four equal parts. See plate I.

The escutcheon is sometimes divided into a greater number of parts, in order to place in it the arms of the several families to which one is allied; and in this case it is called a genealogical achievement. These divisions may consist of six, eight, twelve, and sixteen quarters, (as the royal arms), and even sometimes of twenty, thirty-two, sixty-four, and upwards; there being examples of such divisions frequently exhibited at pompous funerals; but Sir William Dugdale very justly objects to so many arms being clustered together in one shield or banner, on account of the difficulty of discerning one coat of arms from another.

Armorists have invented many differences or characteristical marks, whereby bearers of the same coat of arms are distinguished each from others, and their nearness to the principal bearer demonstrated. According to J. Guillim, these differences are to be considered either as ancient or modern.

Those he calls ancient differences consist in bordures; which is a bearing that goes all round and parallel to the boundary of the escutcheon, in form of a hem, and always contains a fifth part of the field in breadth. Bordures were used in ancient times for the distinguishing not only of one nation or tribe from another, but also to note a diversity between particular persons descended of one family and from the same parents. This distinction, however, was not expressly signified by invariable marks; nor were bordures always appropriated to denote the different degrees of consanguinity: for, as Sir Henry Speiman observes 'ancient heralds, being fond of perspicuous differences, often inverted the paternal tincture, or sometimes inserted another charge in the escutcheon, such as bends, croslets, cantons, or the like; which irregularity has, I suppose, induced modern armorists to invent and make use of others.'

There are bordures of different forms and tinctures, and they are generally used as a difference beween families of the same name, and also as marks of illegitimacy.

A bordure is never of metal upon metal, and seldom of color upon color, but rather of the tincture which the principal bearing or charge is of. Thus Sir —— Dalziel of Glenae, whose predecessor was a younger brother of the noble family of Carnwath, has within a bordure argent, the paternal coat of the ancient name of Dalziel, viz. 'Sable, a hanged man with his arms extended, argent;' formerly they carried him hanging on a gallows. This bearing, though so very singular for a coat of arms, was given as a reward to one of the ancestors of the late Robert Dalziel, earl of Carnwarth, to perpetuate the memory of a brave and hazardous exploit performed in taking down from the gallows the body of a favorite and near relation of king Kenneth II., hung up by the Picts; which story is thus related by Alexander Nisbet: 'The king being exceedingly grieved that the body of his minion and kinsman should be so disgracefully treated, he proffered a great reward to any of his subjects who would adventure to rescue his corpse from the disgrace his cruel enemies had unjustly put upon it; but, when none would undertake this hazardous enterprise, at last a valorous gentleman came and said to the king, Dalziel, which signifies 'I dare;' and he did actually perform that noble exploit to the king's satisfaction and his own immortal honor, and in memory of it got the aforesaid remarkable bearing; and afterwards his posterity took the word Dalziel for their surname, and the interpretation of it, I dare, continues to this day to be the motto of that noble family.' We can have no better proof of the truth of this tradition than this, that the head of this ancient family have for many ages carefully retained this bearing without any alteration or addition.

The modern differences which the English have adopted, not only for the distinguishing of sons issued out of one family, but also to denote the difference and subordinate degrees in each

house from the original ancestors, are nine; viz. For the heir or first son, the Label. Second son, the Crescent. Third son, the Mullet. Fourth son, the Martlet. Fifth son, the Annulet. Sixth son, the Fleur-de-lis. Seventh son, the Rose. Eighth son, the Cross-moline. Ninth son, the Double Quarter-foil. By these differences, the six sons of Thomas Beauchamp, the fifteenth earl of Warwick, who died in the thirty-fourth year of king Edward III., are distinguished in an old window of the church of St. Mary at Warwick; so that, although they are called modern differences, their usage with the English is ancient. But of all the fore-mentioned marks of distinction, none but the label is affixed on the coats of arms belonging to any of the royal family; which the introducers of this peculiarity have, however, thought proper to difference by additional pendants and distinct charges on them; 1. The prince of Wales has a label Luna. 2. The duke of York has a label Luna charged with a cross Mars upon the middle Lambeaux. 3. The duke of Clarence has a label Luna, charged with a cross Mars, between two anchors Jupiter. 4. The duke of Gloucester has a label of five points Luna, the middle one charged with a fleur-de-lis Jupiter; the other four with a cross Mars. These differences are borne upon the arms and supporters. See the plates.

Sisters, except of the blood-royal, have no other mark of difference in their coats of arms, but the form of the escutcheon; therefore they are permitted to bear the arms of their father, as the eldest son does after his father's decease. The reason is by Guillim said to be, that when they are married they lose their surname, and receive that of their husbands'.

Of the Charges.

Whatsoever is contained in the field, whether it occupy the whole or only a part thereof, is called a charge. All charges are distinguished by the names of honorable ordinaries, sub-ordinaries, and common charges.

Honorable ordinaries, the principal charges in heraldry, are made of lines only, which, according to their disposition and form, receive different names.

Sub-ordinaries are ancient heraldic figures, frequently used in coats of arms, and which are distinguished by terms appropriated to each of them.

Common charges are composed of natural, artificial, and even chimerical things; such as planets, creatures, vegetables, instruments &c.

The most judicious armorists admit only of nine honorable ordinaries, viz. The Chief; the Pale; the Bend; the Bend Sinister; the Fess: the Bar; the Chevron; the Cross; and the Saltier.

Of these only six have diminutives, which are called as follows: That of the chief is a fillet; the pale has a pallet and endorse; the bend, a bendlet, cost, and riband; the bend sinister has the scarp and bâton; the bar, the closet and barulet; the chevron, a chevronel and couple-close. See Plate I.

The chief is an ordinary determined by an horizontal line, which, if it is of any other form but straight, must be expressed. It is placed in the upper part of the escutcheon, and contains in depth the third part of the field. Its diminutive is a fillet, the content of which is not to exceed one-fourth of the chief, and stands in the lowest part thereof. This ordinary is subject to be charged with variety of figures; and may be indented, wavy, nebule, &c.

The pale is an ordinary, consisting of two perpendicular lines drawn from the top to the base of the escutcheon, and contains the third middle part of the field. Its diminutives are, the pallet, which is the half of the pale; and the endorse, which is the fourth part of a pale. This ordinary and the pallet may receive any charge, but the endorse should not be charged. The endorse, besides, is never used, according to J. Leigh, but to accompany the pale in pairs, as cotices do the bend; but Sir John Ferne is of a different opinion.

The bend is an ordinary formed by two diagonal lines, drawn from the dexter chief to the sinister base; and contains the fifth part of the field in breadth, if uncharged; but if charged, then the third. Its diminutives are, the bendlet, which is the half of a bend: the cost or cotice, when two of them accompany a bend; which is the fourth part of a bend; and the riband, the moiety of a cost, or the eighth part of a field.

The bend sinister is of the same breadth as the bend, but drawn the contrary way: this is subdivided into a scrape, which is the half of the bend, and into a baton, which is the fourth part of the bend, but does not extend itself to the extremities of the field, there being part of it seen at both ends.

The fess is an ordinary produced by two parallel lines drawn horizontally across the centre of the field, and contains in breadth the third part thereof. Some English writers say it has no diminutive, for the bar is a distinct ordinary of itself.

The bar, according to their definition, is formed of two lines, and contains but the fifth part of the field: which is not the only thing wherein it differs from the fess; for there may be more than one in an escutcheon, placed in different parts thereof, whereas the fess is limited to the centre-point; but in this the French armorists differed from them. The bar has two diminutives; the barulet, which contains the half of the bar; and the closet, which is the half of the barulet. When the shield contains a number of bars of metal and color alternate, of even number, that is called barry of so many pieces, expressing their number.

The chevron, which represents two rafters of a house well jointed together, or a pair of compasses half open, takes up the fifth part of the field with the English, but the French gave it the third. Its diminutives are, The chevronel, which contains the half of a chevron; and the couple-close, which is the half of a chevronel, that is, its breadth is but the fourth part of a chevron. Leigh observes, that this last diminutive is never borne but in pairs, or with a chevron between two of them. The French had but one diminution of this ordinary called Etaye, containing the third part of its breadth.

The cross is an ordinary formed by the meeting of two perpendicular with two horizontal lines in the fess point, where they make four right angles; the lines are not drawn throughout, but discontinued the breadth of the ordinary, which takes up only the fifth part of the field when not charged: but if charged, then the third. It is borne as well engrailed, indented, &c., as plain.

There is a great variety of crosses used in heraldry. Guillim has mentioned thirty-nine different sorts; De la Columbiere seventy-two; Leigh forty-six; and Upton declares he dares not ascertain all the various crosses borne in arms, for that they are almost innumerable.

The saltire, which is formed by the bend and bend sinister crossing each other in right angles, as the intersecting of the pale and fess forms the cross, contains the fifth part of the field; but if charged, then the third. In Scotland, this ordinary is frequently called a St. Andrew's cross. It may, like the others, be borne engrailed, wavy, &c., as also between charges, or charged with any other bearing.

There are other heraldic figures, called subordinaries, or ordinaries only, which, by reason of their ancient use in arms, are of worthy bearing, viz. the Gyron, Franc-quarter, Canton, Pairle, Fret, Pile, Orle, Inescutcheon, Tressure, Annulet, Flanches. Flasques, Voiders, Billet, Lozenge, Gutts, Fusil, Rustre, Mascle, Papillone, and Diaper. See the plates.

The gyron is a triangular figure formed by two lines, one drawn diagonally from one of the four angles to the centre of the shield, and the other is drawn either horizontally or perpendicularly, from one of the sides of the shield, meeting the other line at the centre of the field.

Gyronny is said, when the field is covered with six, eight, ten, or twelve gyrons, in a coat of arms: but a French author would have the true gyronny to consist of eight pieces only, which represents the coat of arms of Flora Campbell, countess of Loudon, &c., whose ancestor was created baron of Loudon in 1604 by James VI. and earl of the same place, May 12th, 1633, the ninth of Charles I.

The franc-quarter is a square figure, which occupies the upper dexter quarter of the shield. It is but rarely carried as a charge. Silvester Petra Sancta has given us a few instances of its use.

The canton is a square part of the escutcheon, somewhat less than the quarter, but without any fixed proportion. It represents the banner that was given to ancient knights-bannerets, and, generally speaking, possesses the dexter-chief point of the shield, as in the figure; but should it possess the sinister corner, which is but seldom, it must be blazoned by a canton sinister. J. Coats reckons it as one of the nine honorable ordinaries, contrary to most heralds' opinions. It is added to coats of arms of military men as an augmentation of honor.

The pairle is a figure formed by the conjunction of the upper half of the saltier with the under half of the pale.

The fret is a figure representing two little sticks in saltire, with a mascle in the centre interlaced. J. Gibbon terms it the herald's true lover's knot; but many dissent from his opinion.

Fretty is said when the field or bearings are covered with a fret of six, eight, or more pieces. The word fretty may be used without addition, when it is of eight pieces: but if there be less than that number, they must be specified.

The pile, which consists of two lines, terminating in a point, is formed like a wedge, and is borne engrailed, wavy, &c., as in the figure. It issues in general from the chief, and extends towards the base; yet there are some piles borne in bend, and issuing from other parts of the field.

The orle is an ordinary composed of two lines going round the shield, the same as the bordure, but its breadth is but one-half of the latter, and at some distance from the brim of the shield.

The inescutcheon is a little escutcheon borne within the shield; which, according to Guillim's opinion, is only to be so called when it is borne single in the fess point or centre

The tressure is an ordinary commonly supposed to be the half of the breadth of an orle, and is generally borne flowery and counter-flowery, as it is also very often double, and sometimes treble. This double tressure makes part of the arms of Scotland, as marshalled in the royal achievement, and granted to the Scottish kings by Charlemagne, emperor and king of France, when he entered into a league with Achaicus, king of Scotland, to show that the French lilies should defend and guard the Scottish lion.

The annulet, or ring, is a well-known figure, and is frequently to be found in arms through every kingdom in Europe.

The flanches are formed by two curved lines, or semicircles, being always borne double. G. Leigh observes, that on two such flanches two sundry coats may be borne.

The flasques resemble the flanches, except that the circular lines do not go so near the centre of the field. Gibbon would have these two ordinaries to be both one, and written flank; alleging, that the two other names are but a corruption of this last: but, as G. Leigh and J. Guillim make them two distinct and subordinate ordinaries, we insert them here as such.

The voiders are by Guillim considered as a subordinate ordinary, and are not unlike the flasques, but they occupy less of the field.

The billet is an oblong square, twice as long as broad. Some heralds imagine, that they represent bricks for building: others more properly consider them as representing folded paper or letters.

The lozenge is an ordinary of four equal and parallel sides, but not rectangular; two of its opposite angles being acute, and the other two obtuse.

Guttes, or *Drops*, are round at bottom, waved on the sides, and terminate at the top in points. Heralds have given them different names according to their different tinctures: thus, if they are yellow, they are called guttés d'or; if white, d'eau; if red, de sang; if blue, de larmes; if green, de vert; if black, de poix.

The fusil is longer than the lozenge, having

its upper and lower part more acute and sharp than the other two collateral middle parts, which acuteness is occasioned by the short distance of the space between the two collateral angles; which space, if the fusil is rightly made, is always shorter than any of the four equal geometrical lines whereof it is composed.

The rustre is a lozenge pierced round in the middle, called by the Germans rutten.

The mascle is pretty much like a lozenge, but voided or perforating through its whole extent, showing a narrow border, as in the figure.

Papillone is an expression used for a field or charge that is covered with figures like the scales of a fish. M. Baron gives us an example of it in the arms of Monti, Gueules Papelone d'Argent. The proper term for it in English would be scallop-work.

Diapering is said of a field or charge, shadowed with flourishings or foliage with a color a little darker than that on which it is wrought. The Germans frequently use it; but it does not enter into the blazoning or description of an arms; it only serves to embellish the coat.

If the fore-mentioned ordinaries have any attributes, that is, if they are engrailed, indented, wavy, &c., they must be distinctly specified, after the same manner as the honorable ordinaries.

As in all ages men have made use of representations of animals and other symbols to distinguish themselves in war, human ingenuity has been not a little exerted, in multiplying these marks of distinction, by all sorts of figures, some natural, others artificial, and many chimerical; in allusion to the state, quality, or inclination of the bearer.

Hence the sun, moon, stars, comets, meteors, &c., have been introduced to denote glory, grandeur, power, &c. Lions, leopards, tigers, serpents, stags, &c., have been employed to signify courage, strength, prudence, swiftness, &c. War, hunting, music, &c., have furnished lances, swords, pikes, arms, harps, &c. Architecture, columns, cheverons, &c.; and the other arts various things that relate to them.

Human bodies, or parts of them, as well as clothes and ornaments, have, for particular intentions, found place in armory. Trees, plants, fruits, and flowers, have also been adopted to denote the rarities, advantages, and singularities, of different countries.

The relation of some creatures, figures, &c., to particular names, has been likewise a very fruitful source of variety in arms. Thus the family of Coningsby bears three coneys; of Arundel, six swallows, from hirundo, the Latin for a swallow; of Urson, a bear, from the Latin ursus; of Lucie, three pikes, in Latin tres lucios pices; of Starkey, a stork; of Castleman, a castle triple-towered; of Shuttleworth, three weavers' shuttles, &c.

Besides these natural and artificial figures, many chimerical or imaginary ones are used in heraldry, the result of fancy and caprice; such as centaurs, hydras, phœnixes, griffins, dragons, &c. This great variety of figures prevents us from comprehending all common charges in a work of this nature; therefore such only are treated of as are most frequently borne in coats of arms.

I. Among the multitude of natural figures which are used in coats of arms, those most usually borne are, for the sake of brevity as well as perspicuity, distributed into the following classes, viz. 1. Celestial figures; as, the sun, moon, stars, &c., and their parts. 2 Effigies of men, women, &c., and their parts. 3. Beasts; as lions, stags, foxes, bears, &c., and their parts. 4. Birds; as, eagles, swans, storks, pelicans, &c., and their parts. 5. Fishes; as, dolphins, whales, sturgeons, trouts, &c., and their parts. 6. Reptiles and insects; as, tortoises, serpents, grasshoppers, &c., and their parts. 7. Vegetables; as, trees, plants, flowers, herbs, &c., and their parts. 8. Stones; as, diamonds, rubies, pebbles, rocks, &c.

These charges have, as well as ordinaries, various attributes or epithets, which express their qualities, positions, and dispositions. Thus the sun is said to be in his glory, eclipsed, &c. The moon, in her complement, increscent, &c. Animals are said to be rampant, passant, &c. Birds have also their denominations, such as close, displayed, &c. Fishes are described to be hauriant, naiant, &c. Lions are termed lioncels, if more than two in a field, and eagles eaglets. A lion is said to be couchant, when lying down; and rampant, when standing on his hind legs, and rearing up his fore feet, as if climbing. Trees and plants are also said to be trunked, eradicated, fructuated, or raguled, according as they are represented in arms. See plate II.

II. Of artificial figures, borne in coats of arms, some are taken from warlike instruments; as swords, arrows, battering rams, gauntlets, helmets, spears, pole-axes, &c. Others from ornaments used in royal and religious ceremonies; as crowns, coronets, mitres, wreaths, crosiers, &c. Others are borrowed from architecture; as towers, castles, arches, columns, plummets, battlements, churches, portcullisses, &c. Others from navigation; as ships, anchors, rudders, pendants, sails, oars, masts, flags, galleys, lighters, &c.

All these bearings have different epithets, serving either to express their position, disposition, or make: viz. swords are said to be erect, pommelled, hilted, &c.; arrows, armed, feathered, &c.; towers, covered, embattled, &c.; and so on of all others.

III. Chimerical Figures form the last and the oddest kind of bearings in coats of arms. Under the name of chimerical figures, heralds rank all representations of things that have no real existence, but are mere fabulous and fantastical inventions. These, charges, griffons, martlets, and unicorns excepted, are not common in British coats. Those most in use are the following, viz.—

Angels, Cherubim, Tritons, Centaurs, Martlets, Griffons, Unicorns, Dragons, Mermaids, Satyrs, Wiverns, Harpies, Cockatrices, Phœnixes, and Sphinxes. These, like the foregoing charges, are subject to various positions and dispositions, which, from the principles already laid down, will be plainly understood.

To these figures may be added the montegre, an imaginary creature, supposed to have the body of a tiger with a satyr's head and horns; also those which have a real existence, but are said to be endowed with extravagant and imaginary qualities, viz. the salamander, beaver, chameleon, &c.

Of the External Ornaments of Escutcheons.

The ornaments that accompany or surround the escutcheons were introduced to denote the birth, dignity, or office of the persons to whom the coat of arms appertains; which is practised both among the laity and clergy. Those most in use are of ten sorts, viz. Crowns, Coronets, Mitres, Helmets, Mantlings, Chapeaux, Wreaths, Crests, Scrolls, and Supporters.

The first crowns were only diadems, bands, or fillets; afterwards they were composed of branches of trees, and then flowers were added to them. Among the Greeks, the crowns given to those who carried the prize at the Isthmian games were of pine; at the Olympic of laurel; and at the Nemean of smallage.

Examples of some of these ancient crowns are frequently met with in modern achievements, as the mural crown; the naval or rostral crown; the castrense or vallary crown; the civic crown; the radiated crown; the celestial crown, formed like the radiated, with the addition of a star on each ray, is only used upon tomb-stones, monuments, and the like. Others of the ancient crowns are still borne as crests.

But modern crowns are only used as ornaments, which emperors, kings, and independent princes set on their heads, in great solemnities, to denote their sovereign authority. These are the most in use in heraldry, and are as follows:—

The crown of the kings of Great Britain, see plate of crowns, is a circle of gold, bordered with pearls and precious stones, and heightened up with four large fleurs-de-lis, and four crosses pattee alternately; from these rise four arched diadems adorned with pearls, which close under a mound, surmounted of a cross like those at bottom. Mr. Sandford, in his Genealogical History, remarks, that Edward IV. is the first king of England, who in his seal, or on his coin, is crowned with an arched diadem.

The crowns of Spain and Portugal are a ducal coronet, heightened up with eight arched diadems that support a mound, ensigned with a plain cross. Those of Denmark and Sweden consist of eight arched diadems, rising from a marquis's coronet, which conjoin at the top under a mound ensigned with a cross botone.

The crowns of most other kings in Europe are circles of gold, adorned with precious stones, and heightened up with large trefoils, and closed by four, six, or eight diadems, supporting a mound, surmounted with a cross.

The grand seignior bears over his arms a turban, enriched with pearls and diamonds, under two coronets, the first of which is made of pyramidical points heightened up with large pearls, and the uppermost is surmounted with crescents.

The pope appropriates to himself a tiara, or long cap of golden cloth, from which hang two pendants embroidered and fringed at the ends, semée of crosses of gold. This cap is enclosed by three marquis's coronets; and has on its top a mound of gold, whereon is a cross of the same, which cross is sometimes represented by engravers and painters pometted, recrossed, flowery, or plain. It appears, from very good authority, that Boniface VIII., who was elected in 1295, was the first who encompassed his cap with a coronet; Benedict XII., in 1335, added a second to it; and John XXIII., in 1411, a third; with a view to indicate by them, that the pope is the sovereign priest, the supreme judge, and the sole legislator amongst Christians.

The coronet of the prince of Wales, or eldest son of the king of Great Britain, was anciently a circle of gold set round with four crosses pattee, and as many fleurs-de-lis alternately; but, since the Restoration, it has been closed with one arch only, adorned with pearls, and surmounted of a mound and cross, and bordered with ermine like the king's. But, besides the coronet, his royal highness has another distinguishing mark of honor, peculiar to himself, viz. a plume of three ostrich feathers, with a coronet of the ancient princes of Wales. Under it, in a scroll, is this motto, 'Ich dien,' which in the German or old Saxon language signifies, I serve. This device was at first taken by Edward prince of Wales, commonly called the Black Prince, after the famous battle of Cressy, in 1346, where, having with his own hand killed John, king of Bohemia, he took from his head such a plume, and put it on his own.

The coronet of all the princes, immediate sons and brothers of the kings of Great Britain, is a circle of gold, bordered with ermine, heightened up with four fleurs-de-lis, and as many crosses-pattées alternate. The particular and distinguished form of such coronets as are appropriated to princes of the blood-royal is described and settled in a grant of the 13th of Charles II.

The coronet of the princesses of Great Britain is a circle of gold, bordered with ermine, and heightened up with crosses-pattées, fleurs-de-lis, and strawberry leaves alternate.

A duke's coronet is a circle of gold bordered with ermine, enriched with precious stones and pearls, and set round with eight large strawberry or parsley leaves.

A marquis's coronet is a circle of gold bordered with ermine, set round with four strawberry leaves, and as many pearls on pyramidical points, equal height, alternate.

An earl's coronet is a circle of gold, bordered with ermine, heightened up with eight pyramidical points or rays, on the tops of which are as many large pearls, placed alternately with as many strawberry leaves, but the pearls much higher than the leaves.

A viscount's coronet differs from the preceding ones as being only a circle of gold bordered with ermine, with large pearls set close together on the rim, without any limited number, which is his prerogative above the baron, who is limited.

A baron's coronet, which was granted by

king Charles II., is formed with six pearls set at equal distances on a gold circle, bordered with ermine, four of which only are seen on engravings, paintings, &c., to show he is inferior to the viscount.

The eldest sons of peers, above the degree of a baron, bear their father's arms and supporters with a label, and use the coronet appertaining to their father's second title; and all the younger sons bear their arms with proper differences, but use no coronets.

As the crown of the king of Great Britain is not quite like that of other potentates, so most of the coronets of foreign noblemen differ a little from those of the British nobility.

The archbishops and bishops of England and Ireland place a mitre over their coats of arms. It is a round cap pointed and cleft at the top, from which hang two pendants fringed at both ends; with this difference, that the bishop's mitre is only surrounded with a fillet of gold, set with precious stones; whereas the archbishop's issues out of a ducal coronet.

This ornament, with other ecclesiastical garments, is still worn by the archbishops and bishops of the church of Rome, whenever they officiate with solemnity; but it is never used in England except on coats of arms.

The helmet was formerly worn as a defensive weapon, to cover the bearer's head and face; and is now placed over a coat of arms as its chief ornament, and the true mark of gentility. There are several sorts, distinguished by the matter they are made of, by their form, and by their position.

As to the matter they are, or rather were, made of: the helmets of sovereigns were of burnished gold damasked; those of princes and lords, of silver figured with gold; those of knights, of steel adorned with silver; and those of private gentlemen, of polished steel.

As to their form: those of the king and the royal family, and noblemen of Great Britain, are open-faced and grated, and the number of bars serves to distinguish the bearer's quality; that is, the helmet appropriated to the dukes and marquises is different from the king's, by having a bar exactly in the middle, and two on each side, making but five bars in all; whereas, the king's helmet has six bars, viz. three on each side. The other grated helmet with four bars is common to all degrees of peerage under a marquiss. The open-faced helmet without bars denotes baronets and knights. The close helmet is for all esquires and gentlemen.

Their position is also looked upon as a mark of distinction. The grated helmet in front belongs to sovereign princes. The grated helmet in profile is common to all degrees of peerage. The helmet standing direct without bars, and the beaver a little open, denotes baronets and knights. Lastly, the side-standing helmet, with beaver close, is the way of wearing it amongst esquires and gentlemen.

Mantlings are pieces of cloth, jagged or cut into flowers and leaves, which now-a-days serve as an ornament for escutcheons. They were the ancient coverings of helmets, to preserve them, or the bearer, from the injuries of the weather; as also to prevent the ill consequences of their too much dazzling the eye in action. But Guillim very judiciously observes, that their shape must have undergone a great alteration since they have been out of use, and, therefore, might more properly be termed flourishings than mantlings.

The French heralds assure us, that these mantlings were originally only short coverings which commanders wore over their helmets; and that, going into battles with them, they often, on their coming away, brought them back in a ragged condition, occasioned by the many cuts they had received on their heads; and, therefore, the more hacked they were, the more honorable they were accounted; as our colors, in time of war, are the more esteemed for having been shot through in many places.

Sometimes skins of beasts, as lions, bears, &c. were thus borne, to make the bearer look more terrible; and this occasioned the doubling of mantlings with furs.

A chapeau, is an ancient hat, or rather cap of dignity, worn by dukes, generally scarlet-colored velvet on the outside, lined and turned up with fur; of late frequently to be met with above a helmet, instead of a wreath, under gentlemen's and noblemen's crests. Heretofore they were seldom to be found, as of right appertaining to private families; but by the grants of Robert Cooke, Clarencieux, and other succeeding heralds; these, together with ducal coronets, are now frequently to be met with in families who yet claim not above the degree of gentlemen.

The wreath is a kind of roll, made of two skeins of silk of different colors twisted together, which ancient knights wore as a head-dress when equipped for tournaments. The colors of the silk are always taken from the principal metal and color contained in the bearer's coat of arms. They are still accounted one of the lesser ornaments of escutcheons, and are placed between the helmet and the crest. In the time of Henry I., and long after, no man who was under the degree of a knight had his crest set on a wreath; but this, like other prerogatives, has been infringed.

The crest is the highest part of the ornaments of a coat-of-arms. It is called crest from the Latin word cresta, which signifies comb or tuft, such as many birds have upon their heads, as the peacock, pheasant, &c., in allusion to the place on which it is fixed. Crests were formerly great marks of honor, because they were only worn by heroes of great valor, or by such as were advanced to some superior military command, that they might be the better distinguished in an engagement, and thereby rally their men if dispersed; but they are at present considered as a mere ornament. The crest is frequently a part either of the supporters, or of the charge borne in the escutcheon. Thus the crest of the royal achievement of Great Britain is a lion guardant crowned.

The scroll is the ornament placed sometimes above the crest, but most usually below the shield and supporters; containing a motto or short sentence, alluding thereto, or to the bear-

ings; or to the bearer's name, as in the two following instances. The motto of the earl of Cholmondeley is, Cassis tutissima virtus, i. e. Virtue is the safest helmet; on account of the helmet in the coat of arms. The motto of the right honorable lord Fortescue is, Forte scutum salus ducum, i. e. A strong shield is the safety of commanders; alluding to the name of that ancient family. Sometimes it has reference to neither, but expresses something divine or heroic; as that of the earl of Scarborough, Murus æreus conscientia sana, i. e. A good conscience is a wall of brass. Others are ænigmatical; as that of the royal achievement, which is, Dieu et mon droit, i. e. God and my right; introduced by Edward III. in 1340, when he assumed the arms and title of king of France, and began to prosecute his claim, which occasioned long and bloody wars, fatal, by turns, to both kingdoms. Mottos, though hereditary in the families that first took them up, have been changed on some particular occasions, and others appropriated in their stead, instances of which are sometimes met with in the history of families.

Sometimes there are two mottos, as in the royal arms of Scotland; where the one, In defence, is placed in a scroll above the crest; and the other, Nemo me impune lacessit, in a scroll under the shield and supporters. Sometimes a third motto is added, as in the royal arms of Great Britain, where the garter, with its motto Honi soit qui mal y pense, surrounds the shield.

Supporters are figures standing on the scroll, and placed at the side of the escutcheon; they are so called because they seem to support or hold up the shield. The rise of supporters is, by M. Menestrier, traced up to ancient tournaments, wherein the knights caused their shields to be carried by servants or pages under the disguise of lions, bears, griffons, blackamoors, &c., who also held and guarded the escutcheons, which the knights were obliged to expose to public view for some time before the lists were opened. Sir George M'Kenzie, who dissents from this opinion, says, 'That the first origin and use of them was from the custom which ever was, and is, of leading such as are invested with any great honor to the prince who confers it: thus, when any man is created a duke, marquis, or knight of the garter, or any other order, he is supported by, and led to the prince betwixt, two of the same quality, and so receives from him the symbols of that honor; and, in remembrance of that solemnity, his arms are thereafter supported by any two creatures he chooses.' Supporters have formerly been taken from such animals or birds as are borne in the shields, and sometimes they have been chosen as bearing some allusion to the names of those whose arms they are made to support. The supporters of the arms of Great Britain, since the accession of king James I. to the throne, are a lion rampant guardant crowned or, on the dexter side; and a unicorn argent, crowned, armed, unguled, maned, and gorged with an antique crown, to which a chain is affixed, all or, on the sinister. Bearing coats of arms supported is, according to the heraldic rules of England, the prerogative, 1. Of those called nobiles majores, viz. dukes, marquises, earls, viscounts, and barons. 2. Of all knights of the garter, though they should be under the degree of barons; and, 3, Of knights of the bath, who both receive on their creation a grant of supporters. And, lastly, of such knights as the king chooses to bestow this honor upon; as in the instance of Sir Andrew Fountain, who was knighted by Philip, earl of Pembroke, when lord lieutenant of Ireland, Fountain being then secretary; and, on his return to England, king William granted him supporters to his arms, viz. two griffons gules and or. In Scotland all the chiefs of clans or names have the privilege of claiming supporters; also the baronets. But by act of parliament, 10th September, 1672, none are allowed to use either arms or supporters, without the lord Lyon's authority, under a penalty and confiscation of all moveables whereon such arms are put.

Of the Rules of Heraldry.

The rules for blazoning, such as the ancient usage and laws of heraldry have established amongst us, are the following:—

1. The first and most general rule is, to express heraldic distinctions in proper terms, so as not to omit any thing that ought to be specified, and at the same time to be clear and concise without tautology.

2. Begin with the tincture of the field, and then proceed to the principal charges which possess the most honorable place in the shield, such as fess, cheveron, &c., always naming that charge first, which lies next and immediately upon the field.

3. After naming the tincture of the field, the honorable ordinaries, or other principal figures, specify their attributes, and afterwards their metal or color.

4. When an honorable ordinary, or some one figure, is placed upon another, whether it be a fess, cheveron, cross, &c., it is always to be named after the ordinary or figure over which it is placed, with one of these expressions, sur tout, or over all.

5. In blazoning such ordinaries as are plain, the bare mention of them is sufficient; but, if an ordinary should be made of any of the crooked lines mentioned above, its form must be specified, that is, whether it be engrailed, wavy, &c.

6. When a principal figure possesses the centre of the field, its position is not to be expressed, or (which amounts to the same thing), when a bearing is named, without specifying the point where it is placed, then it is understood to possess the middle of the shield.

7. The number of the points of mullets or stars must be specified when more than five; and also, if a mullet or any other charge be pierced, it must be mentioned as such, to distinguish it from what is plain.

8. When a ray of the sun, or other single figure, is borne in any other part of the escutcheon than the centre, the point it issues from must be named.

9. The natural color of trees, plants, fruits, birds, &c., is no otherwise to be expressed in blazoning but by the word proper; but if discolored, that is, if they differ from their natural color, it must be particularised.

10. When three figures are in a field, and their position is not mentioned in the blazoning, they are always understood to be placed two above, and one below.

11. When there are many figures of the same species borne in a coat of arms, their number must be observed as they stand, and distinctly expressed.

There are other positions called irregular; as, for example, when three figures, which are naturally placed two and one, are disposed one and two, &c. It must also be observed, that when the field is strewed with the same figures, this is expressed by the word semée; but if the figures strewed on the field are whole ones, it must be denoted by the words sans nombre; whereas, if part of them is cut off at the extremities of the escutcheon, the word semée is then to be used.

Of Marshalling Coats of Arms.

By marshalling coats of arms is to be understood the art of disposing divers of them in one escutcheon, and of distributing their contingent ornaments in proper places. Various causes may occasion arms to be thus conjoined, which J. Guillim comprises under two heads, viz. manifest, and obscure. What this learned and judicious herald means by manifest causes, in the marshalling of coats of arms, are such as betoken marriages, or a sovereign's gift, granted either through the special favor of the prince, or for some eminent services. Concerning marriages it is to be observed,

1. When the coats of arms of a married couple, descended of distinct families, are to be put together in one escutcheon, the field of their respective arms is conjoined pale-ways, and blazoned parted per pale, baron and femme, two coats; first, &c. In which case the baron's arms are always to be placed on the dexter side, and the femme's arms on the sinister side.

2. If a widower marry again, his late and present wife's arms are, according to G. Leigh, 'to be both placed on the sinister side, in the escutcheon, with his own, and parted per pale. The first wife's coat shall stand on the chief, and the second on the base; or he may set them both in pale with his own, the first wife's coat next to himself, and his second outermost. If he should marry a third wife, then the two first matches shall stand on the chief, and the third shall have the whole base. And if he take a fourth wife, she must participate one-half of the base with the third wife, and so will they seem to be so many coats quartered.' But these forms of impaling are meant of hereditary coats, whereby the husband stands in expectation of having the hereditary possessions of his wife united to his patrimony. If a man marry a widow, he marshals her maiden arms only.

3. In the arms of femmes joined to the paternal coat of the baron, the proper differences by which they were borne by the fathers of such femmes must be inserted.

4. If a coat of arms that has a bordure be impaled with another, as by marriage, then the bordure must be wholly omitted in the side of the arms next the centre.

5. The person who marries an heiress, instead of impaling his arms with those of his wife, is to bear them in an escutcheon placed in the centre of his shield, and which, on account of its showing forth his pretension to her estate, is called an escutcheon of pretence, and is blazoned sur tout, i. e. over all. But the children are to bear the hereditary coat of arms of their father and mother quarterly, which denotes a fixed inheritance, and so transmit them to posterity. The first and fourth quarters generally contain the father's arms, and the second and third the mother's; unless the heirs should derive not only their estate, but also their title and dignity, from their mother.

6. If a maiden or dowager lady of quality marry a commoner, or a nobleman inferior to her rank, their coats of arms may be set beside one another in two separate escutcheons, upon one mantle or drapery, and the lady's arms ornamented according to her title.

7. Archbishops and bishops impale their arms differently from the forementioned coats, in giving the place of honor, that is, the dexter side, to the arms of their dignity. Prelates thus bear their arms parted per pale, to denote their being joined to their cathedral church in a sort of spiritual marriage.

With respect to such armorial ensigns as the sovereign thinks fit to augment a coat of arms with, they may be marshalled various ways, as may be seen by the arms of his grace the duke of Rutland and many others. So far the causes for marshalling divers arms in one shield, &c., are manifest. As to such as are called obscure, that is when coats of arms are marshalled in such a manner that no probable reason can be given why they are so conjoined, they must be left to heralds to explain.

Of the Orders of Knighthood, &c.

To the augmentations above mentioned may be added,

1. The baronet's mark of distinction, or the arms of the province of Ulster in Ireland, granted and made hereditary in the male line by king James I., who erected this dignity on the 22d of May, 1611, in the seventh year of his reign, in order to propagate a plantation in the fore-mentioned province. This mark is—Argent, a sinister hand couped at the wrist, and erected gules; which may be borne either in a canton, or in an escutcheon, as will best suit the figures of the arms.

2. The ancient badge of the most noble order of the garter, instituted by king Edward III., 1349, in the twenty-seventh year of his reign. This honorable augmentation is a deep blue garter, surrounding the arms of such knights, and inscribed with this motto—'Honi soit qui mal y pense.'

The arms of those who are knights of the orders of the Bath, of the Thistle, or of St. Patrick, are marshalled in the same manner, with this difference only, that the color and motto accord with the order to which it belongs. Thus the motto, 'Quis separabit, 1783,' on the light blue riband of the order, surrounds the escutcheon of a knight of St. Patrick. 'Nemo me impune la-

cesset,' on a green riband, distinguishes a knight of the Thistle; and 'Tria juncta in uno,' on red, a knight of the Bath. None of these orders of knighthood are hereditary; but the honors of a baronet of Ulster, and of a baronet of Nova Scotia, (created by patent in 1602), descend to the heirs male.

For representations of the badges of the several orders of knighthood, see plate V.

The following table will shew the order of precedency observed at public solemnities, &c.

The King.
Prince of Wales.
King's Sons.
King's Grandsons.
King's Brothers.
King's Uncles.
King's Nephews.
Husbands of the King's Daughters.
Archbishop of Canterbury, Lord-Primate of England.
Lord High Chancellor, Lord Keeper, being a Baron.
Archbishop of York, Primate of England.
Lord High Treasurer.
Lord President of the Privy Council.
Lord Privy Seal.
Lord Great Chamberlain.
Lord High Constable.
Earl Marshal.
Lord High Admiral.
Lord Steward of His Majesty's Household.
Lord Chamberlain of His Majesty's Household.
Dukes according to their Patents.
Eldest Sons of Dukes of the Blood Royal.
Marquises according to their patents.
Dukes' eldest sons.
Earls according to their patents.
Younger Sons of Dukes of the Blood Royal.
Marquises' eldest sons.
Dukes' younger sons.
Viscounts according to their patents.
Earls' eldest sons.
Marquises' younger sons.
Bishops of London, Durham, Winchester, and all other bishops, according to their seniority of creation.
Secretary of State, being a Baron.
Commissioners of the Great Seal.
Barons according to their patents.
Speaker of the House of Commons.
Treasurer, Comptroller, and Vice-Chamberlain of the Household.
Secretary of State, being under the degree of a Baron.
Viscounts' eldest sons.
Earls' younger sons.
Barons' eldest sons.
Knights of the Garter.
Privy Councillors.
Chancellor of the Exchequer.
Chancellor of the Duchy of Lancaster.
Lord Chief-Justice of the King's Bench.
Master of the Rolls.
Lord Chief-Justice of the Common Pleas.
Lord Chief Baron of the Exchequer.
Judges and Barons of the degree of the coif of the said court, according to seniority.
Bannerets made by the King himself in person.
Viscounts' younger sons.
Barons' younger sons.
Baronets.
Bannerets not made by the King himself in person.
Knights of the Thistle.
Grand Crosses.
Knights of the Bath.
Knights Commanders of the Bath.
Companions of the Bath.
Knights Bachelors.
Eldest sons of the youngest sons of Peers.
Baronets' eldest sons.
Eldest sons of Knights of the Garters.
Bannerets' eldest sons.
Eldest sons of Knights of the Thistle and Baths.
Knights' eldest sons.
Baronets' younger sons.
Esquires of Knights of the Bath.
Esquires by Creation.
Esquires by Office.
Younger sons of Knights of the Garter.
Younger sons of Bannerets.
Younger sons of Knights of the Bath.
Younger sons of Knights Bachelors.
Gentlemen.

Of Funeral Escutcheons.

We shall conclude this treatise by describing the several funeral escutcheons, usually called hatchments; by which may be known, after any person's decease, what rank he or she held when living; and, if it be a gentleman's hatchment, whether he was a bachelor, married man, or widower, with the like distinctions for gentlewomen.

The hatchment is usually affixed to the fronts of houses, when any of the nobility or gentry die. 1. The arms, if the deceased be a private gentleman, are parted per pale with those of his wife. The ground without the escutcheon being black denotes the man to be dead; and the ground on the sinister side being white signifies that the wife is living.

When a married gentlewomen dies first, the hatchment is distinguished by contrary color from the former; that is, the arms on the sinister side have the ground without the escutcheon black; whereas those on the dexter side, for her surviving husband, are upon a white ground: the hatchment of a gentlewoman is, moreover, differenced by a cherub over the arms instead of a crest.

When a bachelor dies, his arms may be depicted single or quartered, with a crest over them, but never impaled, as the two first are, and all the ground without the escutcheon is also black.

When a maid dies, her arms, which are placed in a lozenge, may be single or quartered, as those of a bachelor; but, instead of a crest, have a cherub over them, and all the ground without the escutcheon is also black.

When a widower dies, his arms are represented impaled with those of his deceased wife, having a crest and sometimes a helmet and mantling over them, and all the ground without the escutcheon black.

When a widow dies, her arms are also represented impaled with those of her deceased husband, but enclosed in a lozenge, and, instead of a crest, a cherub is placed over them; all the ground without the escutcheon is also black.

If a widower or bachelor should happen to be the last of the family, a mort-head is generally annexed to each hatchment, to denote that death has conquered all.

By the forementioned rules, which are sometimes neglected through the ignorance of illiterate people, may be known, upon the sight of any hatchment, what branch of the family is dead; and by the helmet, coronet, &c., what title and degree the deceased person held. The same rules are observed with respect to the escutcheons placed on the hearse and horses used in pompous funerals, except that they are not surmounted with any crest, as in the foregoing examples of hatchments, but are always plain. It is necessary, however, to ensign those of peers with coronets, and that of a maiden lady with a knot of ribands.

In Scotland a funeral escutcheon not only shows forth the arms and condition of the defunct, but is also a proof of the gentility of his descent; and such persons, for whom this species of escutcheon can be made out, are legally entitled to the character of gentlemen of blood, which is the highest species of gentility. The English hatchment, above described, exhibits no more than a right to a coat of arms, which may be acquired by purchase, and is only the first step towards establishing gentility in a family.

Heralds, College of, or Heralds' Office, a corporation founded by a charter of king Richard III., who granted them several privileges, as to be free from subsidies, tolls, offices, &c. They had a second charter from king Henry VI.; and a house built near Doctors' Commons, by the earl of Derby, in the reign of king Henry VII. was given them by the duke of Norfolk, in the reign of queen Mary I., which house is now rebuilt. This college is subordinate to the earl marshal of England. They are assistants to him in the court of chivalry, usually held in the common hall of the college, where they sit in their rich coats of his majesty's arms.

HERALDUS (Desiderius), or Didier Herault, a counsellor of the parliament of Paris, of uncommon learning. His Adversaria appeared in 1599; which, however, if the Scaligerana may be credited, he repented having published. His notes on Tertullian's Apology, on Minutius Felix, and on Arnobius, have been esteemed. He also wrote notes on Martial's Epigrams. Under the name of David Leidhresserus, he wrote a political dissertation on the independence of kings, some time after the death of Henry IV. He had a controversy with Salmasius, De jure Attico ac Romano; but did not live to finish what he had written on that subject. What he had done, however, was printed in 1650. He died in June 1649.

Heraldus, or Herault, son to Desiderius, was a minister in Normandy, when he was called to the service of the Walloon church of London under Charles I. He wrote a work entitled Pacifique Royal en deuil, in which he condemned the execution of king Charles I. It is quoted by Daille. He was so zealous a royalist that he was forced to fly to France, to escape the fury of the republicans. He returned to England after the Restoration, and resumed his ministry in the Walloon church at London: some time after which he obtained a canonry in the cathedral of Canterbury, which he enjoyed till his death.

HERAT, the ancient Aria, a city of Persia, in the province of Khorassan, is on the high road from Persia to Hindostan, and on the west frontier of Afghaunistaun. It has been taken by all the great conquerors of the east, from Alexander to Nadir Shah. At the beginning of the sixteenth century it was at the height of its modern splendor, and the residence of Aboul Ghazy, the fourth in descent from Timour. It is now the head of a viceroyalty of Cabul. In 1783 Mr. Forster describes it as very commercial, and having an excellent manufacture of carpets. Good horses are bred in the vicinity, and its revenues have been reckoned at 4,000,000 rupees.

HERAULT, Department of (in France), is part of the former province of Languedoc, and derives its name from the river Herault, which traverses it from north to south in its way to the Mediterranean Sea. The chief place of this prefecture is Montpelier: it is divided into four arrondissements, or subprefectures, viz. Montpelier 111,656 inhabitants, Beziers 117,279, Lodève 52,893, and St. Pons 42,298, making a total of 324,126 souls. It contains thirty-six justiciaries of the peace, or cantons, and 333 communes, spread over an area of 951 square miles, and yields a territorial revenue of 21,580,000 francs. It is the ninth military division of the kingdom; has a royal court and bishopric at Montpelier, consists of three electoral circles, and sends five members to the chamber of deputies. It is bounded on the north and east by the department of the Gard, on the south-east by the Mediterranean, on the south-west by the department of Aude, and on the north-west by those of Aveyron and Farn.

The surface of this maritime department is much diversified; it is intersected by mountains and valleys, plains and forests; the soil is generally dry and barren, and with difficulty produces corn; but, to make amends, it yields abundance of excellent wines, especially Muscadel and Frontigniac, a great number of plants suitable for medicine, dyeing, and perfumery, and a vast quantity of fruits of every kind. The country is covered with olive, almond, and fig-trees; the gardens are filled with orange trees, citrons, and pomegranates, which present at all seasons a constant succession of flowers and fruits. There are also some fine forests of oaks, which furnish wood for ship-building and cooperage; the pastures are abundant and always green, and its artificial meadows have been very much increased. One branch of the Cevennes crosses this department in a direction nearly parallel with the coast; in some places the old craters of volcanoes are discernible, and we perceive some masses of basalt, lava, and other volcanic stones. The heights present nothing, so to speak, but uncultivated rocks, where, however, there are some green oaks, box trees, thyme, and lavender.

The pools or lakes of Thau, Frontignan, Magnelone, Perault, and Manguio, which extend over a great space, and communicate with each other by several canals, occupy a considerable part of the coast of this department. They abound in fish of every kind; and produce annually about 23,700 quintals of white fish, 7550 of eels, 45,000 of shell fish, and 15,000 ducks and other aquatic birds, yielding in the whole 560,000 francs, three-fifths of which arise from the pools worked for the advantage of the state.

The soil is generally rich, and is cultivated with horses; but its products are insufficient for the population, since a large portion of the country consists of forests of oak, beech, chestnut, pine, box trees, and green oaks, and another large portion is full of vineyards. The average produce of a hectar of arable land, is 27 francs 17 centimes. It yields little corn; but more than 2,000,000 of hectolites of wine are made every year, of which three-fourths are distilled and exported; it produces also a great quantity of fruit, a number of artificial meadows, almonds, nuts, olives, figs, oranges, citrons, capers, melons (in the open field), camphire, kali, woad, and pastel. Numbers of cattle and sheep are reared in this country, and great quantities of silk-worms; there is also an extensive pilchard fishery, and quarries of marble of different colors; alabaster, limestones, brown free-stone, potters' clay, fossil cinders, aluminous earths, &c. There are establishments for mineral waters at Avène, at Balaruc, and la Malou.

In this department are manufactured cloths for soldiers' dresses, which are exported to Spain and the Levant, woollen and cotton counterpanes, swansdowns, silk and grogram caps, staves, casks, cork, paper, mineral acids, dry and mixed verdigris, Spanish nut oil, soap, fine liqueurs, scented waters, perfumery, grape syrup, and confectionary. There are also brandy distilleries; refining houses for sugar; silk, cotton, and woollen spinning factories; steel manufactories; glass-houses for window glass and bottles; considerable tan-houses, salt-pits, &c. An extensive commerce is carried on in corn, muscadel, and other wines, brandy, spirits, oil, dry and preserved fruits, plants, soap, spices, drugs, verdigris, chemical productions, skins, leather, and cattle. It is a great market for salt, and carries on an import and export trade with almost every port in Europe, America, and the Indies.

The principal rivers which water the country are the Herault and the Lez, which are both navigable, the Ergue, the Mosson, the Salaison, the Orb, the Libron, and the Cesse; the canal in the south, which joins the Mediterranean and the Atlantic, the canal of Grave which communicates with the lakes and the sea by means of the Lez, the canal of Roubine or Lunel, and that of Montpelier. It is traversed by the great roads from Nismes and Perpignan.

Herault, a river which takes its rise in the Cevennes, at the foot of the lofty mountains of Aigaoual, and Lespiron, near the village of Valleraugue, in the circle of Vigan, department of the Gard. It passes by Valleraugue, near Ganges, to St. Bauzil, St. Etienne, St. Guilhem-le-Désert near Aniane and Gignac, to Pezenas and Bessan, and falls into the Mediterranean at the port of Agde, where it forms a channel. Its whole course is about eighty-four miles. As far as St. Guilhem, this river flows through a deep trench of calcareous rock; it is navigable from Bessau to its mouth. Its principal tributary streams are the Ergue, the Dombic, and the Peine.

Herault. See Heraldus

HERB, *n. s.*
Herba'ceous, *adj.*
Her'bage, *n. s.*
Her'bal, *n. s.*
Her'balist, *n. s.*
Her'bar, *n. s.*
Her'barist, *n. s.*
Her'belet, *n. s.*
Herbes'cent, *adj.*
Her'bid, *adj.*
Her'borist, *n. s.*
Her'borough, *n. s.*
Her'bous, *adj.*
Her'bulent, *adj.*
Herb'-woman, *n. s.*
Her'by, *adj.*

Fr. *herbe*; Lat. *herba*; Germ. *herberg*. The generic name of plants: herbaceous, feeding on vegetables: herbage, pasture, or the right of pasture: herbal, a book containing names and descriptions of plants: herbalist, a man skilled in the knowledge of herbs: herbar, synonymous with a plant: herbarist, one skilled in herbs: heebelet, a small herb: herbescent, growing into herbs: herborough, a temporary residence, a harbour: herbous, herbulent, abounding with herbs: herb-woman, a woman that sells herbs: herby, having the nature of herbs.

Now cannot Canace but *herbes* delve
Out of the ground; and maken salves newe
Of *herbes* precious and fine of hewe.
Chaucer. The Squieres Tale.

——— and in her hand
The *herb* she toke well avisand
The lefe, the sede, the stalke, the floure;
And said it had a gode savour
And was no common *herb* to find.
Chaucer's Dreame.

The Priores, as woman taught of gentil blood and hend,
Assented to hir counsel; and forth gone they wend,
Passing forth softly into the *herbery*,
For many a *herb* grewe for sewe (salve) and surgery.
Chaucer. The Pardonere and Tapestere.

The roof hereof was arched over head,
And decked with flowers and *herbars* daintily.
Spenser. Faerie Queene.

In such a night
Medea gathered the enchanted *herbs*
That did renew old Æson. *Shakspeare.*

These *herbelets*, which we upon you strow. *Id.*

No substance but earth, and the procedures of earth, as tile and stone, yieldeth any moss or *herby* substance. *Bacon.*

We leave the description of plants to *herbals* and other like books of natural history. *Id.*

The German lord, when he went out of Newgate into the cart, took order to have his arms set up in his last *herborough*. *Ben Jonson.*

Unhappy, from whom still concealed does lie
Of *herbs* and roots the harmless luxury. *Cowley.*

There is a sort of stubborn weeds
Which if the earth but once, it ever breeds,
No wholesome *herb* can near them thrive,
No useful plant can keep alive. *Id.*

With sweet smelling *herbs*
Espoused Eve decked first her nuptial bed.
Milton.

As for the medicinal uses of plants, the large *herbals* are ample testimonies thereof *More.*

Such a plant will not be found in the *herbal* of nature. *Browne.*

Herbalists have distinguished them, naming that the male whose leaves are lighter, and fruit rounder. *Id.*

Ginger is the root of neither tree nor trunk; but an *herbaceous* plant, resembling the water flower-deluce. *Id.*

Herbarists have exercised a commendable curiosity in subdividing plants of the same denomination. *Boyle.*

Rocks lie covered with eternal snow;
Thin *herbage* in the plains, and fruitless fields. *Dryden.*

Herbs are those plants whose stalks are soft, and have nothing woody in them; as grass and hemlock. *Locke.*

He was too much swayed by the opinions then current amongst *herbarists*, that different colours, or multiplicity of leaves in the flower, were sufficient to constitute a specifick difference. *Ray.*

A curious *herbarist* has a plant, whose flower perishes in about an hour. *Id.*

At the time the deluge came, the earth was loaded with *herbage*, and thronged with animals. *Woodward.*

I was like to be pulled to pieces by brewer, butcher, and baker, even my *herbwoman* dunned me as I went along. *Arbuthnot.*

As to the fuci, their seed hath been discovered and shewed me first by an ingenious *herbarist*. *Derham.*

Their teeth are fitted to their food; the rapacious to catching, holding, and tearing their prey; the *herbaceous* to gathering and comminution of vegetables. *Id.*

If the leaves are of chief use to us, then we call them *herbs*; as sage and mint. *Watts's Logick.*

Our *herbals* are sufficiently stored with plants. *Baker.*

One cultivated spot there was that spread
Its flowery bosom to the noon-day beam,
Where many a rose-bud rears its blushing head,
And *herbs* for food with future plenty teem. *Beattie.*

Of *herbs* and cordials they produced their store,
But she defied all they could employ,
Like one life could not hold nor death destroy. *Byron. Don Juan.*

Herb, in botany, is used by Linnæus to denominate that portion of every vegetable which arises from the root, and is terminated by the fructification. It comprehends, 1. The trunk, stalk, or stem. 2. The leaves. 3. Those minute external parts called by him the fulcra, or supports, of plants. 4. The buds, or, as he also terms them, the winter quarters of the future vegetable.

Herbaceous Plants are those which have succulent stems or stalks that lie down to the ground every year. Of herbaceous plants those are annual which perish stem and root every year; biennial, which subsist by the roots two years; perennial, which are perpetuated by their roots for a series of years, a new stem being produced every spring.

Herbage, in law, signifies the pasture provided by nature for the food of cattle; also the liberty to feed cattle in the forest, or in another person's ground.

HERBELOT (Bartholomew d'), a French writer, eminent for his oriental learning, born at Paris in 1625. He travelled several times into Italy, where he obtained the esteem of some of the most learned men of the age. Ferdinand II., grand duke of Tuscany, gave him many marks of his favor: a library being exposed to sale at Florence, the duke desired him to examine the MSS. in the oriental languages, to select the best of them, and to mark the price; which being done, that generous prince purchased them, and made him a present of them. Colbert, being at length informed of Herbelot's merit, recalled him to Paris, and obtained a pension for him of 1500 livres: he afterwards became secretary and interpreter of the oriental languages, and royal professor of the Syriac tongue. He died at Paris in 1695. His principal work is entitled Bibliotheque Orientale, which he first wrote in Arabic and afterwards translated into French. It is greatly esteemed.

HERBERT (Edward), lord Herbert of Cherbury in Shropshire, an eminent English writer, born in 1581, and educated at Oxford. He travelled through Europe; and at his return was made knight of the Bath. James I. sent him ambassador to Louis XIII. in behalf of the protestants, who were besieged in several cities of France. He continued several years in this station. In 1625 he was created a baron by the title of lord Herbert of Castle Island; and, in 1631, by that of lord Herbert of Cherbury in Shropshire. On the breaking out of the civil wars he adhered to the parliament; and in 1644 obtained a pension, on account of his having been plundered by the king's forces. He wrote a History of the Life and Reign of Henry VIII. which was greatly admired; a treatise De Veritate; and several other works. He died at London in 1648. 'Lord Herbert,' says Mr. Granger, stands in the first rank of the public ministers, historians, and philosophers of his age. It is hard to say whether his person, his understanding, or his courage, was the most extraordinary; as the fair, the learned, and the brave, held him in equal admiration. But the same man was wise and capricious; redressed wrongs, and quarrelled for punctilios; hated bigotry in religion, and was himself a bigot in philosophy.'

Lord Herbert, in fact, was the advocate of a Natural Religion, an attention to which he conceived might supersede the uses of Revelation. He mentions an incident in connexion with the publication of his most celebrated work, which should not escape the modern impugners of miracles:—Being in his chamber, he says, doubtful as to the propriety of publishing his book, on one fair day in summer, his casement opening to the south, the sun shining clear, and no wind stirring, 'I took my book De Veritate in my hand, and, kneeling devoutly on my knees, said these words: 'O thou eternal God, author of the light which now shines upon me, and giver of all inward illuminations, I do beseech thee of thy infinite goodness to pardon a greater request than a sinner ought to make: I am not satisfied enough whether I shall publish this book De Veritate; If it be for thy glory, I beseech thee give me some *sign from heaven*, if not I shall suppress it.' I had no sooner spoke these words

but a loud, though yet gentle noise came from the heavens (for it was like nothing on earth), which did so comfort and cheer me, that I took my petition as granted, and that I had the sign demanded.' Of the truth of this narrative he makes the most solemn assertions, and there is no reason to doubt that he fully believed it.

HERBERT (George), an English poet and divine, brother to Edward, was born in 1593, and educated at Cambridge. In 1619 he was chosen public orator of that university, and afterwards obtained a sinecure from the king. In 1626 he was appointed prebendary of Leighton Bromswold, in the diocese of Lincoln, and in 1630 rector of Bemerton, near Sarum. The great lord Bacon had such an opinion of his judgment, that he would not suffer his works to be printed before they had passed his examination. He wrote a volume of devout poems, called The Temple, and a prose work, entitled The priests to the Temple, or The Country Parson, &c. He died about 1635.

HERBERT (Mary), countess of Pembroke, sister of the famous Sir Philip Sidney, and wife of Henry earl of Pembroke. She was not only a lover of the Muses, but a great encourager of polite literature. Her brother dedicated his Arcadia to her. She translated a dramatic piece from the French, entitled Antonius, a tragedy. She also turned the Psalms of David into English metre; but it is doubtful whether these works were ever printed. She died in 1621. The following well known epitaph was written on her by Ben Jonson:—

> Underneath this sable hearse
> Lies the subject of all verse,
> Sidney's sister, Pembroke's mother:
> Death! ere thou hast killed another,
> Fair, and good, and learn'd as she,
> Time shall throw a dart on thee.

HERBERT (William), a modern bibliographical writer, was a native of Hertfordshire, and was educated at Hitchin. He carried on trade for some years as a hosier, in London; and subsequently went out to the East Indies as a purser's clerk. Here he employed his time in making charts and plans of the coasts and harbours, for which he obtained a handsome acknowledgment from the East India Company on his return. He then commenced business as a map and print seller, in which he was so successful as to be enabled to purchase an estate at Cheshunt. He now reprinted Sir Robert Atkyns's History of Gloucestershire: but his chief literary labor was an edition of Ames's Typographical Antiquities; or Account of the Origin and Progress of Printing in Great Britain and Ireland, considerably augmented, 1785—1790, 3 vols. 4to. He died at Cheshunt in 1795, aged seventy-six.

HERBINIUS (John), a native of Birschen in Silesia, born in 1632. He wrote a work entitled De Statu Ecclesiarum Augustanæ Confessionis in Poloniâ; 4to., 1670: and several curious tracts on cataracts and waterfalls, also in Latin. He died in 1676, aged forty-four.

HERBORN, a town of Germany, on the Dill, in the duchy of Nassau. Here is a celebrated high school, founded in 1584, which has the privileges of a university; and an academy having four teachers. Population 2400. Three miles S. S. E. of Dillenburg.

HERBST (John Frederick William), a German entomologist, was born November 1st 1743, at Petershagen, in the principality of Minden; After having been for some years a teacher at Berlin he obtained the situation of almoner to a Prussian regiment; and, his talents becoming known, he was appointed preacher in several churches of Berlin. He is, however, principally known as a naturalist; was director of the society of Friends of Natural History at Berlin; of the Royal Academy of Bavaria at Burghausen; and of the Economical Society of Potsdam. His death took place November 5th 1807. He was the author of treatises on the natural history of crustaceous animals, insects, worms, scarabæi, butterflies, and apterous insects; all which works were published collectively at Berlin, 1785—1804, under the title of a Natural System of all the known Insects, indigenous and exotic, with plates. Collections of his sermons have also been published.

HERCULANEUM, an ancient city of Campania in Italy, which together with Pompeii was destroyed by an eruption of Vesuvius in the first year of the emperor Titus, or the seventy-ninth of the Christian era, and lately rendered famous on account of the curious monuments of antiquity discovered in its ruins: of these we purpose giving a detailed account under the article POMPEII AND HERCULANEUM.

The epocha of the foundation of Herculaneum is unknown. Dionysius Halicarnassensis conjectures that it may be referred to sixty years before the war of Troy, or about A. A. C. 1242; and therefore that it lasted about 1300 years. The thickness of the heap of lava, by which the city was overwhelmed, has been much increased by fiery streams vomited since that catastrophe; and now forms a mass twenty-four feet deep of dark gray stone, which is easily broken to pieces. The precise situation of this subterraneous city was not known till 1713, when it was accidentally discovered by some laborers, who, in digging a well, struck upon a statue on the benches of the theatre. Many others were afterwards dug out, and sent to France by the prince of Elbœuf. But little progress was made in the excavations till Charles, infant of Spain, ascended the Neapolitan throne, by whose unwearied efforts and liberality a very considerable part of Herculaneum was explored. A large portion of these relics is deposited in a museum at Porteci, and in the royal palace at Naples. Of these the most valuable are doubtless the MSS., which are all however calcined, and a number of them, when exposed to the air, sunk to dust. Among the 1800 preserved, it has long been expected that some of the missing classics may be found. Those first examined were Greek; but a portion of them have been found to be in Latin. A plan for unrolling these MSS. was first invented by a Neapolitan monk; and his present majesty, when prince of Wales, undertook to defray the expense of this proceeding, and sent out Mr. Hayter, an English clergyman, to superintend it.

See HAYTER. But in 1806 the occupation of Naples by the French stopped his labors, the fruits of which were presented by the prince regent to the university of Oxford: no distinct account of them has as yet been given to the public. See POMPEII.

HERCULES, in fabulous history, a renowned hero, who after death was ranked among the gods, and received divine honors. According to the ancients, there were many persons of this name. Diodorus mentions three, Cicero six, and some Greek authors enumerate forty-three, either because several persons thought to do themselves honor by assuming this name, or, perhaps, because Hercules was not a proper name, but an appellative, derived, as Le Clerc conjectures, from the Phœnician word Harokel, merchant; and this learned author alleges, that the name was formerly given to the famous traders who migrated for the discovery of new countries, and for planting colonies there, and who frequently signalised themselves by clearing them of the wild beasts, &c. Of all these, one generally called the Theban Hercules is the most celebrated; and to him the actions of the others have been attributed. He is reported to have been the son of Jupiter by Alcmena (wife to Amphitryon, king of Argos), whom Jupiter enjoyed in the shape of her husband, while he was absent. Amphitryon, having soon after accidentally killed his uncle and father-in-law Electryon, was obliged to fly to Thebes, where Hercules was born. The jealousy of Juno prompting her to destroy the infant, she sent two serpents to kill him in the cradle, but young Hercules strangled them both. He was early instructed in the liberal arts: Castor, the son of Tyndarus, taught him to fight; Eurytus, to shoot; Autolycus to drive a chariot; Linus to play on the lyre; and Eumolpus to sing; while the instructions of Chiron, the centaur, rendered him the most valiant and accomplished hero of the age. In his eighteenth year he delivered the neighbourhood of Mount Cithæron from a huge lion, which preyed on the flocks of Amphitryon, and laid waste the adjacent country. He went to the court of Thespius, king of Thespes, who shared in the general calamity, by whom he was hospitably entertained for fifty days; during which time, or as some say even in one night, he debauched the king's fifty daughters. He next delivered his country from the tribute of 100 oxen, annually paid to Erginus. Such public services became universally known; and Creon, king of Thebes, rewarded his patriotic deeds by giving him his daughter in marriage, and entrusting him with the government. Eurystheus, the son of Amphitryon, having succeeded his father, became jealous of Hercules; and, lest he should deprive him of his crown, left no means untried to get rid of him. On this, Hercules consulted the oracle; but, being answered that it was the pleasure of the gods that he should serve Eurystheus twelve years, he fell into a deep melancholy, which at last ended in a furious madness; during which, among other desperate actions, he put away his wife Megara, and murdered all the children he had by her. As an expiation of this crime, the king imposed upon him twelve labors, surpassing the power of all other mortals to accomplish, which, nevertheless, our hero performed with ease, the favors of the gods having indeed completely armed him. He had received a coat of armour and helmet from Minerva, a sword from Mercury, a horse from Neptune, a shield from Jupiter, a bow and arrows from Apollo, and from Vulcan a golden cuirass and brazen buskin, with a celebrated club of brass. His first labor was the killing of a lion in Nemæa, a wood of Achaia; whose hide was proof against any weapon, so that he was forced to seize him by the throat and strangle him. He carried the dead beast on his shoulders to Mycenæ, and ever after clothed himself with the skin. Eurystheus was so astonished at the sight of the beast, and at the courage of Hercules, that he ordered him never to enter the gates of the city when he returned from his expeditions, but to wait for his orders without the walls. He even got a brazen vessel made, into which he retired whenever Hercules returned. The second labor was to destroy the Lernæan hydra, which had seven heads according to Apollodorus, fifty according to Simonides, and 100 according to Diodorus. This monster he first attacked with his arrows; but soon after, by means of his heavy club, he destroyed the heads of his enemy. This, however, was productive of no advantage; for as soon as one head was beaten to pieces by the club, two sprang up; and the labor of Hercules would have remained unfinished, had not he commanded his friend Iolaus to burn with a hot iron the root of the head which he had crushed to pieces. This succeeded; and Hercules became victorious, opened the belly of the monster, and dipped his arrows in the gall, to render the wounds they should give incurable. He was ordered in his third labor to bring alive and unhurt into the presence of Eurystheus a stag, famous for its incredible swiftness, its golden horns, and brazen feet. This celebrated animal frequented the neighbourhood of Œnoe; and Hercules was employed for a whole year in pursuing it; at last he caught it in a trap, when tired. The fourth labor was to bring alive to Eurystheus a wild boar which ravaged the neighbourhood of Erymanthus. In this expedition he destroyed the centaurs, and caught the boar by closely pursuing him through the deep snow. Eurystheus was so frightened at the sight of the boar, that, according to Diodorus, he hid himself in his brazen vessel for some days. In his fifth labor Hercules was ordered to cleanse the stables of Augeas, where 3000 oxen had been confined for many years. For his sixth labor he was ordered to kill the carnivorous birds which ravaged the country near the lake Stymphalus in Arcadia. In his seventh labor he caught alive, in the Peleponnesus, a prodigious wild bull, which laid waste the island of Crete. In his eighth labor he was employed in obtaining the mares of Diomedes, king of Thrace, which fed upon human flesh. He killed Diomedes, and gave him to be eaten by his mares, which he brought to Eurystheus, who sent them to Mount Olympus, where they were devoured by wild beasts;

though some say they were consecrated to Jupiter, and that a breed of them still existed in the age of Alexander the Great. For his ninth labor, he was commanded to obtain the girdle of the queen of the Amazons. In his tenth labor he killed the monster Geryon, king of Gades, and brought to Argos his numerous flocks, which fed upon human flesh. This was in Iberia or Spain; in the furthest parts of which he erected his two pillars as the utmost limits of the then known world. These ten labors he achieved in about eight years. In this last expedition he likewise killed Antæus, a monstrous giant, who, when weary with wrestling or labor, was immediately refreshed by touching his mother the Earth. Hercules overcame him in wrestling, and slew him; and after him the tyrant Busiris, king of Egypt, who used to sacrifice all strangers upon his altars; but was slain by Hercules, with all his attendants. His eleventh labor was the carrying away the Hesperian golden apples kept by a dragon. See HESPERIDES. The twelfth and last, and most dangerous of his labors, was to bring up to the earth the three-headed dog Cerberus. Descending into hell by a cave on mount Tænarus, he was permitted by Pluto to carry away his friends Theseus and Pirithous, who were condemned to punishment in hell, and Cerberus also was granted to his prayers, provided he made use of no arms to drag him away. Hercules carried him back to hell after he had brought him before Eurystheus. Many other exploits were performed by Hercules. He accompanied the Argonauts to Colchis before he delivered himself up to Eurystheus. He assisted the gods in their wars against the giants, and it was through him that Jupiter obtained the victory. He conquered Laomedon, and pillaged Troy. When Iole, the daughter of Eurytus king of Œchalia, of whom he was deeply enamoured, was refused to his entreaties, he fell into a second fit of insanity, and murdered Iphitus, the only one of the sons of Eurytus who favored his addresses to Iole. He was afterwards purified of the murder, and his insanity ceased; but he was visited by a disorder which obliged him to apply to the oracle of Delphi for relief. The coldness with which the Pythia received him irritated him, and he resolved to plunder Apollo's temple, and carry away the sacred tripod. Apollo opposed him, and a severe conflict was begun, which nothing but the interference of Jupiter could have settled. He was upon this told by the oracle that he must be sold as a slave, and remain three years in the most abject servitude to recover from his disorder. He complied, and Mercury, by order of Jupiter, conducted him to Omphale, queen of Lydia, to whom he was sold as a slave. Here he cleared all the country from robbers; and Omphale, astonished at the greatness of his exploits, married him. Hercules had Agelaus and Lamon by Omphale, from whom Crœsus king of Lydia was descended. He became also enamoured of one of Omphale's female servants, by whom he had Alcæus. After he had completed the years of his slavery, he returned to Peloponnesus, where he restored to the throne of Sparta Tyndarus, who had been expelled by Hippocoon. He became one of Dejanira's suitors, and, after overcoming all his rivals, married her. He was obliged to leave his father-in-law's kingdom Calydon, because he had inadvertently killed a man with a blow of his fist; and on this account he was not present at the hunting of the Calydonian boar. From Calydon he retired to the court of Ceyx king of Trachina, who received him and his wife with great marks of friendship, and purified him of the murder which he had committed at Calydon. He next made war against Eurytus, who had refused him his daughter Iole, and killed him with three of his sons. Iole fell into his hands, and accompanied him to mount Œta, where he intended to offer a solemn sacrifice to Jupiter. As he had not then the shirt and tunic in which he sacrificed, he sent Lichas to Trachin to Dejanira, to provide him a proper dress. Dejanira had some time before been attempted by the Centaur Nessus, as he was ferrying her over the river Evenus; and Hercules, beholding it from the shore, had mortally wounded him with one of his poisoned arrows. Nessus finding himself dying, advised her to mix some oil with the blood which flowed from his wound, and to anoint her husband's shirt with it, pretending that it would infallibly secure him from loving any other woman; and she, apprized of his inconstancy, had actually prepared the poisoned ointment accordingly. Lichas, coming to her for the garments, acquainted her with his having brought away Iole; upon which she anointed his shirt with the fatal mixture. This had no sooner touched his body than he felt the poison diffused through his veins; the violent pain of which made him disband his army, and return to Trachin. His torment increasing, he sent to consult the oracle for a cure; and was answered, that he should cause himself to be conveyed to mount Œta, and there rear up a pile of wood, and leave the rest to Jupiter. Having obeyed the oracle, and his pains becoming intolerable, he dressed himself in his martial habit, flung himself upon the pile, and desired the bystanders to set fire to it; or, as others say, his son Philoctetes, who, having performed his father's command, had his bow and arrows given him as a reward. At the same time Jupiter sent a flash of lightning, which consumed both the pile and the hero; Iolaus, coming to take up his bones, found nothing but ashes; from which it was concluded, that he was gone to heaven, and admitted among the gods. His friends raised an altar where the burning pile had stood; and Menœtius the son of Actor sacrificed a bull, a wild boar, and a goat; and enjoined the people of Opus to observe these ceremonies annually. His worship soon became as universal as his fame; and Juno, forgetting her resentment, gave him her daughter Hebe in marriage. Hercules has many surnames, from the places where his worship was established, and from the labors he had achieved. His temples were numerous and magnificent, and his divinity revered. No dogs or flies entered his temple at Rome: and that of Gades, according to Strabo, was always forbidden to women and pigs. The Phœnicians offered quails on his altars; and, as he was

supposed to preside over dreams, the sick and infirm were sent to sleep in his temples, that they might receive in their dreams the agreeable presages of their approaching recovery. The white poplar was particularly dedicated to his service. None even of the twelve great gods of antiquity have so many ancient monuments as Hercules. The famous statue of Hercules, in the Farnese palace at Rome, is well known to the connoisseurs. It represents him resting after the last of his twelve labors above recited, leaning on his club, and holding the apples of the Hesperides in his hand. In this statue, as in all the other figures of him, he is formed, by the breadth of his shoulders, the spaciousness of his chest, the largeness of his size, and firmness of his muscles, to express strength and a capacity of enduring great fatigue, which constituted the chief idea of virtue among the ancient heathens. His other attributes are his lion's skin, his club, and his bow. Hercules is represented by the ancients as an exemplar of virtue: however, the Hercules bibax, or drunken Hercules, is no uncommon figure; and his amours are described both by the poets and artists. Thus the Cupids are made to take away his club, and he is exhibited in the posture of bending under a little boy; by which is meant, that he who conquered all difficulties was a slave to love. His children were as numerous as the labors and difficulties which he underwent; and indeed they became so powerful soon after his death, that they alone had the courage to invade Peloponnesus. See HERACLIDÆ. The apotheosis of Hercules, or the establishment of his altars in the principal cities of Greece, is fixed by Thrasybulus twenty-nine years before the taking of Troy. Hercules has been honored by the Greeks by the name of Musagetes, the conductor of the Muses; and at Rome by that of Hercules Musarum. He is represented on medals with a lyre in his hand; and the reverse is marked with the figure of the nine Muses, with their proper symbols.

HERCULES, in astronomy, a constellation of the northern hemisphere. See ASTRONOMY.

HERCULES'S PILLARS, in ancient geography, two lofty mountains, one situated on the most southern extremity of Spain, and the other on the opposite part of Africa. They were called ABYLA and CALPE (see those articles); were reckoned the boundaries of the labors of Hercules; and were fabled to have been joined together till they were severed by that hero, and a communication opened between the Mediterranean and Atlantic.

HERCYNA, a river of Bœotia, issuing from a rock in two streams, near the town of Livadia. One from its muddy appearance was called by the ancients by the name of Lethe or Oblivion; the other Mnemosyne, or Memory, being a small limpid stream.

HERCYNIA SILVA, the Hercynian Forest, in ancient geography, the largest of forests. Its breadth was a journey of nine days. From the limits of the Helvetii, Nemetes, and Rauraci, it extended along the Danube to the borders of the Daci and Anartes, a length of sixty days' journey, according to Cæsar, who appears to have been well acquainted with its true breadth, as it occupied all Lower Germany. It may therefore be considered as covering the whole of Germany; and most of the other forests may be considered as parts of it, though distinguished by particular names; consequently the Hartz, in the duchy of Brunswick, which gave name to the whole, was one of its parts. By the Greeks it was called Orcynius, a name common to all the forests in Germany; and Hercynius by the Romans; both from the German Hartz.

HERD, *n. s.*, *v. a.* & *v. n.*
HERD'GROOM, *n. s.*
HERD'MAN, *n. s.*
HERDS'MAN, *n. s.*
} Saxon þeoꝛꝺ; Goth. *herd*; Swed. *herde*; originally signifying a guard or keeper, then the flock or thing guarded. A number of beasts together; a word peculiarly applicable to black cattle: a company of men, in contempt or detestation; anciently a keeper of cattle, as goatherd: herd, to run in companies; to associate; to throw or put into a herd. The other words signify persons employed in keeping and tending herds; or the owners thereof.

Almighty Lord! o Jesu Crist! quod he,
Sower of chast conseil! *hierde* of us alle!
Chaucer. The Second Nonnes Tale.

'Ther n'as baillif, ne *herde*, ne other hine,
That he ne knew his sleight and his covine.
Id. Prologue to the Cant. Tales.

And many a floite, and litlyng horne,
And pipes made of greenè corne,
As have these little *herdegromes*
That kepen bestes in the bromes.
Id. The House of Fame.

But who shall judge the wager won or lost?
That shall yonder *herdgroom*, and none other.
Spenser.

And you, enchantment,
Worthy enough a *herdsman*, if e'er thou
These rural latches to his entrance open,
I will devise a cruel death for thee.
Shakspeare.

Note a wild and wanton *herd*,
Or race of youthful and unhandled colts,
Fetching mad bounds. *Id.*

The rest,
However great we are, honest and valiant,
Are *herded* with the vulgar.
Ben Jonson's Catiline.

Scarce themselves know how to hold
A sheephook, or have learned ought else the least
That to the faithful *herdman's* art belongs.
Milton.

There oft the Indian *herdsman*, shunning heat,
Shelters in cool and tends his pasturing *herds*
At loop-holes cut through thickest shade. *Id.*

A *herdsman* rich, of much account was he,
In whom no evil did reign, or good appear.
Sidney.

So stands a Thracian *herdsman* with his spear
Full in the gap, and hopes the hunted bear.
Dryden.

The *herdsmen*, round
The chearful fire, provoke his health in goblets crowned. *Id.*

Survey the world, and where one Cato shines,
Count a degenerate *herd* of Catilines. *Id.*

Weak women should, in danger, *herd* like deer.
Id.

I do not remember where ever God delivered his oracles by the multitude, or nature truth by the *herd*.
Locke.

When their *herdsmen* could not agree, they parted by consent. *Id.*

Run to towns, to *herd* with knaves and fools,
And undistinguished pass among the crowd.
Walsh.

It is the nature of indigency. like common danger, to endear men to one another, and make them *herd* together, like fellow sailors in a storm. *Norris.*

There find a *herd* of heifers, wandering o'er
The neighbouring hill, and drive them to the shore.
Addison.

I'll *herd* among his friends, and seem
One of the number. *Id. Cato.*

I disdained to mingle with
A *herd*, though to be leader—and of wolves,
The lion is alone, and so am I. *Byron.*

HERDER (John Godfrey), a German Lutheran divine, and moral philosopher, was a Prussian by birth, and obtained the office of Ecclesiastical superintendant-general of the duchy of Saxe Weimar. He was also first preacher to the court, and vice-president of the consistory. He distinguished himself by his writings on the belles lettres; but his works relative to Ethics and Intellectual Philosophy attracted most notice. The following are the titles of some of his works, Lays of Love, the oldest and most beautiful specimens of Oriental Poetry, with twenty-four ancient lays of the Minnesingers, Leipsic, 1778, 8vo.; Scattered Leaves, Gotha, 1791-1796, 6 vols, 12mo.; Letters on the Improvement of Human Nature, Riga, 1793-1796, 8 vols. 8vo.; Intellect and Experience; a Meta-criticism on the Criticism of Pure Reason, i. e. the Philosophy of Kant, 1799, 2 vols. 8vo.; Popular Songs; Poems; Terpsichore, 3 vols. 8vo.; a treatise on the Origin of Language. But the work by which Herder is principally known in England is the Outlines of a Philosophy of the History of Man; of which a translation was published in London in 1800. He died in 1803; and a collection of his writings has since appeared in 26 vols. 8vo.

HERE, *adv.* Sax. þeŋ; Teut. *hier*; Lat. *hic*. In this place; in the present state. Here is often opposed to those in one place as distinguished from another; it is used in making an offer. Hereabouts implies vicinity; hereafter, futurity: hereat, hereby, the occasion or subject by which any effort is produced: the meaning of the other words is obvious; all the compounds excepting hereafter are obsolete; heretofore is formerly; anciently.

HERE'ABOUT, *adv.*
HEREAF'TER, *adv.* & *n. s.*
HEREAT', *adv.*
HEREBY', *adv.*
HEREIN', *adv.*
HEREIN'TO, *adv.*
HEREOF', *adv.*
HEREON', *adv.*
HEREOUT', *adv.*
HERETO', *adv.*
HERE'TOFORE, *adv.*
HERE'UNTO, *adv.*
HEREWITH', *adv.*

If any of you wol of devotion.
Offren, and han min absolution,
Cometh forth anon, and kneleth *here* adoun,
And makely recieveth my pardoun.
Chaucer. The Pardonere's Tale.

You, fair sir, be not *herewith* dismaid,
But constant keep the way in which ye stand.
Spenser.

A bird all white, well feathered on each wing,
Here out up to the throne of God did fly. *Id.*

One man coming to the tribune, to receive his donative, with a garland in his hand, the tribune offended *hereat*, demanded what this singularity could mean? *Hooker.*

In what estate the fathers rested, which were dead before, it is not *hereby* either one way or other determined. *Id.*

How highly soever it may please them with words of truth to extol sermons, they shall not *herein* offend us. *Id.*

Because the point about which we strive is the quality of our laws, our first entrance *hereinto* cannot better be made than with consideration of the nature of law in general. *Id.*

Good-night; mine eyes do itch;
Doth that bode weeping?
—'Tis neither *here* nor there.
Shakspeare. Othello.

We are come to see thee fight, to see thee foigne, to see thee traverse, to see thee *here*, to see thee there. *Id.*

How worthy he is, I will leave to appear *hereafter*, rather than story him in his own hearing. *Id.*

Before they *here* approach,
Old Siward, with ten thousand warlike men,
All ready at a point, was setting forth. *Id.*

Hereof comes it that prince Harry is valiant. *Id.*

My best endeavours shall be done *herein*. *Id.*

Bid them farewel, Cordelia, though unkind;
Thou loseat *here*, a better where to find. *Id.*

I would have in the heath some thickets made only of sweet-briar and honey-suckle, and some wild vine amongst; and the ground set with violets; for these are sweet, and prosper in the shade; and these to be in the heath *here* and there, not in order. *Bacon.*

You shall be happy *here*, and more happy *hereafter*. *Id.*

Herewith the castle of Hame was suddenly surprised by the Scots. *Hayward.*

Then this, then that man's aid, they crave, implore;
Post *here* for help, seek there their followers.
Daniel.

How wretched does Prometheus' state appear,
While he his second mis'ry suffers *here!* *Cowley.*

To-day is ours, we have it *here*. *Id.*

Here's to thee, Dick. *Id.*

I, upon my frontiers *here*,
Keep residence. *Milton.*

Here nature first begins
Her farthest verge. *Id.*

The grand-child, with twelve sons increased, departs
From Canaan, to a land *hereafter* called
Egypt. *Id.*

Hereby the Moors are not excluded by beauty, there being in this description no consideration of colours. *Browne.*

If we should strictly insist *hereon*, the possibility might fall into question. *Id. Vulgar Errors.*

I have long desired to know you *heretofore*, with honouring your virtue, though I love not your person. *Sidney.*

Hereafter he from war shall come,
And bring his Trojans peace. *Dryden.*

Then *here's* for earnest
'Tis finished. *Id.*

Here, here it lies; a lump of lead by day. *Id.*

He that rides post through a country may be able to give some loose description of *here* a mountain and there a plain, *here* a morass and there a river, woodland in one part, and savanas in another. *Locke.*

Your city, after the dreadful fire, was rebuilt, not presently, by raising continued streets; but at first *here* a house, and there a house, to which others by degrees were joined. *Sprat's Sermons.*

Since truths, absolutely necessary to salvation, are so clearly revealed that we cannot err in them, unless we be notoriously wanting to ourselves, *herein* the fault of the judgment is resolved into a precedent default in the will. *South.*

So near is the connection between the civil state and religious, that *heretofore* you will find the government and the priesthood united in the same person. *Id.*

'Tis the divinity that stirs within us;
'Tis Heaven itself that points out an *hereafter*,
And intimates eternity to man. *Addison's Cato.*

I saw *hereabouts* nothing remarkable, except Augustus's bridge. *Id. on Italy.*

I still shall wait
Some new *hereafter*, and a future state. *Prior.*

However, friend, *here's* to the king, one cries;
To him who was the king, the friend replies. *Id.*

If there be an *hereafter*,
And that there is conscience uninfluenced,
And suffered to speak out, tells every man,
Then must it be an awful thing to die,
More horrid yet to die by one's own hand.
Blair.

We now can form no more
Long schemes of life, as *heretofore*. *Swift.*

The acquisition of truth is of infinite concernment: *hereby* we become acquainted with the nature of things. *Watts.*

Here on the sharp spear mad with mortal pangs
The bird transfixed in bloody vortex whirls,
Yet fierce in death the threat'ning talon curls.
Beattie.

HERED'ITABLE, *adj.* HEREDIT'AMENT, *n. s.* HERED'ITARY, *adj.* HERED'ITARILY, *adv.* HER'ITABLE, *adv.* HER'ITAGE, *n. s.* Fr. *hereditaire*; Lat. *hæres*, *hæreditum*. Whatever may be occupied as an inheritance: hereditament, a law term denoting inheritance: hereditary, that which descends by right of inheritance; a birthright: heritable, whatever may be inherited: heritage, an inheritance or estate: in divinity, the people of God

O Lord, save thy people, and bless thine *heritage*. *Common Prayer.*

To thee and thine, *hereditary* ever
Remain this ample third of our fair kingdom. *Shakspeare.*

These old fellows
Have their ingratitude in them *hereditary*. *Id.*

He shall ascend
The throne *hereditary*, and bound his reign
With earth's wide bounds, his glory with the heavens. *Milton.*

By the canon law this son shall be legitimate and *heritable*, according to the laws of England. *Hale.*

Thus while the mute creation downward bend
Their sight, and to their earthly mother tend,
Man looks aloft, and with erected eyes
Beholds his own *hereditary* skies. *Dryden's Ovid.*

When heroic verse his youth shall raise,
And form it to *hereditary* praise. *Id. Virgil.*

Adam being neither a monarch, nor his imaginary monarchy *hereditable*, the power which is now in the world is not that which was Adam's. *Locke.*

He considers that his proper home and *heritage* is in another world, and therefore regards the events of this with the indifference of a guest that tarries but a day. *Rogers.*

Here is another, who thinks one of the greatest glories of his father was to have distinguished and loved you, and who loves you *hereditarily*. *Pope.*

HEREDITARY DISEASES. The opinion that certain diseases, such as scrophula, gout, &c., are hereditary, has been held by physicians ever since the days of Hippocrates, and indeed seems to be confirmed by the experience of mankind in all ages and countries. Dr. Brown, in his Elem. Med., affirms, that, 'A taint, transmitted from parents to their offspring, and celebrated under the appellation of hereditary, is a mere tale, or there is nothing in the fundamental part of this (the Brunonian) doctrine. The sons of the rich, who succeed to their father's estate, succeed also to his gout: Those who are excluded from the estate, escape the disease also, unless they bring it on by their own conduct. Though Peter's father may have been affected with the gout, it does not follow that Peter must be affected; because, by a proper way of life, that is, by adapting his excitement to his stamina, he may have learned to evade his father's disease. If the same person, who, from his own fault and improper management, has fallen into the disease afterwards by a contrary management, and by taking good care of himself prevents and removes the disease, as it has been lately discovered, what then is become of the hereditary taint?'—Such is Dr. Brown's reasoning against the existence of hereditary diseases; but the fallacy of such arguments need scarcely be pointed out. To say, that because, by the use of medicines, or, what is in fact the same thing, by a strict regimen, a person may avoid a certain disease, he therefore inherits no taint or liability to such diseases, is indeed a bold assertion. The observations of every day afford fresh proof that the diseases of the father but too generally descend, with some modification, to the children, either in the shape of weakness, or illness, or, as is more frequently the case, of liability to the same.

HEREDITARY HONORS have been long esteemed useful in a well-governed state, as tending to excite a laudable ardor and generous emulation in acts of virtue and heroism. We shall only quote a judicious sentiment delivered by Dr. Watson, bishop of Llandaff, in the house of lords, upon a question respecting the Scotch peerage, in February 1787:—'Whatever may be said of ancestry no man despises it, but he who has none to value himself upon; and no man will make it his pride, but he who has nothing better.'

HEREDITARY RIGHT, in the British constitution. The grand fundamental maxim upon which the jus coronæ, or right of succession to the throne of Britain depends, Sir William Blackstone takes to be this:—That the crown is, by common law and constitutional custom, hereditary; and this in a manner peculiar to itself: but that the right of inheritance may, from time to time, be changed or limited by act of parliament; under which limitations the crown still continues hereditary. 1. The crown is in general hereditary, or descendible to the next heir, on the death of the last king. All regal governments must be either hereditary or elective

and as there is no instance wherein the crown of England has ever been asserted to be elective, except by the regicides, on occasion of the trial of king Charles I., it must of consequence be hereditary. Yet, in thus asserting an hereditary right, a jure divino title to the throne is by no means intended. Such a title may be allowed to have subsisted under the theocratic establishments of the children of Israel in Palestine; but it never yet subsisted in any other country; save only so far as kingdoms, like other human fabrics, are subjected to the general and ordinary dispensations of Providence. Nor indeed have a jure divino and an hereditary right any necessary connexion with each other; as some have very weakly imagined. The hereditary right, which the laws of Britain acknowledge, owes its origin to the founders of our constitution, and to them only. This has been acquiesced in by general consent, and ripened by degrees into common law; the very same title that every private man has to his own estate. Lands are not naturally descendible, more than thrones: but the law has, for the benefit and peace of the public, established hereditary succession in the one as well as the other. It must be owned, an elective monarchy seems to be the most obvious, and best suited of any to the national principles of government, and the freedom of human nature; and accordingly we find from history, that, in the infancy and first rudiments of almost every state, the leader, chief magistrate, or prince, has usually been elective; and if the individuals who compose that state could always continue true to first principles, uninfluenced by passion or prejudice, unassailed by corruption, and unawed by violence, elective succession were as much to be desired in a kingdom as in other inferior communities. The best, the wisest, and the bravest man, would then be sure of receiving that crown which his endowments merited; and the sense of an unbiased majority would be dutifully acquiesced in by the few who were of different opinions. But history and observation inform us, that elections of every kind are too often brought about by influence, partiality, and artifice; and, even where the case is otherwise, these practices will be often suspected, and as constantly charged upon the successful, by a disappointed minority. This is an evil to which all societies are liable; as well those of a private and domestic kind, as the great community of the public, which regulates and includes the rest. But in the former there is this advantage, that such suspicions, if false, proceed no farther than jealousies and murmurs, which time will effectually suppress: justice may be remedied by legal means, by an appeal to those tribunals to which every member of society has virtually engaged to submit. Whereas, in the great and independent society, which every nation composes, there is no superior to resort to but the law of nature; no method to redress the infringements of that law, but the actual exertion of force. As, therefore, between two nations, complaining of mutual injuries, the quarrel can only be decided by the law of arms; so in one and the same nation, when the fundamental principles of their common union are supposed to be invaded, and more especially when the appointment of their chief magistrate is alleged to be unduly made, the only appeal that can be made is to the sword, and the only process by which the appeal can be carried on is that of a civil and intestine war. An hereditary succession to the crown is therefore now established, in this and most other countries, to prevent that periodical bloodshed and misery which the history of ancient imperial Rome, and the modern experience of Poland, show us to be the consequence of elective kingdoms. But, 2dly, as to the particular mode of inheritance. It in general corresponds with the feudal path of descents, chalked out by the common law in the succession to landed estates; yet with one or two material exceptions. Like them, the crown will descend lineally to the issue of the reigning monarch; as it did from king John to Richard II. through a regular pedigree of six lineal generations: as in them the preference of males to females, and the right of primogeniture among the males, are strictly adhered to. Thus Edward V. succeeded to the crown, in preference to Richard his younger brother, and Elizabeth his elder sister. Like them, on failure of the male line, it descends to the issue female; according to the ancient British custom remarked by Tacitus, solent fæminarum ductu bellare, et sexum in imperiis non discernere. Thus Mary succeeded to Edward VI; and the line of Margaret queen of Scots, the daughter of Henry VII. succeeded on failure of the line of Henry VIII. his son. But among the females, the crown descends by right of primogeniture to the eldest daughter only and her issue; and not, as in common inheritances, to all the daughters at once; the evident necessity of a sole succession to the throne having occasioned the royal law of descents to depart from the common law in this respect: and therefore queen Mary, on the death of her brother, succeeded to the crown alone, and not in partnership with her sister Elizabeth. Again, the doctrine of representation prevails in the descent of the crown, as it does in other inheritances; whereby the lineal descendants of any person deceased stand in the same place as their ancestor, if living, would have done. Thus Richard II. succeeded his grandfather Edward III. in right of his father the Black Prince, to the exclusion of all his uncles, his grandfather's younger children. Lastly, on failure of lineal descendants, the crown goes to the next collateral relations of the late king; provided they are lineally descended from the blood royal, that is, from that royal stock which originally acquired the crown. Thus Henry I. succeeded to William II.; John to Richard I.; and James I. to Elizabeth; being all derived from the Conqueror, who was then the only regal stock. But herein there is no objection (as in the case of common descents) to the succession of a brother, an uncle, or other collateral relation, of the half-blood; that is, where the relationship proceeds not from the same couple of ancestors (which constitutes a kinsman of the whole blood), but from a single ancestor only; as when two persons are derived from the same father and not from the same mother, or vice versa: provided only, that the one ancestor, from whom both are descended, be that from whose veins the blood-

royal is communicated to each. Thus Mary I. inherited to Edward VI., and Elizabeth inherited to Mary; all born of the same father, king Henry VIII., but all by different mothers. See Consanguinity. 3. The doctrine of hereditary right does by no means imply an indefeasible right to the throne. No man will assert this, who has considered our laws, constitution, and history, without prejudice, and with any degree of attention. It is unquestionably in the power of the supreme legislative authority of this kingdom, the king and both houses of parliament, to defeat this hereditary right; and, by particular entails, limitations, and provisions, to exclude the immediate heir, and vest the inheritance in any one else. And this is so extremely reasonable, that without such a power, lodged somewhere, our polity would be very defective. For, let us barely suppose that the heir apparent should be a lunatic, an ideot, or otherwise incapable of reigning; how miserable would the condition of the nation be, if he were also incapable of being set aside! It is therefore necessary that this power should be lodged somewhere; and yet the inheritance and regal dignity would be very precarious indeed, if this power were expressly and avowedly lodged in the hands of the subject only, to be exerted whenever prejudice, caprice, or discontent, should happen to take the lead. Consequently it can no where be so properly lodged as in the two houses of parliament, by and with the consent of the reigning king; who, it is not to be supposed, will agree to any thing prejudicial to the rights of his own descendants. And therefore, in the king, lords, and commons, in parliament assembled, our laws have expressly lodged it. 4. But fourthly, however the crown may be limited or transferred, it still retains its descendible quality, and becomes hereditary in the wearer of it. And hence, in our law, the king is said never to die in his political capacity; though, in common with other men, he is subject to mortality in his natural: because immediately upon the natural death of Henry, William, or George, the king survives in his successor. For the right of the crown vests, eo instanti, upon his heir; either the hæres natus, if the course of descent remains unimpeached, or the hæres factus, if the inheritance be under any particular settlement. So that there can be no interregnum; but, as Sir Matthew Hale observes, the right of sovereignty is fully invested in the successor by the very descent of the crown. And therefore, however acquired, it becomes in him absolutely hereditary, unless by the rules of the limitation it is otherwise ordered and determined: in the same manner as landed estates are, by the law, hereditary or descendible to the heirs of the owner; but still there exists a power, by which the property of those lands may be transferred to another person. If this transfer be made simply and absolutely, the lands will be hereditary in the new owner, and descend to his heir at law: but if the transfer be clogged with any limitations, conditions, or entails, the lands must descend in that channel, so limited and prescribed, and no other. See Succession.

HEREFORDSHIRE, a county of England, whose name is derived from its chief place Hereford i. e. the Army's ford, from its being a strong frontier station of the Saxon and English forces toward Wales. At the period of the Roman invasion Herefordshire was inhabited by the Silures, who also occupied the adjacent counties of Radnor, Monmouth, and Glamorgan, together with that part of Gloucestershire which lies westward from the Severn. In the British language this district was called indifferently by the names of Esslwg Gwent, and Ercinna, words implying an open country of downs, abounding with prospects: hence its inhabitants were denominated Gwyr Esyllwg, Gwr Esyllyr, &c., and, from their derivatives, Syllyrwys.

This county is bounded on the north by Shropshire, on the north-east and east by Worcestershire, on the south-east by Gloucestershire, on the south-west by Monmouthshire, on the west by Brecknockshire, and on the north-west by Radnorshire. Its form is nearly an ellipsis; but some detached parishes are situated beyond the general outline: of these, Farlow is surrounded by Shropshire; Rochford is included in the county of Worcester; and Lytton Hill in that of Radnor: a considerable tract of land called Futhog, with a few acres on the Devandin Hill, is insulated by Monmouthshire. Its greatest extent, from Ludford on the north to the opposite border near Monmouth on the south, is thirty-eight miles. Its greatest width, from Clifford on the west to Cradley on the east, is thirty-five miles. It includes about 80,000 acres, and is divided into eleven hundreds, containing 221 parishes, one city, and six market-towns.

The general aspect of Herefordshire is extremely beautiful: its surface being finely diversified, and broken by swelling heights. From these elevations the prospects are extremely fine; but peculiarly so from the Malvern Hills on the east, and the Hatterell, or Black Mountain, on the west. The fertility of the soil is great; and the county is clothed in almost perpetual verdure. The courses of the rivers and brooks may be traced from any of the adjacent eminences by the rich lines of wood which skirt their margins: much valuable timber is also scattered over the county in hedge-rows, as well as on the sides and summits of the knolls and higher elevations. Every part seems uniformly productive; except, perhaps, on the northern and western outskirts. The general character of the soil is a mixture of marle and clay, containing a large proportion of calcareous earth. The substance is mostly limestone of different qualities; in some parts, particularly near Snodhill Castle, assuming the properties of marble, and becoming beautifully variegated with red and white veins. Towards the western borders the soil is cold, and retentive of moisture, but still argillaceous, with a base of soft crumbling stone, which decomposes on exposure to the atmosphere; or of nodules of impure limestone. The eastern side of the county is principally a stiff clay, of great tenacity and strength, and in many places of a red color; a great proportion of the hundred of Wormelow, on the south, is a light sand. Deep beds of

gravel are occasionally met with in the vicinity of Hereford; and the sub-soil of several of the hills is of siliceous grit. Fullers'-earth is sometimes dug near Stoke; and red and yellow ochres, with tobacco-pipe-clay, are found in small quantities in different parts of the county. Iron ore has been met with in the parts bordering on Gloucestershire: but none has been dug of late years, though from the considerable quantities that have been discovered imperfectly smelted, and from the remains of hand-blomaries that have also been found, it has been thought that some iron works were established here as early as the Roman times.

Herefordshire is particularly famous as a cyder county; yet this, though a favorite object of its husbandry, is by no means the only one: cattle, sheep, swine, corn, hops, &c., have equally strong claims on the attention of the farmer. Plantations of fruit trees are found in every aspect, and in 'soil of every quality, and under every culture.' The most approved site is that which is open to the south-east, and sheltered in other points, but particularly in the opposite direction; for though Virgil and the other Roman poets celebrated the west wind as the most genial in Italy, and Philips, in his Poem on Cyder, recommended the same aspect,

> ——— the west, whose gentle warmth
> Discloses well the earth's all-teeming womb,
> Invigorating tender seeds; whose breath
> Nurtures the orange and the citron groves,
> Hesperian fruits, and wafts their odors sweet
> Wide through the air, and distant shores perfumes,

it is an unquestionable fact, that the westerly winds, and therefore a westerly exposure, are particularly unfavorable to the fruit trees of Herefordshire: they are more cold, as blowing over a considerable tract of the Welsh mountains, which are often covered with snow even late in the spring; and they are more unkind, because from that point proceeds a much more than equal proportion of those fogs and blue mists which Dr. Beale calls 'the disgusts of the Black Mountain.' This may be properly termed a woodland county; many species of trees growing up spontaneously, and becoming strong and vigorous in a very short period. The oak, elm, poplar, and willow, are particularly flourishing, but are seldom suffered to attain full maturity, unless on the estates of the nobility and most eminent landed proprietors. Coppice-wood is extremely abundant, the sides and summits of many of the hills and upland grounds being covered with extensive plantations. The ash coppices are very valuable and numerous: those of the alder are also plentiful in low and marshy situations; the former are regulated under a general system, and are cut about once in eight, ten, or twelve years, according to the uses for which the wood is designed. The principal part of the county is enclosed; and as most of the enclosures are bounded by hedge-rows, it has a very sylvan and woody appearance.

The principal rivers and streams of this county are the Wye, the Lugg, the Munnow, the Arrow, the Frome, the Team, and the Leddon. The Wye has been often celebrated for the extremely picturesque and diversified scenery which adorns its meandering channel. Rising near the summit of the Plinlimmon Hills, in Montgomeryshire, it flows between the counties of Brecknock and Radnor, and afterwards enters Herefordshire near Clifford, the reputed birth-place of the ill-fated fair Rosamond. Winding to the east, above Clifford Castle, it glides beautifully between orchards, meadows, and corn-fields, till it reaches the abrupt and commanding eminence of Mawbech Hill: thence, darting suddenly through the bold arches of Bredwardine bridge, it flows on to Hereford, through a more level but still extremely pleasant country. From Hereford to Ross, its features occasionally assume greater boldness; though more frequently their aspect is placid: but at the latter town, wholly emerging from its late state of apparent repose, it resumes the brightness and rapidity of its primitive character, as it forms the admired curve which the church-yard of Ross commands. The celebrated spire of Ross church, peeping over a noble row of elms, here fronts the ruined Castle of Wilton, beneath the arches of whose bridge the Wye flows through a charming succession of meadows, encircling at last the lofty and well-wooded hill crowned with the majestic fragments of Goodrich Castle, and opposed by the waving eminences of the Forest of Dean. The mighty pile or peninsula of Symond's Rock succeeds, round which the river flows in a circuit of seven miles; though the opposite points of the isthmus are only one mile asunder. Shortly afterwards the Wye quits the county, and enters Monmouthshire at the New Wear.

This river is navigable to Hereford in barges of from eighteen to forty tons; but either a large or a small supply of water is equally fatal to the navigation. The latter is experienced during the greater part of every dry summer, when shoals barely covered with the stream occur very frequently: in winter, heavy rains, or snow dissolving on the river's banks, within the county, have the effect of gradually adding a few inches to the depth; but when these rush into its channel, from the mountains of Brecknock and Radnorshire, they occasion an almost instantaneous overflow, and give it a force which defies all the ordinary means of resistance and control. By this impetuosity considerable quantities of land are frequently removed from their situations on one side or the other, and new channels are thus formed in various places: to this impetuosity is also to be ascribed the want of a sufficient number of bridges to render the communication safe and easy between different parts of the county. In the whole extent of the Wye through Herefordshire there was only one bridge (at Hereford) till the year 1597. An act of parliament was then obtained for erecting a second at Wilton; and since that time two more have been added; the one at Bredwardine, by an act passed in the year 1762; and the other at Witney, by an act passed in 1780. That at Bredwardine, which is built of brick, after sustaining some damage by the great flood of 1795, has continued to resist the impetuosity of the river; but

that of Witney has been already twice destroyed, and was again renewed on stone piers in the year 1802. The principal fish taken in the Wye is the salmon, which is found in it at all times, but only in perfection between the months of December and August. They were formerly more abundant than at present; so much so indeed, that, in the indentures of apprenticeship at Hereford, it was once a clause that the apprentice should not be compelled to live on them more frequently than two days in a week. Their passage up the river is now, however, so much obstructed by iron works, that unless the water is swelled far above its usual height, they cannot advance.

The river Lugg has its origin in Radnorshire, but enters Herefordshire on the north-west side, near Stapleton Castle: thence, flowing in a south-east direction, it receives the Pinsley near Leominster; and afterwards, inclining to the south, is increased by the waters of the Arrow and the Frome. Soon after its junction with the latter river it falls into the Wye, near the pleasant village of Mordisford. The district of country through which this river flows is fine and fertile, but far less abundant in beautiful scenery than the Wye; though Drayton has characterised the Lugg as 'more lovlie.' Like the Wye, however, it is subject to sudden overflows, and is frequently swelled by partial rains, which give it great rapidity and force to its junction with that river. These circumstances have operated to prevent its being rendered navigable, though two acts of parliament have been passed for that purpose. The Munnow rises on the Herefordshire side of the Hatterell mountains, and flowing south-eastward is joined near Longtown by the Escle and Olchron rivulets, which have their springs also near the sources of the Munnow: thence flowing southward, through a pleasant and sequestered vale, it is joined near Alterynnis by the Hothny; after which it turns to the north-east towards Pontrilas, and near that place is increased by the united streams of the Dove and the Werme, which also rise in this county; the former at Dorston (Dore's town), and the latter at Alansmoore. Again, turning to the south-east, it forms the boundary between Herefordshire and Monmouthshire, till it quits the county at Llanrothal, and flowing towards Monmouth is received by the river Wye immediately below that town. The Team or Teme enters this county from the confines of Radnorshire and Shropshire, a short distance north-west from Brampton Bryan, and flowing eastward runs into Shropshire, near Ludlow: thence bending to the south it again enters Herefordshire, but soon leaves it for Worcestershire; where, having made a considerable circuit, it once more flows on the borders of this county, of which it becomes the boundary for a mile or two above and below Whiteborn; after which it discharges itself into the Severn, between Malvern Chace and Woodbury Hill in Worcestershire. In the muscle-shells of this river pearls have occasionally been found. The Leedon, or Leddon, rises above Bosbury on the east side of the county, and running to the south gives name to the town of Ledbury; thence flowing into Gloucestershire it unites with the Severn. The Arrow enters Herefordshire from Radnorshire, and flowing to the east falls into the Lugg below Leominster. The Frome rises near Wolfrelow above Bromyard, and taking a south course is joined by the Lowden near Stretton Grandison; when turning to the south-west it unites with the Lugg above Mordisford. The inland navigation of Herefordshire is very imperfect; though scarcely any county possessing neither iron-works nor any principal manufacture can have greater occasion for its aids. Some medicinal springs have been noticed as rising on the side of the Malvern Hills, and known among the peasantry by the customary name of Holy-wells. Several petrifying springs are also met with in the neighbourhood of Moccas, Fownhope, Llanrothal, Wormesley, &c., and other hilly parts of the county where the soil is calcareous. Near Richard's Castle a small spring has obtained the name of Bonewell, from the circumstance of its frequently emitting, when disturbed, small bones resembling vertebræ and other bones of the frog.

Herefordshire returns eight members to parliament, viz. two for the county, two for the city of Hereford, two for Leominster, and two for Weobly.

Robert Devereux, the celebrated earl of Essex, was born at Netherwood in this county in 1567. —He was beheaded in 1601.—Captain James Cornwall, an excellent naval commander, was born at Bredwardine Castle, and was killed off Toulon, a chain shot depriving him of both his legs, on February 27th, 1743.—He has a noble monument in Westminster Abbey, thirty-six feet high.—David Garrick, the British Roscius, was born at Hereford in 1716, and died in 1779.—Nor must we omit to notice, among the eminent persons of this county, the famous Eleanor Gwynn, the celebrated courtezan in the reign of Charles II.—She died in 1687.—It has been also said that John Kyrle, Pope's Man of Ross, was born at Ross, and died in the year 1724, aged ninety. With an income of £500 per annum he was a blessing to the whole county.—Hereford is a bishop's see, and gives the title of viscount to the Devereux family.—Besides the making of cyder, which is very extensive, this county manufactures coarse woollen cloth, hats, and gloves.

Hereford, the capital of the above county, is situated on a gentle eminence from the river Wye, on the northern bank of which it stands near the centre of the county. This town was a strong station for the Saxon and English forces. By some it is supposed to have been built on the site of Ariconium, an ancient town mentioned by Antoninus, which was destroyed by an earthquake. A church was built here early in the ninth century by king Melfred, the Mercian, in memory of Ethelbert, king of the East Angles, murdered by king Offa's queen at Marden, in this neighbourhood. Soon after it became a cathedral and a bishop's see: the cathedral was rebuilt by bishop Athelstan between 1012 and 1056. At the Norman conquest it was in ruins; the Welsh having, in the reign of Edward the Confessor, destroyed the cathedral, sacked the city, and carried off the bishop. The present

cathedral was begun by the second Norman bishop, Robert de Losin, on the model of the church of Aix-la-Chapelle, and completed by his successor. In 1786 its large western tower fell down, but it has since been tastefully rebuilt. Here were formerly six other churches, but at present there are only four, two being destroyed in the civil wars, viz. All-Saints', St. Peter's, St. John the Baptist's, and St. Nicholas; and several meeting-houses for the dissenters. Formerly there was an hospital of the knights of St. John of Jerusalem at Hereford, together with three other hospitals, a college of gray-friars, and a house of black-friars: on the site of the latter a well-endowed hospital was founded in 1614, with a neat chapel. It has a remarkably ancient stone pulpit. Here is also a good free grammar-school, endowed with scholarships and exhibitions at each of the universities, the master and also the assistant of which are elected by the dean and chapter of the cathedral. The Wye is navigable for barges of considerable burden, which bring up coals and other articles, and carry back cider, timber, bark, and corn. A projected Gloucester and Hereford canal is expected to be speedily finished, by which the trade of the town will be greatly augmented. In general it is well built, and the streets are wide and clean. The manufactures are gloves, hats, and flannels, but only to a small extent. The county-gaol and shire-hall are respectable edifices; and the former is excellently regulated. The old town-hall is a curious wooden fabric. We may also notice here the guildhall, an infirmary, a lunatic asylum, a public library, and a savings' bank. In Broad Street stands a small, but neat theatre. Over the river Wye there is a stone bridge of six arches, built about the end of the fifteenth century. The city is governed by a mayor, escheator, called usually the late mayor, six aldermen, a common council, recorder, &c. It returns two members to parliament, elected by the freemen (in number about 1250), and the mayor is the returning officer. The ramparts and site of the castle, now called Castle-Green, form an agreeable promenade. A triennial music meeting is held here of the three choirs of Worcester, Hereford, and Gloucester, for the performance of oratorios, &c., for the benefit of the widows and orphans of the clergy. They are generally assisted by some of the principal performers from London, Bath, and Oxford. The chief beverage is cider. The city, standing on a gravelly soil, is accounted very healthy, and gives the title of viscount to the family of Devereux. Markets for the sale of poultry, butter, fish, &c., were erected in 1810. The market-days are Wednesday and Saturday, for poultry, butter, &c.; Friday for live stock, and St. Andrew's-day for cattle and horses. Fairs, first Tuesday after February 2d, Wednesday in Easter-week, July 1st, and October 20th. It is thirteen miles south of Leominster, fourteen N. N. W. of Ross, and 135 W. N. W. of London.

HEREMITICAL, *adj.*
HER'MIT, *n. s.*
HER'MITAGE, *n. s.*
HER'MITESS, *n. s.*
HERMITI'CAL, *adj.*

Fr. *hermite*, *hermitage*; Gr. ερημος. A solitary, or anchoret, who retires from the world for contemplation and devotion; a beadsman, one bound to pray for another: hermitage, the residence of a hermit: hermitess, a female recluse: heremitical and hermitical, solitary; contemplative; suitable, or belonging to, a hermit.

Tyll at last word cam onto the Emperour
That Fawnus was without wyfe, and seld was jocounde,
But mournyng for Agea that he was to ybounde,
And lyved as an *hermyte*, soule and destitute
Wythout consolacioune, pensyff of and mute.
Chaucer. The Merchantes Second Tale.

'Yea; than;' quod I, 'what done these preestes here,
Nonnes, and *hermites*, freres, and all tho
That sit in white, in russet and in grene?'
Chaucer. The Court of Love.

By what painful way they pass,
Forth to an hill, that was both steep and high;
On top whereof a sacred chapel was,
And eke a little *hermitage* thereby.
Faerie Queene.

For those of old,
And the late dignities heaped up to them,
We rest your *hermit*. *Shakspeare.*

A withered *hermit*, fivescore winters worn,
Might shake off fifty looking in her eye. *Id.*

Go with speed
To some forlorn and naked *hermitage*,
Remote from all the pleasures of the world. *Id.*

You lay this command upon me, to give you my poor advice for your carriage in so eminent a place; I humbly return you mine opinion, such as an *hermit* rather than a courtier can render. *Bacon.*

And may at last my weary age
Find out the peaceful *hermitage*,
The hairy gown and mossy cell,
Where I may sit and rightly spell
Of every star that heaven doth shew,
And every herb that sips the dew. *Milton.*

About two leagues from Fribourg we went to see a *hermitage*; it lies in the prettiest solitude imaginable, among woods and rocks. *Addison on Italy.*

He had been duke of Savoy, and, after a very glorious reign, took on him the habit of a *hermit*, and retired into this solitary spot. *Id.*

You describe so well your *heremitical* state of life, that none of the ancient anchorites could go beyond you for a cave in a rock. *Pope.*

HER'ESY, *n. s.*
HERE'SIARCH, *n. s.*
HER'ETIC, *n. s.*
HERET'ICAL, *adj.*
HERET'ICALLY, *adv.*

Fr. *heresie*, Lat. *heresis*; Gr. αιρεσις, αιρεσις, and αρχος: from αιρεω, to choose. Choice; party chosen, or adhered to; sect: hence, party or opinion adhered to unreasonably or obstinately; faction; terms generally applied by the Romish church to all who differ from her doctrines. Heresiarch is the principal leader or propagator of heresy: heretical is generally used in a bad sense; and sometimes by way of contempt, or in jest. See Dr. Campbell's Preliminary Dissertations to his Four Gospels, Diss. ix. for an able account of the meaning of αιρεσις in the Greek New Testament.

How exclude they us from being any part of the church of Christ under the colour of *heresy*, when they cannot but grant it possible even for him to be, as touching his own personal persuasion, *heretical*, who, in their opinion, not only is of the church, but holdeth the chiefest place of authority over the same? *Hooker.*

I rather will suspect the sun with cold
Than thee with wantonness; thy honour stands,
In him that was of late an *heretick*,
As firm as faith. *Shakspeare.*

These things would be prevented, if no known *heretick* or schismatick be suffered to go into those countries. *Bacon.*

As for speculative *heresies*, they work mightily upon men's wits; yet do not produce great alterations in states. *Id.*

No *hereticks* desire to spread
Their wild opinions like these Epicures. *Davies.*

Let the truth of that religion I profess be represented to her judgment, not in the odious disguises of levity, schism, *heresy*, novelty, cruelty, and disloyalty. *King Charles.*

The pope declared him not only an *heretick*, but an *heresiarch*. *Stillingfleet.*

Bellarmin owns, that he has quoted a *heretick* instead of a father. *Baker on Learning.*

When a Papist uses the word *hereticks*, he generally means Protestants; when a Protestant uses the word, he means any persons wilfully and contentiously obstinate in fundamental errours. *Watts.*

Constantinople was in an uproar, upon an ignorant jealousy that those words had some *heretical* meaning. *Decay of Piety.*

HERESY, in law, consists in a denial of some of the essential doctrines of Christianity, publicly and obstinately avowed; being defined, 'sententia rerum divinarum humano sensu excogitata, palam docta et pertinaciter defensa.' And here it must be acknowledged, that particular modes of belief or unbelief, not tending to overturn Christianity, or to sap the foundations of morality, are by no means the object of coercion by the civil magistrate. What doctrines shall therefore be adjudged heresy was left by our old constitution to the determination of the ecclesiastical judge; who had herein a most arbitrary latitude allowed him. For the general definition of a heretic given by Lyndewode extends to the smallest deviations from the doctrines of the holy church: 'hæreticus est qui dubitat de fide catholicâ, et qui negligit servare ea, quæ Romana ecclesia statuit, seu servare decreverat.' Or, as the statute 2 Hen. IV. c. 15 expresses it in English, 'teachers of erroneous opinions, contrary to the faith and blessed determinations of the holy church.' Very contrary this to the usage of the first general councils, which defined all heretical doctrines with the utmost precision and exactness. And what ought to have alleviated the punishment, the uncertainty of the crime, seems to have enhanced it in those days of blind zeal and pious cruelty. The sanctimonious hypocrisy of the canonists, indeed, went at first no farther than enjoining penance, excommunication, and ecclesiastical deprivation, for heresy: but afterwards they proceeded boldly to imprisonment by the ordinary, and confiscation of goods in pios usus. But in the mean time they had prevailed upon the weakness of bigoted princes to make the civil power subservient to their purposes, by making heresy not only a temporal, but even a capital offence: the Romish ecclesiastics determining, without appeal, whatever they pleased to be heresy, and shifting off to the secular arm the odium and drudgery of executions; with which they pretended to be too tender and delicate to intermeddle. Nay, they affected to intercede, on behalf of the convicted heretic, ut citra mortis periculum sententiæ circa eum moderetur; well knowing that at the same time they were delivering the unhappy victim to certain death. See ACT OF FAITH. Hence the capital punishments inflicted on the ancient Donatists and Manichæans by the emperors Theodosius and Justinian; hence also the constitution of the emperor Frederic, mentioned by Lyndewode, adjudging all persons without distinction to be burnt with fire, who were convicted of heresy by the ecclesiastical judge. The same emperor, in another constitution, ordained, that if any temporal lord, when admonished by the church, should neglect to clear his territories of heretics within a year, it should be lawful for good catholics to seize and occupy the lands, and utterly to exterminate the heretical possessors. And upon this foundation was built that arbitrary power so long claimed, and so fatally exerted by the pope, of disposing even of the kingdoms of refractory princes to more dutiful sons of the church. The immediate event of this constitution serves to illustrate at once the gratitude of the holy see, and the just punishment of the royal bigot; for, upon the authority of this very constitution, the pope afterwards expelled this very emperor Frederic from his kingdom of Sicily, and gave it to Charles of Anjou. Christianity being thus deformed by the dæmon of persecution upon the continent, our own island could not escape its scourge. Accordingly we find a writ de hæretico comburendo, i. e. of burning the heretic. But the king might pardon the convict by issuing no process against him; the writ de hæretico comburendo being not a writ of course, but issuing only by the special direction of the king in council. In the reign of Henry IV., when the eyes of the Christian world began to open, and the seeds of the Protestant religion (under the opprobrious name of Lollardy) took root in this kingdom; the clergy, taking advantage from the king's dubious title to demand an increase of their own power, obtained an act of parliament, which sharpened the edge of persecution to its utmost keenness. By stat. 2 Hen. V., c. 7., Lollardy was also made a temporal offence, and indictable in the king's courts, which did not thereby gain an exclusive, but only a concurrent, jurisdiction with the bishop's consistory. Afterwards, when the reformation began to advance, the power of the ecclesiastics was somewhat moderated; for, though what heresy is was not then precisely defined, yet we are told in some points what it is not; the statute 25 Henry VIII., c. 14, declaring that offences against the see of Rome are not heresy; and the ordinary being thereby restrained from proceeding in any case upon mere suspicion; i. e. unless the party be accused by two credible witnesses, or an indictment of heresy be first previously found in the king's courts of common law. And yet the spirit of persecution was not abated, but only diverted into a lay channe'. For in six years afterwards, by stat. 31 Hen VIII. c. 14, the bloody law of the six articles was made; which were 'determined and resolved by the most godly study, pain, and travail of his majesty; for which his

most humble and obedient subjects, the lords spiritual and temporal, and the commons, in parliament assembled, did render and give unto his highness their most high and hearty thanks!' The same statute established a mixed jurisdiction of clergy and laity for the trial and conviction of heretics; Henry being equally intent on destroying the supremacy of the bishops of Rome, and establishing all their other corruptions of the Christian religion. Without recapitulating the various repeals and revivals of these sanguinary laws, in the two succeeding reigns, we proceed to the reign of queen Elizabeth, when the reformation was finally established. By stat. 2 Eliz. c. 1, all former statutes relating to heresy are repealed, which leaves the jurisdiction of heresy as it stood at common law; viz. as to the infliction of common censures, in the ecclesiastical courts; and in case of burning the heretic, in the provincial synod only. Sir Matthew Hale is indeed of a different opinion, and holds that such power resided in the diocesan also; though he agrees, that in either case the writ de hæretico comburendo was not demandable of common right, but grantable, or otherwise, merely at the king's discretion. But the principal point now gained was, that by this statute a boundary is for the first time set to what shall be accounted heresy; nothing for the future being to be so determined, but only such tenets as have been heretofore so declared, 1. By the words of the canonical scriptures; 2. By the first four general councils, or such others as have only used the words of the holy scriptures; or 3. Which shall hereafter be so declared by the parliament, with the assent of the clergy in convocation. Thus was heresy reduced to a greater certainty than before; though it might not have been the worse to have defined it in terms still more precise and particular: as a man continued still liable to be burnt for what perhaps he did not understand to be heresy, till the ecclesiastical judge so interpreted the words of the canonical scriptures. For the writ de hæretico comburendo remained still in force, till it was totally abolished, and heresy again subjected only to ecclesiastical correction, pro salute animæ, by stat. 29 Car. II. c. 9: when, in one and the same reign, our lands were delivered from the slavery of military tenures; our bodies from arbitrary imprisonment by the habeas corpus act; and our minds from the tyranny of superstitious bigotry, by demolishing this last badge of persecution in the English law.

HERETOCH, among the Anglo-Saxons, signified the same with dux or duke, denoting the commander of an army. It appears, from Edward the Confessor's laws, that the military force of this kingdom was in the hands of the heretochs, who were constituted through every province and county in the kingdom, being selected out of the principal nobility, and such as were most remarkable as sapientes, fideles, et animosi. Their duty was to lead and regulate the English armies, with a very unlimited power; on which account they were elected by the people in their folk-mote or full assembly, in the same manner as sheriffs.

HERFORD, or HERVORDEN, an old fortified town of Prussian Westphalia, in the county of Ravensberg, at the confluence of the Werra and the Aa. It is divided into the Old and New Town, and a suburb called Radewig; and contains a considerable manufactory of cotton thread, and of linen. Here were formerly an abbey and a convent, secularised in 1804; also a commandery of the order of St. John. Inhabitants 6000. Eleven miles E. N. E. of Ravensberg.

HERGEST'S ISLANDS, a group of islands in the South Pacific, discovered by lieutenant Hergest in the Dædalus, in the year 1792. They consist of Riou's, Trevenen's, Sir Henry Martin's, and Robert's Isles, and extend from lat. 7° 53′ to 9° 14′ S., and from long. 219° 47′ to 220° 21′ E.

HERGEST'S ROCKS, two rocky islets in the Pacific Ocean, also discovered by lieutenant Hergest in the year 1792. Long. 219° 42′ E., lat. 7° 38′ S.

HERJEDALEN, a district in the north of Sweden, included in Gefleborgstœn, and bounded on the north by Jemptland, and on the west by Norway. It forms a large wooded valley extending between 62° and 63° of N. lat., watered by the Ljunga and Ljusna, and flanked by lofty mountains. There is but little corn land, though it seems capable of a more extended cultivation. On the other hand, it abounds in cattle, game, and fish; and the inhabitants carry on a good trade in cheese. Territorial extent 3200 square miles Population about 4000.

HE'RIOT, *n. s.* Sax. ꝑenegilꝺ. A fine paid to the lord at the death of a land-holder, commonly the best thing in the landholder's possession.

> Though thou censume but to renew,
> Yet love, as lord, doth claim a *heriot* due.
> *Cleaveland.*

> This he detains from the ivy, for he should be the true possessory lord thereof; but the olive dispenseth with his conscience to pass it over with a compliment and a *heriot* every year. *Howel.*

> I took him up, as your *heriot*, with intention to have made the best of him, and then have brought the whole produce of him in a purse to you. *Dryden.*

HERIOT, in law, is a customary tribute of goods and chattels, payable to the lord of the see on the decease of the owner of the land. See TENURE. It is of two sorts, viz. Heriot custom, where heriots have been paid time out of mind by custom, after the death of a tenant for life. In some places there is a customary composition in money, as ten or twenty shillings in lieu of a heriot, by which the lord and tenant are both bound, if it be an indisputably ancient custom: but a new composition of this sort will not bind the representatives of either party. Heriot service, when a tenant holds by such service to pay heriot at the time of his death; which service is expressed in the deed of feoffment. For this latter the lord shall distrain; and for the other he shall seize and not distrain. If the lord purchase part of the tenantry, heriot service is extinguished; but it is not so of heriot custom.

HERIOT (George), jeweller to king James VI. and Charles I., the founder of the elegant hospital

at Edinburgh which bears his name, was born in the parish of Gladsmuir, in East Lothian. His ancestors were proprietors of the small village of Trabrowne, and their names appear on the roll of the Scotch parliament. Mr. Creech says, he furnished jewels to prince Charles, afterwards king Charles I., when he went to the court of Spain in 1623. These jewels were never paid for by James; but, when Charles I. came to the throne, the debt to Heriot was allowed to his trustees, in part of their purchase of the barony of Broughton, then crown lands in the neighbourhood of Edinburgh. These lands are now a part of the foundation of the hospital. Mr. Heriot died in 1627. Tradition reports, that he acquired his fortune by purchasing for a trifle a large quantity of yellow sand, with which a shipmaster, who traded to Africa, had loaded his vessel by way of ballast, from the coast of Guinea, without knowing its value; but in which Heriot soon discerned a considerable proportion of gold dust, which he afterwards extracted.

HERIOT'S HOSPITAL. See EDINBURGH.

HERISA, or HERISHAW, an ancient town of Switzerland, in the canton of Appenzel, on the Bulbach. It was the first town of the canton that embraced Christianity. The manufactures of linen, cotton, and muslin, chiefly employ 6000 inhabitants. It is twenty-seven miles south-west of St. Gall, and ten north-west of Appenzel.

HERISSON, in fortification, a beam armed with a great number of iron spikes with their points outwards, and supported by a pivot, on which it turns. These serve as a barrier to block up any passage, and are frequently placed before the gates, and more especially the wicket doors of a town or fortress, to secure those passages which must be often opened and shut.

HERITIER (Nicholas l'), a French poet of the seventeenth century, who was historiographer of France, and treasurer to the guards. He wrote two tragedies, entitled Hercule Furieux, and Clovis. He died in 1680.

HERITIER (Mary Jane l' de Villandon), a French poetess, daugher of the above, was born in 1664. She was a member of the academies of the Jeux Floraux, and the Ricovrati at Padua. She wrote, 1. Translation of Ovid's Epistles; 2. La Tour Tenebreuse, an English Tale; 3. Les Caprices du Destin, a novel; and 4, L'Avare puni, a tale in poetry.

HERITIER (Charles Louis l' de Brutelle), an eminent French botanist, one of the most distinguished students and promoters of the Linnæan principles and accuracy in his own country, was born of an opulent mercantile family, at Paris in 1746. In 1772 he was appointed superintendant of the waters and forests of the Generalité of Paris; and, his active mind being turned to fulfil the duties of his office, he began to apply to botany, with a particular view to the knowledge of forest trees. He soon extended his enquiries; studied the works of Linnæus; and became one of the most zealous disciples of the illustrious Swede. He died in 1800 at Paris.

HERITIERA, in botany, so named in honor of the able French botanist, Charles Louis l'Heritier de Brutelle. Essential character; MALE CAL. five toothed; COR. none; filament columnar; anthers, from five to ten, below the top; FEMALE CAL. five toothed; COR. none; germens five, sessile, with five pairs of barren anthers between them; drupas five, dry, of one cell; SEEDS solitary. Species one only; a native of Ceylon, and cultivated in Kew gardens under the name of the looking-glass plant.

HERKIMER, a county of New York, United States, erected from Montgomery county in 1791, but, by successive subdivisions, now restricted to a smaller area. Its present form is an irregular oblong, embracing the Mohawk River, which crosses the southern part. Its geographical centre lies about eighty-five miles on a right line north-west from Albany. It is bounded north by St. Lawrence county, east by Montgomery county and a small angle of Otsego county, south by Otsego county, and west by Oneida and Lewis counties; its greatest length north and south is eighty-five miles; its greatest width sixteen miles. The area is 1106 square miles, or 717,840 acres. Situated between 42° 49′ and 44° 7′ N. lat., and 0° 44′ and 1° 15′ W. long. from New York. This county has a large proportion of hilly land, and as great a diversity of soil as any in the state. The southern part furnishes some of the small sources of the Susquehanna.

HERKLA, a town on the east coast of Tunis, Africa, the Adrumetum of earlier times, the Justiniana of the middle ages, and the Heraclea of the Lower empire. It was built on a promontory, and appears to have been about a mile in circuit; but the ruins did not appear to Dr. Shaw so extensive as he expected.

HERMÆA, in antiquity, ancient Greek festivals in honor of Mercury. One of these was celebrated by the Pheneatæ in Arcadia; a second by the Cyllenians in Elis; and a third by the Tanagreans, where Mercury was represented with a ram upon his shoulder, because he was said to have walked through the city in that posture in time of a plague, and to have cured the sick; in memory of which it was customary, at this festival, for one of the most beautiful youths in the city to walk round the walls with a ram upon his shoulder. A fourth festival was observed in Crete, when it was usual for the servants to sit down at the table while their masters waited; a custom which was also observed at the Roman Saturnalia.

HERMAN (Paul), a famous botanist in the seventeenth century, born at Hall, in Saxony. He practised physic in the isle of Ceylon, and was afterwards professor of botany at Leyden, where he died in 1695. He wrote 1. A Catalogue of the Plants in the Public Garden at Leyden; 2. Cynosura Materiæ Medicæ; 3. Floræ Lugduno-Batavæ flores: 4. Paradisus Batavus; and, 5, Musæum Zeylanicum.

HERMANN (James), a learned mathematician of the academy at Berlin, and a member of the academy of sciences at Paris, was born at Basil in 1678. He was a great traveller, and for six years was professor of mathematics at Padua. He afterwards went to Russia, being invited thither by Peter the Great, in 1724. On his return to Basil he was made professor of morality and

natural law; and died there in 1733. He wrote several mathematical works.

HERMANNIA, in botany, a genus of the pentandria order and monadelphia class of plants; natural order thirty-seventh, columniferæ; CAPS. quinquelocular; the petals at the base are semitubulated and oblique. There are twenty-two species.

1. H. alnifolia, has a shrubby stalk and branches growing irregularly four or five feet high, with pale yellow flowers in short spikes from the sides and ends of the branches, appearing in April or May.

2. H. althæifolia, has a shrubby stalk, and soft woolly branches, growing two feet high, with numerous yellow flowers in short spikes growing at the end of the branches, and making their appearance in July.

3. H. grossularifolia has a shrubby stalk and spreading branches, growing three or four feet high, with bright yellow flowers coming out in great numbers at the ends of all the shoots and branches in April or May.

4. H. hyssopifolia has a shrubby upright stalk, branching out laterally six or seven feet high, with pale yellow flowers in clusters from the sides of the branches, appearing in May and June.

5. H. lavendulifolia has a shrubby stalk and slender branches, very bushy, about a foot and a half high, small spear-shaped, obtuse and hairy leaves, with clusters of small yellow flowers along the sides of the branches continuing from June to Autumn. All these plants are natives of Africa, and therefore must be kept in a greenhouse during the winter in this country. They are propagated by cuttings of their young shoots, which may be planted in pots of rich earth from April to July.

HERMANNSTADT, or Szeben, the ancient Cibinium, or Hermanopolis, is a large fortified town of Transylvania, of which it was formerly the capital, and stands on the river Szeben, in a beautiful plain. It is not considered healthy: and its streets and general accommodations are inferior to most towns of Europe of the same size. As the chief town of the Saxon settlers in Transylvania, it is the place of their archives, and the seat of a Protestant university. It has also a convent and three monasteries, one of which belongs to the Greek monks of St. Basil. The principal square contains a fine statue and fountain. The orphan hospital, the barracks outside of the town, the theatre, and the residence of baron Bruckenthal, are also worth notice. The last contains a good library, and a valuable collection of pictures, antiquities, and natural history. Its chief manufacture is soap and candles. Thirty miles south-east of Weissenburg, and 392 south-east of Vienna.

HERMANT (Godfrey), a learned doctor of the Sorbonne, born at Beauvais in 1617. He wrote many works; the principal of which are, 1. The Lives of St. Athanasius, St. Basil, St. Gregory Nazianzen, St. Chrysostom, and St. Ambrose. 2. Four pieces in defence of the rights of the university of Paris against the Jesuits. 3. A French Translation of St. Chrysostom's Treatise of Providence, and Basil's Ascetics. 4. Extracts from the Councils; published after his death, under the title of Clavis disciplinæ Ecclesiasticæ. He died suddenly at Paris, in 1690.

HERMAPH'RODITE, *n. s.* } Fr. *hermaphrodite*, from
HERMAPHRODIT'ICAL, *adj.* } *ἑρμῆς* and *αφροδίτη*. An animal uniting two sexes.

Man and wife make but one right
Canonical *hermaphrodite*. *Cleaveland.*

There may be equivocal seeds and *hermaphroditical* principles, that contain the radicality of different forms. *Browne.*

The chosen knight
And free companion of the gallant Bourbon,
Late Constable of France; and now to be
Lord of the city which hath been Earth's lord
Under its emperors, and changing sex,
Not sceptre, an *hermaphrodite* of empire—
Lady of the Old World.
Byron. Deformed Transformed.

A HERMAPHRODITE is generally understood to signify a human creature possessed of both sexes, or who has the parts of generation both of male and female. The term, however, is applied also to other animals, and even to plants. The word is a compound of Ερμης, Mercury, and Αφροδιτη, Venus; q. d. a mixture of Mercury and Venus, i. e. of male and female. By Mr. Hunter, hermaphrodites are divided into natural and unnatural, or monstrous. The first belongs to the more simple orders of animals, of which there is a much greater number than of the more perfect. The unnatural takes place in every tribe of animals having distinct sexes, but is more common in some than in others. The human species, he imagines, has the fewest, never having seen them in that species, nor in dogs; but in the horse, sheep, and black cattle, they are very frequent. From Mr. Hunter's account, however, it does not appear that such a creature as a perfect hermaphrodite has ever existed. All the hermaphrodites which he had the opportunity of seeing had the appearance of females, and were generally thought such. In the horse they are very frequent. In most species of animals, the production of hermaphrodites appears to be the effect of chance; but in the black cattle it seems to be an established principle of their propagation. It is a well-known fact, and, as far as has yet been discovered, appears to be universal, that when a cow brings forth two calves, one of them a bull, and the other a cow to appearance, the cow is unfit for propagation, but the bull-calf becomes a very proper bull. The cows are known not to breed; they do not even show the least inclination for the bull, nor does the bull ever take the least notice of them. Among the country-people in England, this kind of calf is called a free-martin; and this singularity is just as well known among the farmers as either cow or bull. When they are preserved, it is for the purposes of an ox or spayed heifer, viz. to yoke with the oxen, or fatten for the table. They are much larger than either the bull or the cow, and the horns grow longer and bigger, being very similar to those of an ox. The bellow of a free-martin is similar to that of an ox, and the meat is similar to that of the ox or spayed heifer, viz much finer in the fibre than either the bull or cow;

and they are more susceptible of growing fat with good food. By some they are supposed to exceed the ox and heifer in delicacy of taste, and bear a higher price at market. The Romans, who called bull taurus, spoke also of tauræ, in the feminine gender, different from vaccæ or cows. Stephens observes, that it was thought they meant by this word barren cows, which obtained this name because they did not conceive any more than bulls. He quotes a passage from Columella: 'And, like the tauræ, which occupy the place of fertile cows, should be rejected or sent away.' He likewise quotes Varro, De re Rusticâ: 'The cow which is barren is called taura.' Among the reptile tribe, such as worms, snails, leeches, &c., hermaphrodites are very frequent. In the Memoirs of the French Academy, we have an account of this very extraordinary kind of hermaphrodites, which not only have both sexes, but do the office of both at the same time. Such are earth-worms, round-tailed worms found in the intestines of men and horses, land snails, and those of fresh waters, and all the sorts of leeches. And, as all these are reptiles, and without bones, M. Poupart concludes it probable, that all other insects which have these two characters are also hermaphrodites. The method of coupling practised in this class of hermaphrodites, may be illustrated in the instance of earth-worms. These creep, two by two, out of holes proper to receive them, where they dispose their bodies in such a manner as that the head of the one is turned to the tail of the other. Being thus stretched lengthwise, a little conical button or papilla is thrust forth by each, and received into an aperture of the other. Among the insects of the soft or boneless kind, there are great numbers which are so far from being hermaphrodites, that they are of no sex at all. Of this kind are all the caterpillars, maggots, and worms, produced of the eggs of flies of all kinds: but the reason of this is plain; these are not animals in a perfect state, but disguises under which animals lurk. In the collection of insects belonging to professor Germar are the following hermaphrodite butterflies: 1. Papilio atalanta. The left side male, the right side female; the left pair of wings is smaller, and more deeply notched than the right: the left antenna shorter than the right. 2. Papilio antiopa; the right side male, and left side female. The right antenna much shorter than the left. 3. Papilio phœbe; left side male: left antenna shorter than the right; and the left pair of wings smaller, but the color and margin same as the right pair: hinder part of the body same as in male. 4. Sphinx euphorbiæ; left side male, and smaller than the right or female side: the distribution of the color is remarkable; the whole under side of the body is divided by a line, in the direction of its length; the male side is covered with a green powder, while the female side has a white antenna, rose-red breast, and the abdomen marked with white denticulations. 5. Sphinx galli; left side male; the right antenna and the right pair of wings longer than those of the male side; but there is no difference of color in the delineation of the two parts.

Hermaphrodite Flowers, in botany, are so called by the sexualists on account of their containing both the anthera and stigma, the organs of generation, within the same calyx and petals. Of this kind are the flowers of all the classes in Linnæus's sexual method, except the classes monœcia and diœcia; in the former of which, male and female flowers are produced on the same root; in the latter, on distinct plants from the same seed. In the class polygamia, there are always hermaphrodite flowers mixed with male or female, or both, either on the same or distinct roots. In the plantain tree the flowers are all hermaphrodite; in some, however, the anthera, or male organ, in others the stigma or female organ, proves abortive. The flowers in the former class are styled female hermaphrodites; in the latter, male hermaphrodites. Hermaphrodites are thus as frequent in the vegetable kingdom as they are rare in the animal one. See Botany.

HERMAPHRODITUS, in the pagan mythology, the son of Hermes, or Mercury, and Aphrodite, or Venus. Being educated on Mount Ida by the Naiades, Salmacis, one of these nymphs, fell desperately in love with him; but he refusing to gratify her passion, she watched him one day, while he was bathing in a fountain in Caria, and leaping into it, seized him, entwined herself about him, and by her prayers, obtained of the gods to have his body and hers united into one. Whereupon Hermaphroditus, finding himself thus metamorphosed, prayed his celestial parents, that in future every man who should bathe in that fountain should possess both sexes, which, according to Ovid, was also granted. Some explain the fable, that Hermaphroditus was represented as the son of Mercury and Venus, to exhibit the union between eloquence or commerce, whereof Mercury was god, with pleasure, whereof Venus was the deity.

HERMAS, an ecclesiastical author of the first century; and, according to Origen, Eusebius, and Jerome, the same whom St. Paul salutes in the end of his first epistle to the Romans. He wrote a book in Greek some time before Domitian's persecution, A. D. 95, entitled The Pastor, from his representing an angel speaking to him in it under the form of a shepherd. The Greek text is lost, but a very ancient Latin version of it is extant. Some of the fathers have considered this book as canonical. The best edition of it is that of 1698, where it is to be found among the other apostolical fathers, illustrated with the notes and corrections of Cotelerius and Le Clerc. With these it was translated into English by archbishop Wake, the best edition of which is that of 1710.

Hermas, in botany, a genus of the monœcia order, belonging to the polygamia class of plants. The umbel in the hermaphrodite is terminal; there is a universal involucrum and partial ones. The rays of the small umbels are lobed; the central one flower-bearing; there are five petals, and five barren stamina; the seeds are two-fold and suborbicular. In the male the lateral umbels have universal and partial involucra; the small umbels are many-flowered; there are five petals, and five fertile stamina.

HERMELIN (Samuel Gustavus, baron), a

scientific Swedish nobleman, was a native of Stockholm, in which metropolis he was born in 1744. Having travelled over a great part of the European continent, he was entrusted with the conduct of a mission to the United States of America. On his return in 1784 he visited England; after which more than fifteen years of his life were devoted to his Swedish atlas. Through his exertions also, and principally at his own expense, great improvements were introduced among the mining establishments of Bothnia. After fifty-four years spent in important active services, he retired from public life in 1815, retaining his salary, with an additional pension of 1000 rix dollars. Besides a variety of tracts printed among the transactions of the Academy of Stockholm, the following treatises were published by him separately:—A Mineralogical Description of Lapland and Westro-Bothnia, with tables of the population and industry of the latter province; Mineralogical Charts of the Southern Provinces of Sweden; On the Melting and Casting of Copper Minerals; On the use of Stones found in the Swedish Quarries; and an Essay on the Resources of the Swedish Provinces. M. Hermelin closed his long and useful life on the 4th of May, 1820.

HERMES, Gr. ΕΡΜΗΣ, from Ερμηνευς, an interpreter. The Greek name of the god Mercury. See MERCURY.

HERMES, surnamed Trismegistus, i. e. thrice greatest, an Egyptian or Phœnician priest and philosopher, and according to some a king; which triple office, they say, was the reason of this surname; though Suidas alleges, it was given him because he taught the doctrine of the Trinity. It is more probable, however, that he was so named on account of his great learning; for he is said to have written thirty-six books on divinity and philosophy, and six on physic. Clemens Alexandrinus has given a catalogue of his works; but none of them are extant, except a piece entitled Poemander, which is reckoned spurious. He taught the Egyptians chemistry, the art of land-measuring, the cultivation of the olive, the division of time into hours, and the use of hieroglyphics. He is supposed to have flourished under Ninus or Osiris, about A. M. 2076.

HERMES, or HERMA, among antiquaries, a sort of Square or cubical figure of the god Mercury, usually made of marble, though sometimes of brass or other materials, without arms or legs, and planted by the Greeks and Romans in their cross-ways. Servius gives us the origin thereof, in his comment on the eighth book of the Æneid. 'Some shepherds,' says he, 'having one day caught Mercury asleep on a mountain, cut off his hands; from which he, as well as the mountain where the action was done, became denominated Cyllenius, from κυλλος, maimed; and thence certain statues without arms are denominated Hermeses or Hermæ.' But this etymology of the epithet of Cyllenius contradicts most of the other ancient authors; who derive it from Mercury's birth-place, Cyllene, a city of Elis, or the mountain Cyllene, which had been so named before him. Suidas gives a moral explication of this custom of making statues of Mercury without arms. 'The Hermeses,' says he, 'were statues of stone placed at the vestibules or porches of the doors and temples at Athens; for this reason, that, as Mercury was held the god of speech and of truth, square and cubical statues were peculiarly proper; having this, in common with truth, that on what side soever they are viewed, they always appear the same. Athens abounded more than any other place in Hermeses: there were abundance of very signal ones in various parts of the city, and they were indeed among the principal ornaments of the place. They were also placed in the high roads and cross-ways, because Mercury, who was the courier of the gods, presided over the highways; whence he had his surnames of Trivius and Viacus.

HERMET'ICAL, *adj.* } French, *hermetique*,
HERMET'IC, *adj.* } from Hermes, or Mer-
HERMET'ICALLY, *adv.* } cury, the imagined inventor of chemistry. Chemical.

The tube was closed at one end with diachylon, instead of an *hermetical* seal. *Boyle.*

An *hermetical* seal, or to seal any thing hermetically, is to heat the neck of a glass 'till it is just ready to melt, and then with a pair of hot pincers to twist it close together. *Quincy.*

He suffered those things to putrefy in *hermetically* sealed glasses, and vessels close covered with paper, and not only so, but in vessels covered with fine lawn, so as to admit the air, and keep out the insects: no living thing was ever produced there. *Bentley.*

HERMETICAL ART, a name given to chemistry, on a supposition that Hermes Trismegistus was the inventor of the art, or that he excelled therein. See HERMES.

HERMETICAL SEAL, a manner of closing glass vessels, for chemical operations, so very accurately, that nothing can exhale, not even the most subtile spirits. It is performed by heating the neck of the vessel in the flame of a lamp till it be ready to melt, and then with a pair of pincers twisting it close together. This chemists call putting on Hermes's seal.

HERMHARPOCRATES, or HERMARPOCRATES, in antiquity, a deity, or figure of a deity, composed of Mercury and Harpocrates, the god of silence. M. Spon gives a hermharpocrates in his Rech. Cur. de l' Antiquité, having wings on his feet like Mercury, and laying his finger on his mouth like Harpocrates. It has been suggested that this combination was intended to show that silence is sometimes eloquent.

HERMIANI, or HERMIATITÆ, a sect of heretics in the second century, thus called from their leader Hermias, and also denominated Seleuciani. One of their distinguishing tenets was, that God is corporeal; another, that Jesus Christ did not ascend into heaven with his body, but left it in the sun.

HERMIAS, a heretic of the second century, the founder of the above sect, born in Galatia. He maintained that the deity is material, the world eternal, and that the human soul is composed of fire and spirit.

HERMILLY (Vaquette d'), a French historian, born at Amiens in 1707. He wrote the history of Majorca and Minorca, and translated Feijoo's Critical Theatre, and Ferara's History of Spain.

HERMIONE, in fabulous history, the daughter of Menelaus and Helen, who was betrothed to her cousin Orestes, but afterwards married to Pyrrhus, whom Orestes therefore killed in the temple of Apollo, and recovered Hermione.

HERMIONE, in ancient geography, a considerable city of Argolis. It was in ruins, except a few temples, in the time of Pausanias; who says, that the new city was at the distance of four stadia from the promontory on which the temple of Neptune stood.

HERMIT is derived from the Greek ερημος, a desert, and therefore should rather be written eremite, Paul, surnamed the Hermit, is usually reckoned the first hermit; though St. Jerome, at the beginning of the Life of that saint, says it is not known who was the first. Some think John the Baptist, others Elias; others make St. Anthony the founder of the eremetical life; but others say, that he only rekindled and heightened the fervor thereof, and that his disciples owned St. Paul of Thebes for the first that practised it. The persecutions of Decius and Valerian are supposed to have been the occasion. Several of the ancient hermits, though they lived in deserts, had numbers of religious accompanying them. There are also various orders and congregations of religious distinguished by the title of hermits; as, hermits of St. Augustine, of St. John Baptist, of St. Jerome, of St. Paul, &c.

HERMITAGE is also applied to any religious cell, built and endowed in a recluse place, and annexed to some large abbey, of which the superior was called a hermit.

HERMITAGE, in geography, a hill of France on the side of the Rhone, opposite Tournon, famous for its vineyards, and the production of the red and white hermitage wine: on the top is the ancient chapel which gave name to the hill.

HERMODACTYL, *n. s.* Gr. ἑρμῆς and δάκτυλος.

Hermodactyl **is a root of a determinate and regular figure, and represents the common figure of a heart cut in two, from half an inch to an inch in length. This drug was first brought into medicinal use by the Arabians, and comes from Egypt and Syria, where the people use them, while fresh, as a vomit or purge; and have a way of roasting them for food, which they eat in order to make themselves fat. The dried roots are a gentle purge, now little used.** ***Hill.***

HERMODACTYLS are brought from Turkey, and are of a white color, compact, yet easily cut or powdered, of a viscous whitish taste, with a light degree of acrimony. They were of great repute among the ancients as a cathartic; but those now sold in the shops have very little purgative virtue. Neumann declares he never found them to have any effect. The hermodactyl is the root of the colchicum variegatum, according to some; others suppose it to be that of the iris tuberosa.

HERMODORUS, a philosopher of Ephesus, who, coming to Rome, advised the making of the laws called the Twelve Tables; on which account a statue was erected to his memory.

HERMOGENES, the first and most celebrated architect of antiquity, was, according to Vitruvius, born at Alanbada, a city in Caria. He built a temple of Diana at Magnesia; another of Bacchus at Tros. He wrote a book on architecture, which is lost.

HERMOGENES, of Tarsus, an ancient orator, who was in every respect a prodigy. At seventeen years of age he published his System of Rhetoric, and at twenty his Philosophic Ideas; but at twenty-five totally lost his memory. His body being opened after his death, his heart was found of an extraordinary size, and hairy all over. He died about A. A. C. 168. His works were published by Aldus in 1509.

HERMOGENES, a heretic of the second century, born in Africa. He held matter to be the first principle; and, regarding it as the fountain of all evil, he maintained that the world, and every thing contained in it, as well as the souls of men and other spirits, were formed by the Deity from an uncreated and eternal mass of corrupt matter.

HERMOGENIANS, a sect of ancient heretics, so denominated from their leader Hermogenes. Their opinions were warmly opposed by Tertullian. They were divided into several branches under their respective chieftains, viz. Hermians, Seleucians, Materiari, &c.

HERMON, or AERMON, in ancient geography, a mountain of the Amorites, called Sanior by the Phœnicians, and Sanir or Senir by the Amorites, on the east of Jordan. It is also called Sion by Moses, but must not be confounded with the Sion of Jerusalem. By the Sidonians it was called Scirion; in the Vulgate it is called Sarion. Joshua informs us that it was the dominion of Og, king of Bashan; which must be understood of its south side. It is never particularly mentioned by profane writers, being comprised under Libanus, or Antilibanus, with which it is joined on the east. It is also called Hermonim, plurally, Psalm xlii. 6, because it was extensive, and contained several mountains.

HERMUND, or HELMUND, a river of Afghaunistaun, the Etymander of Arian. It rises to the west of Cabul, and, running to the south-west, is joined by the Urghundab, and empties itself, after a course of 360 miles, into the sea of Zerra, or Aria Pales. It is in general fordable, but, in winter, is very deep and broad. There was formerly an embankment, called the Bundi Rustem, across this stream; from which, perhaps, it was said to lose itself in the sands.

HERMUS, in ancient geography, a river of Ionia; which, rising near Dorylæum, a town of Phrygia, in a mountain sacred to Cybele, touched Mysia, and ran through the Regio Combusta, then through the plains of Smyrna down to the sea, carrying along with it the waters of the Pactolus, Hyllus, and other rivers. It was said, by Virgil and other poets, to roll down gold.

HERN, *n. s.* Contracted from HERON; which see.

Birds that are most easy to be drawn are the mallard, swan, *hern*, and bittern. *Peacham.*

The towering hawk, let future poets sing,
Who terror bears upon his soaring wing;
Let them on high the frighted *hern* survey,
And lofty numbers paint their airy fray. *Gay.*

HERNANDEZ (Francis), a naturalist and physician, who was sent out by Philip II., king of Spain, to make observations on, and to de-

scribe, the natural productions of Spanish America. His pecuniary allowance for this purpose appears to have been ample; and he spared no expense to make himself acquainted with such objects as he was in search of. He wrote an account of their nature and properties, but it does not appear that he lived to superintend the publication of his labors; for in 1651 the result of his enquiries was edited at Rome, under the care of the Lyncæan Academy, established in that city; the papers of Hernandez having been purchased by Frederic Cesi, a young nobleman who founded, and was perpetual president of the Lyncæi. This work had originally been published in the Spanish language at Mexico, under the name and care of Francis Ximenes but the Roman edition, in small folio, came out in Latin, having the following title, 'Nova Plantarum, Animalium et Mineralium Mexicanorum Historia, a Francisco Hernandez, Medico in Indiis Præstantissimo, primùm Compilata.' The original drawings of this work were procured by Hernandez, who payed the immense sum of 60,000 ducats for them; they had been drawn at the time when Joseph à Costa was in America; but the numerous wood-cuts which accompany this volume are by no means equal to what might have been expected from the account we have of the drawings; and this called forth an observation of regret from Linnæus, that the work did not answer the trouble and expense which had been bestowed upon it. It must, however, be remarked, that no blame should attach to the memory of Hernandez, but to his editors on this account. What became of him is not recorded, but his drawings were consumed by a fire in the Escurial. Among the figures are some curious animals; but the plants compose the chief bulk of the work. Some of his representations are so extraordinary that their truth have been doubted; for intance, his macpalxochiquahvitl, the form of which is so strange that some error was reasonably expected. His accuracy, however, has lately been verified even in this instance. The plant, whose large united stamens exactly resemble a bird's foot, is of the malvaceous order, and is recently figured in a splendid French work. A specimen of this plant is preserved in spirits at Sir Joseph Banks's. Hernandez does not appear to have published any other works on natural history; but this will entitle him to our gratitude, for having first unfolded to European botanists the treasures of that then little known quarter of the world. The Mexican names are always given, and his medical observations are general and good. A history of the church of Mexico has been ascribed to our author, but without certainty.

HERNANDRIA, Jack-in-a-box tree: a genus of the trandria order, and monœcia class of plants; natural order thirty-eighth, tricoccæ: MALE CAL. tripartite: COR. tripetalous: FEMALE CAL. truncated, quite entire: COR. hexapetalous; the plum hollow, and open at the mouth or upper part, with a loose kernel. 1. H. ovigera, grows many feet high, garnished with large oval leaves, not peltated; and monœcious flowers, succeeded by swollen fruit, open at the end, and a nut within. 2. H. sonora, or common Jack-in-a-box, is a native of both the Indies. It grows twenty or thirty feet high, and is garnished with broad peltated leaves, and monœcious flowers, succeeded by a large swollen hollow fruit, formed of the calyx, having a hole or opening at the end, and a hard nut within. The wind blowing into the cavity of this fruit makes a very whistling and rattling noise, whence the name. Both these species, being tender exotics, must be planted in pots of rich earth, and always kept in a hot-house; in which, notwithstanding all the care that can be taken, they seldom flower, and never grow beyond the height of common shrubs, though in the places where they are natives they arrive at the height of trees. They are propagated by seeds procured from the West Indies.

HE'RNIA, *n. s.* Latin. Any kind of rupture, diversified by the name of the part affected.

A *hernia* would certainly succeed. *Wiseman.*

HERNIA, in medicine, from Greek ερνος, a branch, is the name by which surgical writers distinguish the disease more commonly and vulgarly called a rupture, from a false idea that the case is attended with a laceration of the peritonæum. Sir Astley Cooper defines it as 'a preternatural tumor occasioned by some of the viscera of the abdomen being displaced out of that cavity.' The places in which these swellings most frequently make their appearance are the groin, the navel, the labia pudendi, and the upper and fore part of the thigh; they occur at every point of the anterior part of the abdomen, and there are several less common instances in which hernial tumors present themselves at the foramen ovale in the perinæum, in the vagina at the eschiatic notch.

If the situation of such tumors be various, the viscera which produce them are still more so; instances having occurred of the stomach, uterus, liver, spleen, and bladder, being found to form their contents. But a part of the intestina. canal, or a portion of the omentum, are from experience known to be the most frequent cause of their formation. From these circumstances of situation and contents, all the different appellations are derived by which herniæ are distinguished. Thus they are termed inguinal, scrotal, femoral, umbilical, and ventral; from their appearing in the groin, scrotum, thigh, navel, or belly. When the tumor is confined to the groin, the hernia is said to be incomplete, and is termed bubonocele; but, when the swelling reaches down to the bottom of the scrotum, the rupture is then supposed to be complete, and the disease obtains the name of scrotal rupture, or oscheocele.

Of these disorders, the inguinal hernia is by much the most frequent; next to that is the femoral. The umbilical is seldom observed in men, or even in women who have not borne children. The causes which tend to the production of hernia in its more usual form are these: 1. The containing parts of the abdomen are elastic and compressible; whatever, therefore, tends to produce a diminution of capacity, in the cavity of the abdomen, must occasion a proportional degree of risk of some of the contained parts being pushed from their natural situations. Violent coughing, crying, laughter, or great bodily exertion, are attended with more or less

contraction of the abdominal muscles, and particularly of the diaphragm; and, as the contraction of these muscles must always diminish the abdominal cavity, these causes therefore are frequently productive of hernia. 2. Falls, in consequence of the derangement they produce in the abdominal viscera, from the sudden and violent shock with which they are often attended, are often the immediate causes of hernia. 3. Persons of a preternatural laxity of frame are very liable to hernia. The containing parts of the abdomen, from the want of a sufficient tone and firmness, are unable in such people to resist on all occasions the weight of the different viscera; and they are therefore more particularly exposed to disorders of this kind on the slightest application of any of the causes already mentioned.

In whatever situation a protrusion of any portion of the intestines occurs, except in the hernia congenita, as all the viscera are contained within the peritonæum, a portion of that membrane, it is evident, must be carried down together with the parts protruded; and, in every such instance, it is this portion of the peritonæum which goes down along with the gut that is termed the hernial sac. The size of this sac is various in different subjects, and in different stages of the same disorder. On the first appearance of the disease it is commonly of no very considerable size, as such swellings seldom acquire any great bulk at once; but, by repeated descents of the bowels, it comes to be pushed lower and lower, till in some instances its bulk becomes very considerable indeed; and when, in this advanced period of the disorder, the sac happens to be laid open, it is found to contain either large quantities of omentum or intestine, and frequently large portions of each. As the peritonæum has this property, in common with many other parts of the body, of thickening according to the degree of any gradual extension applied to it, so in many instances the thickness and firmness of the hernial sac are often very enormous.

All the bad symptoms which are found to occur in herniæ, proceed, as may be readily supposed, either from obstruction to the passage of the fæces when the intestinal canal forms the tumor, or from a stoppage of circulation occasioned by stricture on the prolapsed parts; so that the attending symptoms, it is evident, will be always more or less hazardous according to the nature of the parts so protruded. Thus, when the omentum alone forms the substance of hernial swellings, as that organ does not appear to be so immediately necessary as many of the other viscera, such tumors are not so frequently productive of bad consequences; at least they are seldom in any degree so hazardous as when a part of the alimentary canal is either protruded by itself or along with the omentum.

Although this, however, is in general the case, yet it sometimes happens, that even an omental rupture is productive of no small degree of danger. When a stricture so complete upon it occurs as to occasion a stoppage of circulation in the protruded part, mortification with all its bad consequences must be the certain event: and the connexion between the omentum, stomach, and other viscera, is such, that a sudden descent of any considerable portion of the former, sometimes brings on vomiting, hickup, and other troublesome symptoms; and, lastly, though a rupture containing omentum only might not of itself produce any thing bad; yet, as the passage through which the omentum has slipped must of necessity continue open so long as that viscus remains protruded, and as that circumstance alone must, so long as it continues, render it more easy for a portion of intestine likewise to get down, this of itself is a sufficient reason for entitling even this species of hernia to the serious attention of practitioners.

But whatever the contents of such swellings may be, as their remaining in some instances for a considerable length of time without being productive of any bad symptoms must proceed entirely from the circulation continuing to go freely on, notwithstanding the derangement of parts; so, whenever a stricture occurs up the protruded viscera, sufficient to produce either a stoppage of the circulation or of the fæcal contents of the alimentary canal, when a portion of intestine forms the disease, the following in general are the symptoms which accrue:—

An elastic colorless swelling is observed at the part affected; a slight pain is felt, not only in the swelling itself, but, if part of the alimentary canal is down, a universal uneasiness is perceived over the whole abdomen; and this pain is always rendered worse by coughing, sneezing, or any violent exertion. The patient complains of nausea; frequent retching; can get no discharge by stool; becomes hot and restless; and the pulse is commonly quick and hard. When the swelling is formed entirely by a portion of intestine, if no fæces be contained in it, it has a smooth, equal surface, and is easily compressible, but instantly returns to its former size on its pressure being removed; but, in ruptures of long standing, where hard fæces have collected in the protruded bowels, considerable inequalities are detected. When again the tumor is composed both of intestine and omentum, its appearance is always unequal, it feels soft and somewhat like dough, and of course is not so elastic as when part of the intestinal tube only is down; for although, like the other, it is compressible, it does not so readily regain its former dimensions on the pressure being taken off.

These symptoms can never happen from the presence of omentum only; for although stricture produced on a portion of omentum, even when no part of the intestinal tube is down, does now and then occasion a good deal of distress, such as pain in the part, sickness, vomiting, and twitching pains through the whole belly; yet no obstruction ever occurs from this, and of course none of the symptoms ever prove so alarming as when any part of the gut is affected. If these symptoms we have described, as being produced by a strangulated bowel, are not now obviated by a removal of the stricture which produced them, the nausea and retching terminate in frequent vomitings, first of a bilious, and afterwards of a more fetid matter; the belly becomes tense; the pain turns more violent; a distressive convulsive hickup comes on; the fever, which before was not apparently of much consequence,

now becomes very formidable; and a total want of rest, with a very disagreeable state of anxiety, continues through the whole course of the complaint. These symptoms having gone on with violence for some time, the patient is at last commonly relieved in a sudden from all manner of pain; and then he flatters himself that all danger is over. But instead of that, the pulse, from having been hard and frequent, becomes languid and interrupted; cold sweats break out over the whole body; but especially on the extremities; the eyes acquire a kind of languor; the tenseness of the abdomen subsides, and the swelling of the part affected disappears; the teguments covering the parts, which before were either of a natural appearance or had somewhat of a reddish inflamed cast, now acquire a livid hue, and a windy crepitous feel is distinguishable all over the course of the swelling. If the protruded parts have not of themselves gone entirely up, their return is now in general easily effected by a small degree of pressure, and the patient then discharges freely by stool; but the cold sweats increasing, the hickup turns more violent, and death itself is at last ushered in by its usual forerunners, subsultus tendinum, and other convulsive twitchings.

These are the ordinary symptoms of what is termed a strangulated or incarcerated gut-hernia; that is, when the parts protruded become so affected by stricture as to produce pain; and do not either return to their natural situations on the patient's getting into a horizontal posture, or cannot even be immediately replaced by the hands of a practitioner. In whatever situation a strangulated hernia occurs, the only rational method of cure, it is evident, must consist in the removal of that stricture which prevents the return of the protruded parts. It is that stricture which ought to be considered as the cause of all the mischief; and, unless it be removed, nothing effectual can be done for the relief of the patient.

As soon as the assistance of a practitioner is desired for the removal of symptoms in cases of hernia, the first circumstance requiring his attention is the placing of his patient in such a posture as will most probably favor the return of the protruded parts. Placing the patient's feet over the shoulders of another person, while his body is allowed to hang downwards, has on some occasions answered when other means have failed. The surgeon should at the same time endeavour to assist the return of the bowels, by means of gentle pressure with his hands and fingers. In the inguinal or scrotal hernia, this pressure should be made obliquely upwards and outwards, to correspond with the opening in the external oblique muscle; in the femoral hernia it ought to be made directly upwards; in the umbilical and ventral hernia, directly backwards.—The swelling should be grasped with one hand at the bottom, while with the fingers of the other hand an attempt is made to push gently the contents of the tumor into their place, always observing that the parts last protruded be first reduced. This operation is by authors termed the taxis.

When the means now mentioned have failed, no remedy affords more relief than blood-letting. The quantity to be drawn ought chiefly to be determined by the strength of the patient. There is scarcely any disease, however, where such large quantities of blood can with propriety be taken from weak people. Bleeding, till the patient is in a state of deliquium animi, is frequently known to produce a more effectual relaxation of the muscles than can be done by any other means. On that account it is sometimes advised in cases of hernia, and the practice is now and then attended with advantage.

If, however, all these endeavours prove ineffectual; if the swelling is not reduced, but still presents an inflamed tense surface; if the fever still continues and even becomes worse, the operation of dividing the parts producing the stricture can alone save the life of the patient. To determine the exact time at which to proceed to an operation has been considered as one of the nicest points in surgery. In general, when every attempt has failed, and no repetition of the former remedies is likely to succeed, the surgeon ought certainly to proceed to the operation. A few hours, even when assistance has been early applied, is perhaps all the time which ought ever to be consumed in trials of this nature. But however necessary this operation may be when a patient's life is in danger, as it is always attended with some degree of hazard, it ought never to be practised where symptoms of strangulation do not exist.

In that kind of hernia called chronic, the circulation of the part forming the hernia, as well as the peristaltic motion of such parts of the alimentary canal as have been protruded, go freely and regularly on. There are many instances of large herniæ falling down even to the bottom of the scrotum, and continuing there for many years, without producing any interruption to the usual discharge by stool. All that can be done here is to prevent any accumulation of fæces in the intestine, by prescribing a proper diet, and the occasional use of gentle laxatives; and obviating any inconvenience which might arise from the weight of the tumor, by the application of a proper truss or suspensory bandage; to warn them of the risk to which they are constantly liable, and to caution them against violent exercise, particularly leaping, and every sudden exertion. The truss ought to be fitted exactly to the part for which it is intended; for, without the utmost nicety in this respect, it must always do more harm than good: for the sole purpose of a bandage, in cases of hernia, is to prevent effectually the falling down of such parts as have been newly replaced. If therefore the pad or bolster of the bandage does not bear properly against the opening upon which it is placed, a portion of gut may slip out, and be materially injured by the pressure of the pad.

The circumstances to be attended to in performing the operation for hernia, in general, are these. A table of convenient size and height being placed in a proper light, the patient must be so laid on it as to relax the diseased parts as much as possible, and then secured by proper assistance. To lessen the contents of the abdomen as much as possible, the bladder ought to be

emptied previous to the operation. An incision is to be made with a common round-edged scalpel through the skin and part of the cellular substance, long enough to allow the stricture to be fully exposed. The rest of the cellular substance is then to be divided with the greatest attention. That part of the muscle forming the stricture or ring must next be laid distinctly in view. A small portion of the protruding sac must also be exposed: after which the directory is to be passed between the ring and the sac. A straight probe-pointed scalpel is now to be introduced into the groove of the directory, and by it the ring is to be dilated till the point of the finger can be introduced. The finger is here considered as the safest director; for, it being insinuated into the aperture in the tendon immediately above the protruded parts, the point of the knife is easily introduced upon it; and, by keeping the end of the finger always a little before the knife, the opening may be enlarged to any necessary extent without risk of wounding any of the contiguous parts.

By the ease with which the finger is introduced, the operator will be enabled to judge when the ring is sufficiently dilated; and, if the strangulation was entirely in the ring, it will now be evident that every obstacle to the reduction must be removed, and of consequence that the prolapsed parts may be returned with little difficulty. If the patient be young, or if the disease has continued a considerable time, such a degree of inflammation frequently ensues in the neck of the sac as to produce thickening and straitness; so that, after the sac and its contents have been entirely freed from the stricture of the ring, the intestines cannot be reduced. We judge this to be the case when, after the stricture of the ring has been removed, the parts prolapsed do not expand into their natural size, and farther, when they make resistance when we attempt to return them. In this case the neck of the sac must be opened with the utmost caution, to avoid wounding the parts within it.

If the herniary sac, under the straitened place of its neck, be thin and transparent, and there is little or no reason to suspect an adhesion of the bowels to the sac, the best method, as Dr. Monro, in his publication on the Bursæ Mucosæ, observes, will be to make a small hole in the sac below the stricture, and then to introduce a small furrowed probe, and to cut cautiously upon it. But if the sac be thick and dark colored, and there is likewise a suspicion that the bowels may adhere to it, the easiest and safest manner will be to make the hole in the peritonæum above the stricture; then to introduce a common probe, bent near its point into a semicircle, with its point directed downwards through the strictures, into the sac; and upon the point of it to make, with great caution, another small hole; after which we may either cut upon the probe, or introduce a furrowed probe, and divide the neck of the sac.

After this, the bowels are to be returned by pressure upon the sac, without opening it farther; and the sides of the wound in the skin are to be brought together, and kept so by means of slips of adhesive plaster, though stitches made at the distance of a finger's breadth from each other will exclude the air, and prevent the return of the bowels more effectually. Over these are to be laid several folds of charpie, and the whole is to be secured by a bandage adapted to the nature of the part.

When the hernia is of long standing, and when there is reason to think adhesions have taken place between the sac and bowels, or that mortification has already begun, or that some filaments run across the sac and prevent the reduction, or that there is water in the sac, or that the gut is in danger of being entangled from a part of the omentum being down, a different method of operating becomes necessary.

The patient is to be placed as already directed. The operator is to grasp the tumor with the one hand, so as to make the skin tense on the fore part of it, while with the scalpel in the other he divides the skin from one end of the tumor to the other. The cellular substance is by gentle strokes to be divided, till not only the ring, but the whole length of the sac, is laid bare. An opening is now, in the most cautious manner, to be made into the sac by slight scratches, to avoid hurting any of its contents. In making this perforation, which is considered as the nicest part of the operation, considerable assistance is obtained from the use of the small directory, upon the point of which the fibres of the sac are to be successively raised and divided till an opening is made. The opening is to be enlarged till it admit the fore finger of the left hand, which serves as a directory for conducting the straight probe-pointed scalpel with which the sac is to be divided through its whole length. The sac being laid fully open, the parts contained in it ought to be examined with the nicest attention, to discover whether they are all sound or not; and if, upon any attentive inspection, it is found that they are not evidently in a gangrenous state, even although they seem considerably inflamed, they should be immediately returned into the abdomen. When adhesions take place between different parts of the protruded gut, the greatest caution is necessary in separating them. When the bowels cannot be reduced with ease, the ring is to be dilated by the blunt-pointed scalpel in the manner already directed. But in case gangrene or mortification is already begun all these parts must be cut away, as the return of such into the cavity of the abdomen must be generally attended with the worst consequences. We now come to notice.

The Hernia Inguinalis or Bubonocele.

This species of hernia is formed by a protrusion of some of the abdominal bowels through the rings of the external oblique muscles. It is known by the general symptoms of hernia already enumerated, and by a soft and somewhat elastic swelling, beginning in the groin, and descending by degrees into the scrotum in men, and into the labia pudendi in women. When the hernia contains omentum only, the swelling is both more soft, compressible, and more unequal than when the gut alone is down; the scrotum becomes more oblong than in the intestinal hernia; and, when the quantity of omentum

is large, it is also much more weighty than a gut rupture of the same size; but frequently the tumor is composed of both gut and omentum, and then the distinguishing symptoms of each can never be so clearly marked.

Bubonocele may be confounded with certain other diseases; but may be distinguished by the following marks which are present in these disorders, while the symptoms of hernia are absent: from venereal bubo, by the presence of that incompressible hardness with which all such swellings are at first attended, and by the fluidity of matter which in the suppurative state is always observable: from hernia humeralis, or swelling of the testes, by the absence of the hardened and enlarged state of the testis and epidydimus, and likewise of the pain, the tumor of the testicle being remarkably heavy in proportion to the bulk, the spermatic process being commonly free from the swelling. In the hernia humeralis, also, the intestines are unobstructed, and the general symptoms of hernia are wanting. From the hydrocele of the tunica vaginalis testis, by the tumor generally feeling more smooth to the touch than in hernia, by the swelling here beginning in the under part of the scrotum and ascending, by the spermatic cord being always free and distinct, and by a fluctuation being evident. From hydrocele of the spermatic cord, sometimes with much difficulty, and therefore it requires here particular attention. In every case of tumor in the testes where the most perfect certainty is not obtained, and when it is necessary to have recourse to an operation, the surgeon ought to proceed as in a case of real hernia.

The treatment of bubonecele is the same with that already advised in the treatment of hernia in general, only making allowance for the situation of the disease. In attempting the reduction by means of the hand, the pressure should be obliquely upwards and outwards, corresponding with the ring of the abdominal muscle. In performing the operation, the patient should be laid on a table, with his head and body almost horizontal, whilst at the same time his buttocks are somewhat elevated by pillows placed beneath them. The legs hanging over the edge of the table ought to be separated, so as to admit the operator between them; and should in that situation be firmly secured by an assistant on each side, who should take care to keep the thighs so far raised as to relax all the abdominal muscles. The parts being previously shaved, an incision must be made with a common round-edged scalpel through the skin and part of the cellular substance, beginning at least an inch above the superior end of the tumor, and continuing it down to between two and three inches below the ring. Although, in by much the greatest proportion of hernial swellings, the spermatic vessels lie behind the protruded parts, yet on some occasions they have been found on the anterior part of the tumor; so that in order to avoid the risk of wounding them, as soon as the skin is divided, the remainder of the operation should be performed in the most cautious manner, care being taken to avoid every large blood-vessel which makes its appearance. The ring must now be laid distinctly in view; a small portion of the protruding sac must also be exposed; after which the directory is to be introduced between the ring and the sac, placing the point of the instrument obliquely upwards and outwards. A blunt-pointed bistoury is now to be introduced into the groove of the directory, and by it the ring is to be dilated till the point of the finger can be introduced. The directory is now to be laid aside, and the finger used in place of it through the rest of the operation. After the operation is finished the dressings are to be applied, and the whole secured by a T bandage, or suspensory bag, properly stuffed with soft lint.

Of Hernia Congenita.

The testes in the fœtus are, till near the time of delivery, lodged in the cavity of the abdomen. When they descend into the scrotum, they push before them a portion of the peritonæum, which afterwards forms the vaginal coat. The passages by which they descend are soon shut up; but sometimes a portion of some of the abdominal viscera, passing down, forms that species of hernia to which new born infants are liable, termed by Haller the hernia congenita. The testicle and protruded intestine being here in contact with one another, the tunica vaginalis testis forms the hernial sac. A hernia congenita may be distinguished in an adult by the bowels pushing down between the sac and the fore part and sides of the testicle, so as often in a great measure to conceal it; whereas, in the common hernia, every part of the testicle can be felt distinctly; and it is of material use to make the distinction, because in whatever manner we operate in hernia congenita, unless we take the utmost care to exclude the air, there will be a more violent inflammation and greater distress than in common cases, because the testicle will partake of the inflammation. In the treatment of ruptures, of the congenital kind, little difference occurs from the management of the common scrotal hernia; only a truss ought never to be applied to infants, unless the testicle can be felt in the scrotum, after the contents of the hernia have been reduced; as it would entirely prevent the descent of the testicle, which yet remains in the abdomen.

Of Hernia Cruralis, or Femoral Hernia.

The seat of this species of hernia is upon the upper and fore part of the thigh; the protruded bowels passing out at the same opening through which the large blood-vessels of the thigh are transmitted from the abdomen, and of consequence under that part of the tendon at the under end of the abdomen known by the name of Poupart's or Fallopius's ligament. Sometimes the bowels which protrude are situated immediately over the femoral vessels, sometimes on the outside of these, but more frequently they lie upon their inner side. The disease is more frequent in women than in men, on account of the width of the female pelvis, and of consequence the length and laxity of the ligament. The femoral hernia is more in danger of being confounded with inguinal hernia than with any other; the tumor, however, is deeper, and the

ring of the abdominal muscle, which lies entirely above the tumor in femoral hernia, completely surrounds the parts in that of the inguinal kind. In the treatment of femoral hernia, when symptoms of strangulation occur, we must use all the remedies commonly practised for hernia in general; only that here, in attempting to reduce the parts by the hand, the pressure should be made directly upwards. An incision of sufficient length is to be made through the integuments, so as to allow that part of the tendon which forms the stricture to be laid fairly in view; and, after dividing the integuments, we are cautiously to cut the fascia lata of the thigh, and separate any glands which may come in the way till the stricture and part of the sac distinctly appear. The stricture is then to be divided, by cutting fibre after fibre successively. The spermatic vessels in the male, or round ligament in the uterus in the female, may be avoided by cutting in a direction towards the umbilicus, carefully dividing the tendon transversely. Some authors, from a sense of the danger attending this part of the operation, have recommended merely to dilate the passage, instead of dividing the tendon; but, in such a situation, to attempt a farther dilatation without the assistance of the knife, would probably be seldom attended with any advantage. After the parts are reduced, the wound is to be dressed as directed in the treatment of hernia in general; a piece of thin leather spread with some adhesive plaster retains the dressings better, and with much more ease, than any other bandage.

In exomphalos, or umbilical hernia, the parts protruded pass out at the umbilicus, and are commonly the intestines, or omentum, or both; sometimes part of the stomach, the liver, and even the spleen, have been found in the sac. Here, as in other ruptures, the peritonæum forms the sac, and in recent cases it is generally very evident; but by the size of its contents, or a long continuance of the disorder, it sometimes becomes so connected with the surrounding parts, that by many its existence has been doubted, and sometimes the swelling has increased to such a degree as to burst even the skin itself. The disease occurs most frequently in infancy, soon after birth. In the adult state, corpulent people are more subject to it than those of a contrary habit; and pregnant women are particularly subject to it, on account of the size of the uterus.

The diagnosis in this disease is readily made, as the disorder can scarcely be confounded with any other. If the disease be attended to in due time, a bandage properly fitted will generally effect a cure; and, in such swellings as occur in pregnancy, delivery will commonly remove the disorder: but, even in cases of pregnant women, a bandage early applied and properly used will give considerable relief, till a cure can be obtained by delivery. In this disease the omentum is more frequently pushed out than any other viscus; hence umbilical herniæ in general are not productive of such bad symptoms as usually occur in the other kinds of rupture. When, however, the intestines protrude, the usual symptoms of a strangulated hernia are apt to be induced, and, when the means usually employed for returning the intestine into the abdomen do not succeed, a cure, it is evident, must depend entirely on a thorough removal of the stricture. In performing this operation, an incision through the integuments is the first step to be taken, so as to expose the stricture of the tendon and the neck of the sac. The stricture is to be removed in the manner already described; and, as the tendon completely surrounds the neck of the sac, the stricture may be cut wherever it can be most readily dilated. A radical cure, similar to that for the other species, has been proposed, but with as little probability of success,

Ventral rupture is a protrusion of some of the bowels through the interstices of the abdominal muscles, and is most frequently observed in some of the parts most contiguous to the linea alba. The treatment of this species of disease is exactly the same with that of exomphalos, or the rupture of the navel.

Cystic hernia, or hernia of the bladder, though less frequent than that of the omentum or intestines, is not very uncommon. The situation in which it occurs is in the groin, through the abdominal ring, in the fore-part of the thigh, under Poupart's ligament, so as to form inguinal or crural hernia. Instances have likewise occurred of the bladder being pushed into the perinæum. Sometimes it occurs by itself, without any complication; at other times it is accompanied with intestines and omentum, both in inguinal and femoral herniæ; when complicated with bubonocele, the protruded part of the bladder is situated between the intestine and spermatic chord.

The usual symptoms are a tumor, attended with fluctuation either in the groin, in the fore part of the thigh, or perinæum, which generally subsides when the patient voids urine. When the swelling is large, before water can be made with freedom it is commonly necessary to have recourse to pressure, at the same time that the tumor, when in the groin or thigh, is as much elevated as possible, but when the swelling is small, and especially when no stricture is as yet produced, the patient generally makes water with great ease, and without any assistance from external pressure. When the disease occurs, without any complication, it is commonly owing to a suppression of urine. In the diagnosis, care must be taken not to mistake it for a hydrocele. In recent cases, the part protruding may in general be easily reduced, especially if we attend to the suppression of urine, which probably gave rise to the disease. A proper truss ought afterwards to be worn for a long time. When the disease has been of long standing, adhesion takes place between the bladder and cellular substance of the scrotum. In this case, therefore, as long as no symptoms occur to render the operation necessary, a suspensory bandage, so fitted as effectually to support the prolapsed part, is the only probable means of relief. Sometimes the bladder, owing to a suppression of urine, at other times part of the intestines, have been found to protrude through the vagina. This is called hernia vaginalis. In the former case a fluctua-

tion of water is perceptible to the touch. The reduction is made by laying the patient on her back, with her loins somewhat raised, and pressing with the fore finger from the vagina. Descents may in future be generally prevented, by evacuating the urine often, and by the use of a pessary introduced into the vagina. Nearly the same means are employed in reducing the intestine, when it is found to protrude.

HERNIARIA, rupture-wort; a genus of the digynia order, and pentandria class of plants; natural order eleventh, sarmentaceæ: CAL. quinquepartite; there are five barren stamina, and a monospermous capsule: COR. none. The most remarkable species is the H. glabra, or smooth rupture-wort, a native of many parts of England. It is a low trailing plant, with leaves like the smaller chickweed; the flowers come out in clusters from the side of the stalks at the joints, and are of a yellowish-green color. This plant is a little saltish and astringent. Cows, sheep, and horses, eat it; goats and swine refuse it.

HERNOSAND, an extensive government in the north of Sweden, comprising the provinces of Angermannland, Jemptland, and Medelpad. Its territorial extent is 18,000 square miles, but so thin is the population that the whole does not exceed 100,000. The country is well wooded.

HERNOSAND, or HERNOSUND, a town in the north of Sweden, in Angermannland, the capital of the foregoing government, and a bishop's see. It stands on the island of Herno, in the Gulf of Bothnia, and is united to the continent by a bridge. It has a college with seven teachers, and from sixty to seventy students: a botanical garden; and a good harbour. It was formerly a staple town, and its trade in linen is still very considerable. It has suffered repeatedly from the Russians: and is 240 miles north by west of Stockholm. Population 2500.

HE'RO, *n. s.*
HE'ROESS, *n. s.*
HERO'ICAL, *adj.*
HERO'ICALLY, *adv.*
HERO'IC, *adj.*
HERO'ICLY, *adv.*
HER'OINE, *n. s.*
HER'OISM, *n. s.*

Lat. *heros*; Gr. ηρως. A man eminent for bravery; or in any other respect, as a hero in learning: heroess, heroine, a female hero: heroical, noble; brave; illustrious; productive of heroes: heroism, the qualities and character of a hero.

Bolingbroke
From John of Gaunt doth bring his pedigree,
Being but the fourth of that *heroick* line. *Shakspeare.*

In which were held, by sad disease,
Heroes and *heroesses*. *Chapman.*

Verse makes *heroick* virtue live,
But you can life to verses give. *Waller.*

I sing of *heroes*, and of kings,
In mighty numbers mighty things. *Cowley.*

Methinks *heroick* poesy, 'till now,
Like some fantastic fairy land did show. *Id.*

These sure, said I, will me obey;
These sure *heroick* notes will play. *Id.*

Not that which justly gives *heroick* name
To person, or to poem. *Milton.*

Samson hath quit himself
Like Samson, and *heroickly* hath finished
A life *heroick*. *Id.*

And few indeed can parallel our climes
For worth *heroic* or *heroic* crimes. *Marvell.*

Not *heroically* in killing his tyrannical cousin. *Sidney.*

Musidorus was famous over all Asia for his *heroical* enterprizes. *Id.*

An *heroick* poem is the greatest work which the soul of man is capable to perform: the design of it is to form the mind to *heroick* virtue by example. *Dryden.*

Though you have courage in an *heroical* degree, I ascribe it to you as your second attribute. *Id.*

I have chosen the most *heroick* subject which any poet could desire: I have taken upon me to describe the motives, the beginning, progress and successes of a most just and necessary war. *Id.*

But inborn worth, that fortune can control,
New-strung, and stiffer bent her softer soul;
The *heroine* assumed the woman's place,
Confirmed her mind, and fortified her face. *Id.*

Free from all meaning, whether good or bad;
And, in one word, *heroically* mad. *Id.*

Yet when some virtue much outgrows the rest,
It shoots too fast, and high to be expressed,
As his *heroic* worth struck envy dumb
Who took the Dutchman, and who cut the boom. *Id.*

Then shall the British stage
More noble characters expose to view,
And draw her finished *heroines* from you. *Addison.*

Onward they march embattled to the sound
Of martial harmony; fifes, cornets, drums,
That rouse the sleepy soul to arms and bold
Heroic deeds. *Somerville's Chase.*

Heroes in animated marble frown. *Pope.*

These are thy honors, not that here thy bust
Is mixed with *heroes*, or with kings thy dust. *Id.*

In this view he ceases to be an *hero*, and his return is no longer a virtue. *Id. Odyssey.*

If the Odyssey be less noble than the Iliad, it is more instructive; the Iliad abounds with more *heroism*, this with more morality. *Broome.*

Why should we kill the best of passions love?
It aids the *hero*, bids ambition rise
To nobler heights, inspires immortal deeds,
Ev'n softens brutes, and adds a grace to virtue. *Thomson.*

The solitary silent solemn scene
Where Cæsars, *heroes*, peasants, hermits, lie
Blended in dust together. *Dyer.*

Some write a narrative of wars and feats
Of *heroes* little known, and call the rant
An history. *Cowper.*

Heroes alas! are things of small concern;
Could history man's secret heart reveal
And what imports a heaven-born mind to learn
Her transcripts to explore what bosom would not yearn? *Beattie.*

An hour ago you would have given your soul
To look like other men, and now you pause
To wear the form of *heroes*.
Byron. The Deformed Transformed.

A HERO, in Pagan mythology, was a great and illustrious person, of a mortal nature, but supposed, after his death, to partake of immortality, and to be placed among the number of the gods. The Greeks erected columns and other monuments over the tombs of their heroes, and established a kind of worship in honor of the names both of their heroes and heroines. The Romans also raised statues in honor of their heroes; but there were six of a superior order, who were

supposed to be admitted into the community of the twelve great gods, viz. Hercules, Bacchus, Æsculapius, Romulus, Castor, and Pollux. Authors distinguish between the worship which the ancients paid to their heroes, and that offered to their gods. The latter consisted of sacrifices and libations; the former was only a kind of funeral honor, in which they celebrated their exploits, concluding the rehearsal with feasts.

The HERO OF A POEM, or ROMANCE, is the principal personage, or he who acts the chief part of it. Thus the hero of the Iliad is Achilles; of the Odyssey, Ulysses; of the Æneid, Æneas; of Tasso's Jerusalem, Godfrey of Bulloign.

HERO, in fabulous history, a famous priestess of Venus, who lived at Abydos, in a tower on the banks of the Hellespont. Leander her lover, who lived at Sestos on the other side of the strait, every night swam over to visit her, being directed by a light fixed on the tower. But the light being put out in a stormy night, the youth missed his way, and was drowned; on which Hero threw herself into the sea, and perished.

HERO, THE OLD, and HERO, THE YOUNG, two celebrated Greek mathematicians. The latter was a disciple of Ctesibius. Their works were translated into Latin by Borochius; Spiralium Liber, by Hero senior; and Tractat. artis et machin. militar. by Hero junior. They flourished about A. A. C. 130 and 100.

HERO, NORTH and SOUTH, two islands of Lake Champlain. On the former, thirteen miles in length and two in breadth, is a township annexed to Chittenden county, Vermont. South Hero is an island on the same lake, belonging also to that county. It is ten miles long and five broad, and produces good grain crops. There is also a quarry in it of gray marble, which has the appearance of being a petrifaction of scallops, a species of shell common in this vicinity.

HEROD, improperly styled the Great, tyrant of Judæa, was born at Ascalon, about A. A. C. 68. His father, Antipater the Idumean, or Edomite, appointed him governor of Galilee: Mark Antony made him tetrarch, or ethnarch; and he afterwards obtained the kingdom of Judæa, which was confirmed to him by Augustus, a short time before the birth of our Saviour. At the birth of our Lord, in the vain hope of cutting off the Messiah, he caused all the infants of Bethlehem under two years of age to be massacred. His barbarity was as fatal to his own family as to his subjects; for he murdered his beautiful wife Mariamne, her mother Alexandra, her brother Aristobulus, her grandfather Hyrcanes II., and his own sons Alexander and Aristobulus; which led the emperor Augustus to say, that it was better to be Herod's swine than his sons. He died miserably within three years after the birth of Christ, aged seventy.

HEROD AGRIPPA I. and II. See AGRIPPA.

HEROD ANTIPAS, the son of Herod the Great, by his wife Cleopatra, a native of Jerusalem. Herod, in his will, named his son Archelaus his successor, giving Antipas the title of Tetrarch of Galilee and Peræa. Antipas adorned and fortified the principal places of his dominions. He married the daughter of Aretas king of Arabia; whom he divorced about A. D. 33, to marry his sister-in-law Herodias, wife to his brother Philip, who was still living. St. John the Baptist, exclaiming against this incest and adultery, was imprisoned in the castle of Machærus; and afterwards beheaded by Herod's order, as recorded in Mat. xiv., Mark vi. and Luke iii. Aretas, to revenge the affront which Herod had offered to his daughter, declared war against him, and overcame him in a very obstinate engagement. Herod, being afterwards detected as a party in Sejanus's conspiracy, was banished by the emperor Caligula into Lyons in Gaul, whither Herodias accompanied him. This Antipas is the Herod who, being at Jerusalem at the time of our Saviour's passion (Luke xxiii. 11), ridiculed him, by dressing him in a white robe, and sending him back to Pilate, as a mock king, whose ambition gave him no umbrage. The time when he died is not known, but it is certain he died in exile, as well as Herodias. Josephus says he died in Spain.

HERODIAN, an eminent Greek historian, who flourished at Rome in the third century, in the reigns of Severus, Caracalla, Heliogabalus, Alexander, and Maximin. His history begins from the death of Marcus Aurelius the philosopher, and ends with those of Balbinus and Maximin, and the beginning of the reign of Gordian. It is written in very elegant Greek; and there is an excellent translation of it into Latin, by Angelus Politianus. It was published by Henry Stephens in 4to. in 1581: by Boecler, at Strasburg, in 1662, in 8vo.; and by Hudson, at Oxford, in 1699, 8vo.

HERODIANS, a sect among the Jews, mentioned in Matt. xxii. 16, and Mark iii. 6. Commentators are much divided with regard to them. St. Jerome, in his dialogue against the Luciferians, takes the name to have been given to such as owned Herod for the Messiah; and Tertullian and Epiphanius are of the same opinion. But the same Jerome, in his Comment on St. Matthew, treats this opinion as ridiculous; and maintains, that the Pharisees gave this appellation by way of ridicule to Herod's soldiers, who paid tribute to the Romans; agreeably to this, the Syrian interpreters render the word by the domestics of Herod, i. e. Herod's courtiers. M. Simon, in his notes on the 22nd chapter of Matthew, advances a more probable opinion. The name he supposes to have been given to such as adhered to Herod's party and interest, and were for preserving the government in his family, about which there were great divisions among the Jews. F. Hardouin will have the Herodians and Sadducees to have been the same. Dr. Prideaux is of opinion that they were distinguished from the other Jews by their concurrence with Herod's scheme, of subjecting himself and his dominions to the Romans, and by complying with many of their heathen usages and customs. This symbolizing with idolatry, upon views of interest and worldly policy, was probably that leaven of Herod against which our Saviour cautioned his disciples. It is farther probable, that they were chiefly of the sect of the Sadducees; because the leaven of Herod is also called the leaven of the Sadducees.

HERODIAS. See Herod. She was granddaughter of Herod the Great, so that even her marriage with her uncle Philip was incestuous, as well as her adultery with her brother.

HERODOTUS, an ancient Greek historian, the son of Lyxus and Dryo, born at Halicarnassus in Caria, in the first year of the seventy-fourth Olympiad, about A. A. C. 484. Halicarnassus being at that time under the tyranny of Lygdamis, grandson of Artemisia, queen of Caria, Herodotus retired to Samos; whence he travelled over Egypt, Greece, Italy, &c., and acquired the knowledge of the history and origin of many nations. He then began to digest the materials he had collected, and composed that history which has preserved his name ever since. He wrote it in the isle of Samos. Lucian informs us, that when Herodotus left Caria to go into Greece, he began to consider with himself,

> The lofty means to be for ever known,
> And make the ages yet to come his own.

His history, he presumed, would easily procure him fame, and raise his name among the Grecians, in whose favor it was written; but then he saw that it would be tedious to go through all the cities of Greece, and recite it to the inhabitants of each city. He thought it best therefore to take the opportunity of their assembling all together; and accordingly recited his work at the Olympic games, which rendered him more famous than even those who had obtained the prizes. None were ignorant of his name, nor was there a single person in Greece who had not either seen him at the Olympic games, or heard those speak of him who had seem him there. His work is divided into nine books; which, according to the computation of Dionysius Halicarnassensis, contain the most remarkable occurrences within a period of 240 years; from the reign of Cyrus to that of Xerxes, when the historian was living. These nine books are named after the nine muses, each book being distinguished by the name of a muse; and this has given birth to two disquisitions: viz. 1. Whether they were so called by Herodotus himself; and, 2, For what reason they were so called. As to the first, it is generally agreed that Herodotus did not impose these names himself; but it is not agreed why they were imposed by others. Lucian tells us, that these names weve given them by the Grecians at the Olympic games, when they were first recited, as the best compliment that could be paid the man who had taken pains to do them so much honor. Others have thought, that the names of the Muses have been fixed upon them by way of reproach, to intimate, that Herodotus, instead of true history, had written a work of fiction. Aldus Manutius, Joachim Camerarius, and Henry Stephens, have written apologies for him; and have very justly observed, that he seldom relates any thing of doubtful credit, without producing the authority on which his narration is founded; and, if he has no certain authority to fix it upon, always uses the terms, ut ferunt, ut ego audivi, &c. There is ascribed also to Herodotus, but falsely, a Life of Homer, which is usually printed at the end of his work. He wrote in the Ionic dialect, and his style and manner have been much admired. There have been several editions of his works; two by Henry Stevens, in 1570 and 1592; one by Gale at London in 1679; and one by Gronovius at Leyden in 1715, which is the best.

Heroic Age is that age or period of the world wherein the heroes, or those called by the poets the children of the gods, are supposed to have lived. It coincides with the fabulous age.

Heroic Poem is that which undertakes to describe some extraordinary action, or enterprise. Homer, Virgil, Statius, Lucan, Tasso, Camoens, Milton, and Voltaire, have composed heroic poems. In this sense, heroic poem coincides with epic poem.

Heroic Verse is that wherein heroic poems are usually composed; or it is that proper for such poems. In the Greek and Latin, hexameter verses are peculiarly denominated heroic verses, as being alone used by Homer, Virgil, &c. Alexandrine verses, of twelve syllables, were formerly called heroic verses, as being supposed the only verse proper for heroic poetry; but later writers use verses of ten syllables.

HER'ON, *n. s.* } Fr. *heron*; Ital. *airone*;
Her'onry, *n. s.* } Gr. ερων. A bird that
Her'onshaw, *n. s.* } feeds on fish; heronry, a place where these birds breed.

> He saw when voided were wilde dere,
> These fauconers upon a faire rivere,
> That with hir haukes han the *heron* slain.
> *Chaucer. The Frankeleine's Tale.*

> The scornyng jaie; the eles foe the *heroune*,
> The false lapwing, all full of trecherie.
> *Chaucer. The Assemblee of Foules.*

> The *heron*, when she soareth high, sheweth winds.
> *Bacon.*

> So lords, with sport of stag and *heron* full,
> Sometimes we see small birds from nests do pull.
> *Sidney.*

> They carry their load to a large *heronry* above three miles. *Derham's Physico-Theology.*

Heron, in ornithology. See Ardea. This bird is a very great devourer of fish, and will do more mischief to a pond than even an otter. People who have kept herons, and have had the curiosity to number out the fish they feed them with into a tub of water, and count them, have found that a heron will eat fifty moderate sized roach and dace in a day. It has been found, that, in carp-ponds visited by this bird, one heron will eat up 1000 store carp in a year, and will hunt them so close that very few can escape. The readiest method of destroying this mischievous bird is by fishing for him in the manner of pike, with a baited hook; the bait consisting of small roach or dace, and the hook fastened to one end of a strong line, made of silk and wire twisted together. The wire should be entered under the gills of the roach, and run just under the skin to the tail; in which condition the fish will live several days; for if it be dead the heron will not touch it. To the other end of the line is fastened a stone of two pounds weight; and, several of these baited lines being sunk by means of the stone in different parts of the pond, in a night or two the heron will certainly be taken.

HEROPHILUS, an ancient physician, born in Chalcedon about A. A. C. 500. He was an

accurate anatomist, and is said to have discovered the lacteal vessels, as well as to have made some discoveries in botany.

HER'PES, *n. s.* Gr. ἕρπις. A cutaneous inflammation of two kinds: miliaris, or postularis, which is like millet-seed upon the skin; and excedens, which is more corrosive and penetrating, so as to form little ulcers.

A farther progress towards acrimony maketh a *herpes*; and, if the access of acrimony be very great, it maketh an *herpes* excedens. *Wiseman's Surgery.*

HERQUI, or ERQUI, a village of France, in the department of the North Coasts, with a harbour on the British Channel; eighteen miles west of St. Malo, and four and a half E. N. E. of St. Brieux.

HERQUI BAY, and HERQUI POINT, a bay and cape on the coast of the above village. Sir Sidney Smith sailed into this bay on the 17th of March, 1796, and destroyed several French ships.

HERRENBERG, a town of Germany, in Wurtemberg, fourteen miles S. S. E. of Stuttgard.

HERRENBREITUNGEN, a town of Franconia, in Henneberg, on the Werra.

HERRENGRUND, a mining town of Hungary, four miles N. N. W. of Neusohl. Near it is a productive spring, impregnated with sulphate of copper; the metal is obtained in the form of an oxide by precipitation with iron in the usual way, and is called cement-copper. Here is also a subterraneous passage leading from the town to a place called Stara Hora, or the Old Hill.

HERRERA, a town of Spain, in Old Castile, thirty-two miles N. N. W. of Burgos.

HERRERA (Ferdinand de), an eminent Spanish poet of the sixteenth century, was born at Seville, and principally succeeded in the lyric poetry. Besides his poems, he wrote notes on Garcilasso de la Vega, and an account of the war of Cyprus, and the battle of Lepanto, &c.

HERRERA TORDESILLAS (Anthony), a Spanish historian, secretary to Vespasian Gonzaga, viceroy of Naples, and afterwards historiographer of the Indies, under Philip II., who allowed him a considerable pension. He wrote a general History of the Indies, in Spanish, from 1492 to 1554; and of the World (not so much esteemed) from 1554 to 1598. He died in 1625, aged about sixty-six.

HERRICK (Robert), a poet of the seventeenth century, was a native of London; and educated at St. John's College, and Trinity Hall, Cambridge. He took orders, and in 1629 was presented to the living of Dean Prior in Devonshire. Under the government of Cromwell he suffered deprivation; but he recovered his benefice after the Restoration, which he did not long survive. His compositions were published in 1648 under the title of Hesperides, or the Works both Humane and Divine of Robert Herrick, 8vo. A selection from them, with an account of the author, by Dr. Nott, was again printed at Bristol in 1810; and a complete edition at Edinburgh in 1823, 2 vols. 8vo.

HER'RING, *n. s.* Sax. þæþing; Teut. *hering*; Belg. *herink*. A small sea fish.

The coast is plentifully stored with round fish, pilchard, *herring*, mackrel, and cod. *Carew.*

Buy my *herring* fresh. *Swift.*

HERRING. See CLUPEA.

HERRING FISHERY. See FISHERY.

HERRING (Thomas), archbishop of Canterbury, was the son of the Rev. John Herring, rector of Walsoken in Norfolk, where he was born in 1693. He was educated at the free grammar school of Wisbech, and at Jesus College, Cambridge; was afterwards chosen fellow of Corpus Christi College, and continued a tutor there upwards of seven years. Having entered into orders, in 1719, he was successively minister of Great Shelford, Stow cum Qui, and Trinity in Cambridge; chaplain to Dr. Fleetwood, bishop of Ely; rector of Rettingdon in Essex, and of Barly in Hertfordshire; preacher to the Society of Lincoln's Inn, chaplain in ordinary to king George II., rector of Blechingley in Surrey, and dean of Rochester. In 1737 he was consecrated bishop of Bangor, and in 1743 he was made archbishop of York. When the rebellion broke out in 1745, and the king's troops were defeated at Prestonpans, he convened the nobility, gentry, and clergy of his diocese, and addressed them in an animated speech; which had such an effect, that a subscription ensued, to the amount of £40,000; and the example was followed by the nation in general. On the death of Dr. Potter, in 1747, he was translated to the see of Canterbury; but in 1753 was seized with a violent fever, which brought him to the brink of the grave; and, after languishing about four years, he died on the 13th of March, 1757. He expended upwards of £6000 in repairing and adorning the palaces of Croydon and Lambeth. This worthy prelate possessed, in a most eminent degree, the virtues of public life; he was an excellent preacher, and a true friend to religious and civil liberty. After his death was published a volume of his sermons on public occasions.

HERRNHUT, a small town of Saxony, in Upper Lusatia, built by count Zinzendorf in 1722 for the use of the Moravian brethren. Its manufactures consist of cotton and linen stuffs, stockings, sealing-wax, hats, colored paper, ribands, and utensils of copper, brass, and steel. Its observatory and burial-ground on an adjacent hill are worthy attention. Before the erection of this place, the Moravian brethren were scattered throughout the continent. It is nowthe capital of the Moravian establishments, and from it the brethren frequently take the name of Herrnhutters. It is six miles south of Lobau. Inhabitants about 1800.

HERSCHELL (Sir William), LL. D., the distinguished astronomer, was son of a musician of Hanover, born November 15th, 1738. He was destined by his father for his own profession, and placed at the age of fourteen in the band of the Hanoverian guards. Quitting this regiment abruptly, he arrived in England in 1757; and obtained the patronage of the earl of Darlington. He also succeeded in conducting several concerts, oratorios, &c., in the palatinate of Durham, and the neighbourhood. In 1766 he became organist at Halifax; then at the

Octagon chapel, Bath, which, together with his pupils, produced him a good income. He had now for some time devoted his leisure hours to the mathematics and astronomy; and set about constructing a telescope for himself: he soon produced a seven, a ten, and a twenty feet reflector, having in the latter case used nearly 200 object mirrors before he could satisfy himself. From this period he gradually withdrew from his musical engagements. Late in 1779 he began a survey of the heavens with a seven feet reflector, and after eighteen months' labor, discovered, on the 13th of March, 1781, a new planet, which he named the Georgium Sidus. This drew upon him the public attention, and the patronage of his late majesty; who, by the settlement of a handsome salary, enabled him to devote the rest of his life to astronomy, at Datchett, near Windsor, and at Slough; where he commenced the erection of his forty feet telescope, and completed it in 1787. In 1783 he discovered a volcanic mountain in the moon, and from farther observations, with the assistance of his instrument, in 1787, two others were plainly distinguished, emitting fire from their summits; he also ascertained that the Georgium Sidus was surrounded with rings, and had six satellites, &c. In 1802 Herschell laid before the Royal Society a catalogue of 5000 new nebulæ, nebulous stars, planetary nebulæ, and clusters of stars, which he had discovered; and received from the university of Oxford the honorary degree of doctor of laws, which was followed up, in 1816, by the Guelphic order of knighthood from the regent. He continued his astronomical observations till within a short period of his death, which took place at Slough in August, 1822.

HERSCHELL, the name given by some foreigners to the new planet, called Georgium Sidus by Dr. Herschell, who discovered it. See ASTRONOMY.

HERSE, *n. s.* & *v. a.* } See HEARSE. A
HERSE'LIKE, *adj.* } temporary monument raised over a grave; the carriage in which corpses are drawn at a funeral: herselike, funereal; suitable to funerals; dull; dismal.

And, after that, about the *herses*
Full many orisons and verses,
Withouten note, ful softely
Said were; and that full hertily
That all the night, till it was day,
The peple in the church con pray.
Chaucer's Dreame.

I would my daughter were dead at my foot, and the jewels in her ear. O, would she were *hersed* at my foot, and the ducats in her coffin.
Shakspeare.

Even in the Old Testament, if you listen to David's harp, you shall hear as many *herselike* airs as carols.
Bacon.

The Grecians spitefully drew from the darts the corse,
And *hersed* it, bearing it to fleet. *Chapman.*

The house is *hersed* about with a black wood,
Which nods with many a heavy-headed tree.
Crashaw.

When mourning nymphs attend their Daphnis' *herse*,
Who does not weep that reads the moving verse?
Roscommon.

On all the line a sudden vengeance waits,
And frequent *herses* shall besiege your gates.
Pope.

HERSE. Fr. herce, i. e. a harrow. In fortification, a lattice, or portcullis, in form of a harrow, beset with iron spikes. It is usually hung by a rope fastened to a maulinet; to be cut, in case of surprise, or when the first gate is broken with a petard, that the herse may fall, and stop up the passage of the gate or other entrance of a fortress. It is otherwise called a sarrasin, or cataract; and when it consists of straight stakes, without any cross pieces, it is called orgues.

HERSE is also a harrow which the beseiged, for want of chevaux de frise, lay in the way, or in breaches, with the points up, to incommode the march of the enemy's horse or infantry.

HERSELF', *pron.* See HER. A female individual as distinguished from others; mistress of her own thoughts; the oblique case of the reciprocal pronoun.

The daughter of Pharaoh came down to wash *herself*. *Exodus.*

She returned answer to *herself*. *Judges.*

Not that I may encresen *hire* honour,
For she *hireselven*, is honour and rote
Of bountee, next hire sone; and soules bote.
Chaucer. The Prioresses Tale.

The jealous o'er-worn widow and *herself*,
Since that our brother dubb'd them gentlewomen,
Are mighty gossips in this monarchy. *Shakspeare.*

And while vain pomp does her restrain
Within her solitary bower,
She courts *herself* in amorous vein,
Herself both Danæ and the shower. *Marvell.*

The more she looks, the more her fears increase,
At nearer sight; and she's *herself* the less.
Dryden.

HERSENT (Charles), a French divine of the seventeenth century, who wrote a work entitled Optati Galli de cavendo Schismate. As in this work he charged Cardinal Richelieu with views inimical to the Gallican church, he was obliged to quit France, and retire to Rome; where he incurred censure from the Inquisition, by publishing some peculiar opinions on the doctrine of grace, and was excommunicated. He then returned to France; wrote a Paraphrase on Solomon's Song, with other tracts; and died in 1660.

HERSILIA, the wife of Romulus, the first king of Rome. After her death she was deified, and worshipped under the names of Horta and Orta.

HERSILLON, in the military art, a sort of plank or beam, ten or twelve feet long, whose two sides are driven full of spikes or nails to incommode the march of the infantry or cavalry. The word is a diminutive of herse.

HERTFORD, or HARTFORD, the county town of Hertfordshire, and a borough sending two members to parliament, stands on the river Lea, twenty-one miles north of London. Its British name appears to have been Durocobriva, or the Red-Ford, from the color of the gravel at the bottom of the river: others derive it from hart a deer, there formerly having been great numbers here. It has also been written Hereford. See the county. The arms of the town

are a hart couchant in the water; but they are probably derived from the name of the town. Alfred erected a castle here to check the depredations of the Danes, who came by water from the Thames to Ware; and several Saxon monarchs held courts here. There are in Hertford two parish churches, All Saints' and St. Andrew's. The governors of Christ's Hospital, in London, have a gallery in the latter for the accommodation of the children of their school here, which contains about 400 boys and sixty girls. Here are three dissenters' meeting-houses, a well-established Sunday-school, and a public charity-school for boys and girls. The county gaol and penitentiary-house is a new and commodious building. The town has had several charters of incorporation, but is now governed by a mayor, a high-steward (who is generally a nobleman), a recorder, nine aldermen, a town clerk, a chamberlain, ten capital burgesses, sixteen assistants, and two sergeants at mace. The county election is held here in the shire-hall, a noble building erected by Mr. Adam, in 1780. The electors of the borough consist of householders, and such freemen as were inhabitants when made free. The number of voters exceeds 620. In the reign of William I. a priory of Benedictine monks was founded here, under the abbey of St. Alban's: the remains of its castle consist at present of a gate-house, and an ancient wall with angular towers. The market on Saturday is well supplied with grain. Fairs, second Saturday before Easter-Sunday, Old May-day, Old Midsummer-day, and November 8th, all for cattle.

Hertford College, is an important establishment of the East India Company at Hertford. The establishment of this college arose out of a project of the marquis of Wellesley; who, during his administration in India, founded at Calcutta a collegiate institution, to provide the means of acquiring a knowledge of the languages, the laws, and the local usages of our Indian empire. The directors of the East India Company disapproved in part of the plans of the governor-general; but they at the same time felt the necessity of giving some knowledge to those whom they had nominated as writers: the result was the establishment of the Hertford College.

The system of instruction here adopted holds a medium between the strictness of our public schools and the laxity of the English universities. Every youth, upon being nominated by a director, must, previous to his admission, produce a testimonial from his schoolmaster, and pass an examination in Greek, Latin, and arithmetic, before the professors: those who are found deficient are remanded till another period; for the lectures of the different professors in the college are given in a manner to make preparation necessary, and to encourage most effectually habits of future application. They embrace, in substance, all the important parts of classical literature, the oriental languages, the elements of mathematics and natural philosophy, the laws of England, general history, and political economy.

Examinations take place twice a year, which continue twelve days; and are conducted upon the general plan of the collegiate examinations of our universities, particularly of Cambridge, The questions are framed with a view to ascertain the degree of progress and actual proficiency in each particular department on the subjects studied during the term; and the answers, in all practicable cases, are given in writing, in the presence of the professors, and without reference to books. After the examination is over, the professor of each department reviews, at his leisure, the papers he has received, and places, as nearly as he can, each individual in the numerical order of his relative merit, and in certain divisions implying his degree of positive merit. These arrangements are finally subject to the control of the whole collegiate body. Besides these classifications, prize-medals, books, and honorary distinctions, are awarded to those who are the heads of classes, or as high as second, third, fourth, or fifth, in two, three, four, or five, departments. The course of study occupies two years, and is designed to commence at such an age, that the student may be ready to proceed to India by the time he is eighteen or nineteen years old: having thus begun the study of the oriental languages, he is prepared to prosecute them with advantage at Calcutta, so as to proceed to any official appointment on arriving at his majority.

Each pupil, of whom there are eighty, pays £100 per annum to the college; which is not thought to cost the company more than £10,000 a year. Among its professors this college has already ranked the distinguished names of Sir James Mackintosh and Mr. Malthus.

HERTFORDSHIRE, a county of England, which, as well as those of Bedford and Bucks, belonged to the Cassii, or Catieuchlani, terms signifying men in hostility, or of battle; the latter particularly meaning warriors of the coverts. After the Romans had obtained possession of the island, it was included in the province or district called Flavia Cæsariensis. During the Saxon usurpation it was unequally divided between the kingdom of the East Saxons and that of Mercia.—The name of Hertford, the county town, seems to be derived from much the same source as that of the county just described. It was also written Hereford by the Saxon authors, which is thought to be a corruption of Here Ford, i. e. the Army's Ford.

This is an inland county, situated between the parallels of 51° 37′ and 52° 5′ N. lat. It is bounded on the north and west by Bedfordshire and Cambridgeshire, by Buckinghamshire on the west, by Essex on the east, and by Middlesex on the south. 'It measures,' says Mr. Young, 'twenty-eight miles from east to west, thirty-six miles from north to south, and 130 miles in circumference.' It contains eight hundreds, nineteen market-towns, 120 parishes, and 949 villages. It is in the dioceses of London and Lincoln, the province of Canterbury, and is included in the home circuit.

Of the climate of this county Mr. Young writes, 'I met with no registers of the weather; nor would they probably have contained any thing materially different from other counties

equally southern. The harvest is not forwarder here than in Cambridgeshire; and in the thickest woodland parts, where the soil is wet, it is not so forward as in the more open parts of that adjacent county.' The air, however, is deemed generally mild and healthy. The surface is in many parts richly diversified with hill and dale, clothed with noble woods, and thickly studded with numberless parks attached to the seats of the nobility and gentry.

The *soils*, as delineated on Mr. Young's map, are of the following character: Much the largest portion, occupying all the western border, and extending diagonally beyond the middle of the county, as far as Wotton-Wood Hall, and also round Hertford, is loam of different qualities. The next portion is clay, occupying two districts; the smallest of which is the southern, a stiff, harsh, and tenacious soil; the other, which is much the largest, is the north-east district, consisting of rather a strong wet loam, on a stiff basis of clay-marl. The chalky district extends along a great part of the north-west borders, south-west and due east of Baldock the eastern extremity. But chalk forms the basis, at different depths, of the whole county. The surface chalk consists of two variations:—chalk with no other mixture than what ages of cultivation and manuring have added, and what is called marm, which is a white marl, from a mixture of a portion of clay. Both these soils are good, but the latter is the best. The fourth, or last district, is denominated 'poor gravel.' It is a small triangular patch, having the town of Hatfield nearly in the centre of its base. Besides these, there is a small slip of rich loam extending along the borders of the county, between Theobald's and Hoddesdon. But all these soils are extremely varied and intermixed.

The principal *rivers* are the Lea and the Colne, and these two are composed of many inferior streams, most of whose sources lie in this county. The Lea rises near Lea-Grove Bedfordshire, enters Herts near Bower Heath, and, traversing the county in a north-westerly direction, joins the Stort about a mile east of Hoddesdon, then runs nearly south, and continues with that river, for the most part, the boundary of the county towards the east. The Colne, being the same river that is called Verulam, Verlam, or Muse River, rises in the hundred of Dacorum, near Marget Street, and the confines of Bedfordshire. It runs S.S.E. to St. Alban's, and by the walls of the Roman Verulam; thence nearly south till it loses its original name of Verulam and its consequence, near Colney Street, in the river Colne, which is there a small stream, and rises near Kit's End in Middlesex. Besides these, there are several smaller streams, particularly the Maren, the Beane, the Rib, the Quin, the Ash, and the Gade. The Nine-Sister Spring of the celebrated Cam at Ashmead, the source of the Hix near Hitchin, and the sources of other rivers are in this county.—The Grand Junction Canal, from Braunston Wharf on the Coventry Canal to Old Brentford, where it joins the Thames, enters the county of Hertford above Berkhamstead, and follows the course of the Bulbum and Gade to Rickmansworth; and thence the course of the Colne, till it leaves the county.—The few *medicinal springs* of this province are chiefly chalybeate; these are confined to the south part. Some incrustating springs have been noticed near Colthall, in the northern part of the county.—The *agricultural produce* consists principally of wheat, barley, and apples: there are no minerals of any consequence.

Hertfordshire sends six members to parliament: viz. two for the county, two for Hertford, two for St. Alban's.

Hertfordshire has produced the following celebrated characters: viz. St. Alban, the protomartyr of England, born at Verulam, now St. Alban's, in the third century. He suffered during the Dioclesian persecution, A. D. 303.—John Shute, lord viscount Barrington, a learned and pious nobleman and theological writer, was born at Theobalds, 1678. Died 1734.—Nicholas Brekespeare, Pope Adrian IV., the only Englishman who ever attained that dignity, was born at Langley near St. Alban's; he died, not without suspicion of poison, in 1159.—The pious and amiable poet Cowper, was born at Berkhamstead, 1741; died April 25th, 1800.—Richard Cromwell, eldest son of Oliver, was born at Cheshunt, 1626; died 1712.—Sir Richard Fanshawe, a statesman and poet, born at Ware, 1607; died 1666.—Robert Hill, a remarkable self-taught linguist; born at Tring, 1699; died 1777.—Sir John King, an eminent lawyer, born at St. Alban's, 1639; died about 1677.—Sir John Mandeville, a remarkable traveller, born at St. Alban's; died at Liege, 1371.—Thomas Stanley, a learned poet and historian, born in this county, in 1644; died 1678.—John Walker, the worthy author of the Pronouncing Dictionary, and several other valuable works, born at Barnet, 1732; died 1807.—Seth Ward, a learned divine and mathematician, born at Buntingford, 1617; died in a state of insanity, 1689. Hertford, the county town, gives the title of marquis to the Seymour-Conway family. This county may be said in general to be destitute of manufactures; yet not entirely so. Plaiting straw is a resource for poor women and children in one part of the county, and is carried on to a great extent in and near Dunstable, and at Redbourne, St. Alban's, Berkhamstead, Hitchin, &c.—Malt is also made to a considerable extent.

HERTHA, or HERTHUS, in mythology, a goddess worshipped by the ancient Germans. She is mentioned by Tacitus, in his book De Moribus Germanorum, cap 40. Vossius supposes that this goddess was Cybele: but she was more properly Terra or the Earth; for the Germans still use hert for the earth, whence also the English word earth.

HERVEY (James), a clergyman of exemplary piety, was born in 1714, and succeeded his father in the livings of Weston-Favell, and Collingtree, in Northamptonshire. These, being within five miles of each other, he attended alternately with his curate; till, being confined by ill health, he resided constantly at Weston; where he diligently pursued the labors of the ministry and his studies. This excellent divine died on Christmas day 1758, leaving the little he possessed to buy warm clothing for the poor in

that severe season. No work is more generally or deservedly known than his Meditations and Contemplations: containing Meditations among the Tombs, Reflections on a Flower-garden, a Descant on Creation, Contemplations on the Night and Starry Heavens, and a Winter Piece. The sublime sentiments in these pieces have the peculiar advantage of being conveyed in a a flowing elegant language, and they have accordingly gone through many editions. He published, besides, Remarks on lord Bolingbroke's Letters on History; Theron and Aspasio, or a Series of Dialogues and Letters on the most Important Subjects; some sermons and other tracts.

HERY, *v. a.* Sax. þeṗian, to praise; to celebrate. To hallow; to regard as holy. Now no longer in use.

> And whan that folk it to his fader told,
> Not only he, but all his contree mery
> Was for this childe, and God they thanke and *hery*.
> *Chaucer. The Clerkes Tale.*
>
> But by the mouth of children thy bountee,
> Parfourmed is, for on the brest sinking
> Sometime shewen they thin *herying*.
> *Chaucer. The Prioresses Tale.*
>
> Then wouldst thou learn to carol of love,
> And *hery* with hymns thy lasse's glove.
> *Spenser.*

HESBON, Esebon, or Heshbon, in ancient geography, the royal city of the Amorites, in the tribe of Reuben, according to Moses; though in Josh. xxi. 39, where it is reckoned among the Levitical cities, it is put in the tribe of Gad; which proves its situation to be on the confines of both.

HESDIN, a well built and fortified town in the department of the Pas-de-Calais, France, situated among the marshes of the small river Canche. Including the four suburbs contiguous, Hesdin contains about 5000 inhabitants, chiefly employed in the manufacture of stockings, caps, &c. It is twelve miles south-east of Montreuil, and twenty-seven west of Arras.

HESELRIGE (Sir Arthur), Bart., was the eldest son of Sir Thomas Heselrige, of Nosely, in Leicestershire, a gentleman of an ancient family, and succeeded to the title on the death of his father, in 1629. He was one of the representatives in parliament for the county of Leicester in 1640, when he distinguished himself by his opposition to the arbitrary measures of the court; and was active in procuring a bill of attainder against lord Stafford. His name appears among the members of parliament, whose arrest was the object of Charles I.'s visit to the house of commons. In the civil wars, Sir Arthur Heselrige was governor of Newcastle; and commanded a regiment of cuirassiers, which he had raised. He also acted at the head of a committee at Leicester, for the confiscation of the property of the royalists. He particularly attached himself to Cromwell, whose confidence he enjoyed; and, after the death of the king, was appointed one of the council of state. The protector likewise nominated him a member of his house of peers. At the beginning of the Restoration, he endeavoured to counteract the designs of Monk; and did not live to witness the triumph of the royal cause, his death having taken place January the 7th, 1660. Two letters which he wrote on military service have been published; 1. Concerning the revolt and recovery of Tinemouth Castle; London, 1648, 4to.; and 2. A Letter to William Lenthall, concerning a great victory obtained by the Parliament Forces in Northumberland, London, 1648, folio.

HESHUSIUS (Tilleman), a German Lutheran divine, born at Wessel in 1526. He wrote, 1. Commentaries on the Psalms: 2. On Isaiah: 3. On St. Paul's Epistles; and, 4, On Justification and the Lord's Supper. He died in 1588.

HESIOD, a very ancient Greek poet; but whether contemporary with Homer, or a little older, is not agreed among the learned. His father, as he tells us in his Opera et Dies, was an inhabitant of Cumæ, one of the Æolian Isles, now called Taio Nova; and removed thence to Ascra, a little village of Bœotia, at the foot of Mount Helicon, where Hesiod was probably born. Of what rank his father was is no where said; but that he was driven by misfortunes from Cumæ to Ascra, Hesiod himself informs us. His father seems to have prospered better at Ascra, than he did in his own country; yet Hesiod could arrive at no higher fortune than keeping sheep on the top of Mount Helicon. Here he first devoted himself to the service of the Muses, as he boasts in his Generatio Deorum :—

> Erewhile as yet the shepherd swain behold,
> Feeding beneath the sacred mount his fold,
> With love of charming song, his breast they fired:
> There me the heavnenly muses first inspired;
> There, when the maids of Jove the silence broke,
> To Hesiod thus the shepherd swain they spoke, &c.

On the death of the father, an estate was left, which ought to have been equally divided between Hesiod and his brother Perses; but Perses defrauded him in the division, by corrupting the judges. The last circumstance he mentions relating to himself is his conquest in a poetical contention. Archidamus, king of Eubœa, had instituted funeral games in honor of his own memory, which his sons afterwards took care to have performed. Here Hesiod was a competitor for the prize in poetry; and won a tripod, which he consecrated to the Muses. When he was grown old (for it is agreed by all that he lived to a very great age), he removed to Locris, a town about the same distance from mount Parnassus as Ascra was from Helicon. His death was tragical. The man with whom he lived at Locris, a Milesian born, ravished a maid in the same house; and though Hesiod was entirely ignorant of the fact, yet, being maliciously accused to her brothers as an accomplice, he was unjustly slain with the ravisher, and thrown into the sea. The Theogony and Opera et Dies are the only undoubted pieces of this poet now extant; but it is supposed that even these have not come down to us complete. A good edition of Hesiod's works was published by Le Clerc, at Amsterdam, in 1701.

HESIONE, in fabulous history, the daughter of Laomedon, king of Troy, and sister of king Priam. Being exposed to be devoured by a sea-monster, Hercules killed it and delivered

her; but, Laomedon refusing him the promised reward, he sacked Troy, and gave Hesione to Telamon.

HES'ITANCY, *n. s.* } Fr. *hesiter;* Lat.
HES'ITATE, *v. a.* } *hæsito* Indecision,
HESITA'TION, *n. s.* } doubt, suspense: hesitate, to faulter, demur, pause: hesitation, intermission of speech; difficult utterance; suspense; delay.

The reason of my *hesitancy* about the air is, that I forgot to try whether that liquor, which shot into crystals, exposed to the air would not have done the like in a vessel accurately stopped. *Boyle.*

I cannot foresee the difficulties and *hesitations* of every one: they will be more or fewer, according to the capacity of each peruser.
Woodward. Natural History.

Some of them reasoned without doubt or *hesitancy*, and lived and died in such a manner as to show that they believed their own reasonings. *Atterbury.*

A spirit of revenge makes him curse the Grecians in the seventh book, when they *hesitate* to accept Hector's challenge. *Pope.*

Willing to wound, and yet afraid to strike
Just hint a fault, and *hesitate* dislike;
Alike reserved to blame or to commend,
A tim'rous foe, and a suspicious friend. *Pope.*

Many clergymen write in so diminutive a manner, with such frequent blots and interlineations, that they are hardly able to go on without perpetual *hesitations.*
Swift.

HESPER, Hesperus, Gr. ἑσπερος, in astronomy, the evening star; an appellation given to Venus when she sets after the sun. See Hesperus.

HESPERIA, or Hesperia Magna, an ancient name of Italy; so called by the Greeks from its western situation.

HESPERI Cornu is called the Great Bay by the author of Hanno's Periplus; but most interpreters, following Mela, understand a promontory; some Cape Verd, others Palmas Cape: Vossius takes it to be the former, since Hanno did not proceed so far as the latter cape.

HESPERIDEÆ, in botany, from the Hesperides; golden or precious fruit: the nineteenth order in Linnæus's natural method. See Botany.

HESPERIDES, in ancient mythology, the granddaughters of Hesperus, the brother of Atlas. According to Diodorus, these brothers possessed great riches in the western parts of Africa. Hesperus had a daughter called Hesperia, who married her uncle Atlas, and from this marriage proceeded seven daughters, called Hesperides from the name of their mother, and Atlantides from that of their father. According to the poets, the Hesperides were three in number, Ægle, Arethusa, and Hesperethusa. Hesiod, in his Theogony, makes them the daughters of Nox, Night, and seats them in the same place with the Gorgons; viz. at the extremities of the west, near mount Atlas; because the sun sets there. They were fabled to have had the keeping of certain golden apples, on the other side of the ocean. A dragon watched the garden, but Hercules slew him, and carried off the apples. Pliny and Solinus suppose the dragon to mean an arm of the sea, wherewith the garden was encompassed, and which defended the entrance; and Varro supposes, that the golden apples were sheep. Others, with more probability, say they were oranges.

Hesperides, Gardens of the, in ancient geography, are placed by some authors at Larach, a city of Fez; by others at Bernich, a city of Barca, which accords better with the fable. Others take the province of Susa in Morocco for the island wherein the garden was seated. And, lastly, Rudbecks places the Fortunate Islands, and these gardens, in his own country, Sweden.

HESPERIDUM Insulæ, in ancient geography, islands near the Hesperi Cornu; but the accounts of them are so much involved in fable, that nothing certain can be affirmed of them.

HESPERIS, Rocket, dame's violet, or queen's gilliflower; a genus of the siliquosa order, and tetradynamia class of plants; natural order thirty-ninth, siliquosæ. The petals are turned obliquely; there is a glandule within the shorter stamina; the siliqua almost upright; the stigma forked at the base, connivent, or closing at the top: cal. close. The species are,

1. H. inodora, the scentless rocket, with a fibrous root; upright, round, firm stalks, two feet high, garnished with spear-shaped, acute, pointed, sharply indented, close-sitting leaves; and all the branches terminated by large spikes of scentless flowers, with obtuse petals, of different colors and properties in the varieties. This species makes a fine appearance, but has no scent.

2. H. matronalis, the common sweet-scented garden rocket, having fibrous roots, crowned with a tuft of long, spear-shaped, rough, leaves; upright, single, hairy stalks, two feet high; garnished with oval, lanceolate, slightly indented, close-sitting leaves; and the stalk and branches terminated by large and long spikes of sweet-scented flowers of different colors and properties in the varieties, of which there are a great number. All the varieties of this species are so remarkable for imparting a fragrant odor, that the ladies were fond of having them in their apartments. Hence they derived the name of dame's violet; and, bearing some resemblance to a stock gilliflower, were sometimes also called queen's gilliflower; but are now most commonly called rocket.

3. H. tristis, the dull-flowered night-smelling rocket, has fibrous roots, upright, branching, spreading, bristly stalks, two feet high; spear-shaped pointed leaves; and spikes of pale purple flowers, of great fragrance in the evening. All the species are hardy, especially the first and second, which prosper in any of the open borders, and any common garden soil; but the third should have a dry warm situation, and a few may be placed in pots to be sheltered in case of inclement weather. They may be propagated either by seeds, by offsetts, or by cuttings off the stalks.

HESPERUS, in mythology, the brother of Atlas, and grandfather of the Hesperides. Diodorus, lib. iii. relates, that Hesperus, having ascended to the top of Mount Atlas, the better to observe the stars, never returned; and hence he was fabled to have been changed into the star

called Lucifer in the morning, and Hesperus in the evening.

HESSE CASSEL, an electorate of Western Germany, bordering on Hanover, the Prussian States, Hesse Darmstadt, and Nassau. In 1803 the former title of Landgrave was first exchanged by the house of Hesse for that of elector, through the influence of Napoleon: but, the reigning prince not being sufficiently subservient to France, his territories were afterwards added to the kingdom of Westphalia: and the elector retired to Prague. One of the first effects of the victories of the allies, in 1813, was the re-establishment of this prince. He holds the eighth place in the German States, and has three votes in the grand assembly of the diet.

His dominions consist, according to the final settlements of the congress of Vienna, of Upper and Lower Hesse, the grand duchy of Fulda, the territory of Hanau, and the lordship of Schmalkalden, with some smaller adjacent territories. They are divided into ten provinces, thus described:—

Provinces.	Containing in English Sq. miles.	Population.	Chief Towns	Inhabitants.
1. Lower Hesse . . .	1883	248,000	CASSEL	19,500
2. Upper Hesse . . .	651	58,319	Marburg	6500
3. Hersfeld	159	19,010	Hersfeld	5222
4. Ziegenhain	223	26,600	Ziegenhain	1100
5. Fritzlar	136	16,102	Fritzlar	2267
6. Schmalkalden . . .	117	22,826	Schmalkalden	4697
7. Fulda	618	68,006	Fulda	7463
8. Isenburg	95	47,457	Birstein	1000
9. Hanau.	427	63,000	Hanau	11,997
10. Schauenburg . . .	194	27,000	Rintelen	2666

Much of the surface of these provinces is occupied with hills abounding with wood and minerals; and interspersed with valleys devoted to pasturage. Upper Hesse is partly occupied by the lofty range of Wesergebirge. The elevated parts of Fulda are Vogelsberg and Rhoen; and Schmalkalden is principally occupied by the forest of Thuringia. The climate, on the whole, is cold and uncongenial in comparison with the latitude. Hanau produces the most useful vegetables; its soil is rich, and its climate comparatively mild. It is the only district in which the vine flourishes. But agriculture is altogether in a backward state.

The chief rivers of Hesse Cassel are the Maine, the Fulda, the Werra, the Edder, and the Lahn. Tobacco is grown along the banks of the Werra and the Maine; but potatoes supply a great part of the population with food. Flax is raised in some places, and is a valuable article for domestic purposes. The mountainous districts afford large supplies of timber; and many useful metallic productions. Among these are silver, copper, iron, cobalt, vitriol, salt, alum, marble, basalt, and coal. Cassel, the capital of the electorate, is situated on the Fulda, in the district of Lower Hesse. Other chief places are Hanau, Marburg, and Fulda. Linen, made from the flax grown in the country, is the staple manufacture; besides supplying the home consumption, the linen and yarn annually exported amount to about £300,000. Much of the native iron and steel is wrought upon the spot in Schmalkalden. The silk manufacture is carried on in a few places; and cotton spinning has been lately introduced. The commerce of Hesse Cassel languishes for want of free channels. Its principal streams, the Maine and the Werser, traverse only corners of its territory, and heavy duties are levied on the navigation of others, by the states through which they pass to the sea.

Education is restricted to the higher ranks by law; and the press is greatly restrained here. The constitution is a limited hereditary monarchy: the states, consisting of the prelates, and nobles, deputies from the towns.

The reigning family and most of the inhabitants are Calvinists; they amount to about 340,000. The Lutherans are stated at 150,000; the Catholics at about 90,000, and the Jews at 8500. Smaller sects make up the remainder of the population. The contingent to the confederate army is 5400 men, but the whole of the armed force amounts to 8000 or 10,000, and the revenue to about 500,000. A public debt has lately been incurred, equal to about one year's revenue.

HESSE DARMSTADT, or the GRAND DUCHY OF HESSE, is situated near the Rhine, and belongs to another branch of the House of Hesse. It is divided into two parts, by the country of Hanau and the territory belonging to Frankfort, which stretches along the right bank of the Maine. The southern portion of these dominions, which is the most fertile, contains an area of 2000 square miles, and a population of 350,000. The other division contains about 1900 square miles, and a population of 250,000. The territorial extent of the whole grand duchy, including its possessions on the left bank of the Rhine, has been lately stated by M. Pauli to include only 3617 square miles, and 620,630 inhabitants, which is about 171 persons to each square mile.

None of the minor states of Germany have benefited by the French Revolution more than this. The landgrave became an early member of the confederation of the Rhine, and, with the title of

grand duke, received considerable accessions of territory, with the sovereignty of the free cities within his dominions. In 1809 he obtained further accessions, in consequence of his exertions against Austria; and when, after the battle of Leipsic, he agreed to join the allies, it was on condition of preserving his territory entire. The congress of Vienna, in 1815, confirmed this treaty; and in the cessions made to Hesse Darmstadt on the left bank of the Rhine, in return for what was relinquished on the right, to suit other members of the alliance, the balance was in favor of the grand duke, both as to population and compactness of territory.

Hesse Darmstadt is fully as mountainous as Hesse Cassel, its northern division containing part of the ranges of the Vogelsberg and Wersterwald; while the southern has on the right of the Rhine the rugged and romantic Odenwald, and on the left a number of hills and mountains, branching off from Mont Tonnerre. Its metallic products of iron, copper, and lead, supply the chief articles of commerce; but the soil is often poor, and in many districts the lower orders live chiefly on potatoes: in the valleys corn and vegetables are successfully cultivated; also flax; and in certain situations tobacco; vines only appearing along the banks of the Maine and Rhine. The pasturage in general is good; and salt is obtained in large quantities at Creutznac. The rivers, besides the Rhine and Maine, are the Lahn, the Nidda, the Ohen, the Schwalm, and the Itter, all to the north of the Maine. The climate is healthy, and the position of the country favorable to trade; but this advantage has been little improved. The principal manufactures, which are also in a drooping state, are linen, woollen, leather, and hardware. Its chief towns are, Mentz, population 25,000; Darmstadt (the capital) 12,000; Worms, 5700; Giessen 2500. The town of Darmstadt has of late increased rapidly, principally from a twenty years' exemption from taxes, granted here to whoever builds a house in conformity with the government plan.

The constitution of Hesse Darmstadt is a limited monarchy, divided into states or representatives; but the latter are not often assembled. The crown is hereditary in the male line, and the sovereign is considered of age at eighteen. Hesse Darmstadt has one vote and the ninth place at the smaller assembly of the Germanic diet; at the larger it has three votes. Besides the ministry, the high court of appeal, and other offices at Darmstadt, each province has a regency, a court of justice, a chamber of finance, and a commission for the domain lands. The minor divisions of the grand duchy are bailiwics. The revenue is calculated at £400,000, of which £80,000 go to pay the interest of the national debt. The military are between 6000 and 7000 men, besides militia. In point of education Hesse Darmstadt has of late made considerable advances. There is a university at Giessen; at Mentz a school of law; and classical schools at Giessen, Darmstadt, Mentz, and Worms.

Hesse-Homburg, a small principality to the south of Hesse-Darmstadt at the foot of the Taunus Mountains, and belonging, with the title of landgrave, to a younger branch of the family o Hesse-Darmstadt. It formerly had only about 7000 inhabitants; but the influence at the congress of Vienna of four sons of the reigning prince who acted a distinguished part in the late wars of Austria, obtained it several additional districts, and it now reckons 20,000 inhabitants. In 1806, when the confederation of the Rhine was formed, the landgrave was deprived of his states. Its new territories are on the left side of the Rhine. The landgrave is an independent member of the Germanic confederation; but his revenue hardly exceeds £18,000 a-year. The family residence is at the town of Homburg, containing about 3500 inhabitants, and situated in a beautiful country, at the foot of lofty mountains. It is called, on that account, Homburg on the Height. The eldest of the sons, the hereditary prince, married the princess Elizabeth of England in 1818: another of the brothers is married to a princess of Prussia. The professed religion here is Calvinism.

HESSIAN Fly, a very mischievous insect, which a few years ago appeared in North America; and whose depredations then threatened entirely to destroy the crops of wheat in that country. It is, in its perfect state, a small winged insect; but the mischief it does is while in the form of a caterpillar; and the difficulty of destroying it is increased by its being as yet unknown where it deposits its eggs, to be hatched before the first appearance of the caterpillars. These mischievous insects begin their depredations in autumn, as soon as the wheat begins to shoot up through the ground. They devour the tender leaf and stem with great voracity, and continue to do so till stopped by the frost; but no sooner is this obstacle removed by the warmth of the spring, than the fly appears again, laying its eggs now upon the stems of the wheat just beginning to spire. The caterpillars, hatched from these eggs, perforate the stems of the remaining plants at the joints, and lodge themselves in the hollow within the corn, which shows no sign of disease till the ears begin to turn heavy. The stems then break; and, being no longer able to perform their office in supporting and supplying the ears with nourishment, the corn perishes about the time that it goes into a milky state. These insects attack also rye, barley, and timothy grass, though they seem to prefer wheat. This terrible insect appeared first in Long Island during the American war, and was supposed to have been brought from Germany by the Hessians; whence its name. Thence it proceeded inland at the rate of about fifteen or twenty miles annually; and in 1789 had reached 200 miles from the place where it was first observed. At that time it continued to proceed with unabating increase; being apparently stopped neither by rivers nor mountains. In the fly state it is likewise exceedingly troublesome; by getting into houses in swarms, falling into victuals and drink; filling the windows, and flying perpetually into the candles. It still continued to infest Long Island as much as ever; and in many places the culture of wheat was entirely abandoned. Mr. Morgan, in a communication to the Philadelphia Society for promoting

agriculture, informs us, that he had made himself acquainted with the fly, by breeding a number of them from the chrysalis into the perfect state. The fly is at first of a white body with long black legs and whiskers, so small and motionless as not to be easily perceived by the naked eye, though very discernible with a microscope; but they soon become black and very nimble, both on the wing and feet, being about the size of a small ant. During the height of the brood in June, where fifty or 100 of the nits have been deposited on one stalk of wheat, he has sometimes discovered, even with the naked eye, some of them twist and move on being disturbed: this is while they are white; but they do not then travel from one stalk to another, nor to different parts of the same stalk. The usual time of their spring hatching from the chrysalis is in May. 'Those who are doubtful whether the fly is in their neighbourhood, or cannot find their eggs or nits in the wheat, may satisfy themselves by opening their windows at night, and burning a candle in the room. The flies will enter in proportion to their numbers abroad. The first night after the commencement of wheat harvest, this season, they filled my dining room in such numbers as to be exceedingly troublesome in the eating and drinking vessels. Without exaggeration I may say, that a glass tumbler, from which beer had been just drunk at dinner, had 500 flies in it in a few minutes. The windows are filled with them when they desire to make their escape. They are very distinguishable from every other fly by their horns or whiskers.' In its perfect state it is probably a tenthredo, like the black negro fly of the turnip. As great quantities of wheat were at this time imported from America into Britain, it became an object worthy of the attention of government, to consider how far it was proper to allow of such importation, lest this destructive insect might be brought along with the grain. See our article Entomology.

HEST, *n. s.* Sax. þæꝛt. Command; precept; injunction. Obsolete, or written behest.

> When faith fayleth in priestes sawes,
> And tordes *hestes* are holden for lawes,
> And robberie is holde purchase,
> And lecherie is holde solace;
> Then shall the lord of Albion
> Be brought to great confusion. *Chaucer's Prophecie.*

> Thou wast a spirit too delicate
> To act her earthy and abhorred commands,
> Refusing her grand *hests*. *Shakspeare.*

HESYCHIUS, the most celebrated of all the ancient Greek grammarians, whose works are extant. He was a Christian; and, according to some, the same with Hesychius, patriarch of Jerusalem, who died in 609. He wrote a Greek lexicon; which, in the opinion of Casaubon, is the most learned and useful work of that kind produced by the ancients. Schrevelius published a good edition of it in 1668, in 4to. with notes; but the best are those of John Alberti, printed at Leyden in 1746, and Ruhnkenius, in 1776; both in 2 vols. folio.

HET'EROCLITE, *n. s.* } Fr. *heteroclite;*
Heteroclit'ical, *adj.* } Lat. *heteroclitum.* Nouns declined irregularly; any person or thing deviating from the common rule.

> In the mention of sins *heteroclitical*, and such as want either name or precedent, there is oft-times a sin, even in their histories. *Browne.*

> The *heteroclite* nouns of the Latin should not be touched in the first learning of the rudiments of the tongue. *Watts.*

HET'ERODOX, *adj.* & *n. s.* Fr. *heterodoxe;* Gr. ετερος, different, and δοξα, creed or opinion A person deviating from the established opinions; a peculiar sentiment: generally applied to religious tenets.

> Not only a simple *heterodox*, but a very hard paradox it will seem, and of great absurdity, if we say attraction is unjustly appropriated unto the loadstone. *Browne's Vulgar Errours.*

> Partiality may be observed in some to vulgar, in others to *heterodox* tenets. *Locke.*

HETERODROMUS Vectis, a lever in which the fulcrum, or point of suspension, is between the weight and the power. It is the same with what is called a lever of the first kind.

HETEROGE'NEAL, *adj.* }
Heterogene'ity, *n. s.* } Fr. *heterogene:* Gr. ετερος and γενος.
Heteroge'neous, *adj.* } Differing in nature or kindred: opposition in qualities.

> Let the body adjacent and ambient be not commaterial, but merely *heterogeneal* towards the body that is to be preserved: such as quicksilver and white amber to herbs and flies.

> Guaiacum, burnt with an open fire in a chimney, is sequestered into ashes and soot; whereas the same wood, distilled into a retort, does yield far other *heterogeneities*, and is resolved into oil, spirit, vinegar, water, and charcoal. *Boyle.*

> 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.*

> I have observed such *heterogeneous* bodies, which I found included in the mass of this sandstone. *Woodward.*

Heterogeneity, in physics, is also used for the heterogeneous parts themselves: in which sense, the heterogeneities of a body are the same things with its impurities.

Heterogeneous Nouns, one of the three variations in irregular nouns; or such as are of one gender in the singular number, and of another in the plural. Heterogeneous, under which are comprehended mixed nouns, are six fold. 1. Those which are of the masculine gender in the singular number, and neuter in the plural; as, hic tartarus, hæc tartara. 2. Those which are masculine in the singular number, but masculine and neuter in the plural; as hic locus, hi loci, and hæc loca. 3. Such as are feminine in the singular number, but neuter in the plural; as, hæc carbasus, and hæc carbasa. 4. Such as are neuter in the singular number, but masculine in the plural; as, hoc cœlum, hi cæli. 5. Such as are neuter in the singular, but neuter and masculine in the plural; as, hoc rastrum, hi rastri, and hæc rastra. And, 6, Such as are neuter in the singular, but feminine in the plural; as, hoc epulum, hæ epulæ.

HETEROS'CIANS, *n. s.* Gr. ἑτέρος and σκία. Those whose shadows fall only one way, as the shadows of us who live north of the tropic fall at noon always to the north.

HETH, חת, Heb. i. e. fear, the second son of Canaan, grandson of Ham, and progenitor of the Hittites, Gen. x. 15. He dwelt southward of the promised land, at Hebron or its neighbourhood. Ephron, an inhabitant of Hebron, was a descendant of Heth, and the city in Abraham's time was peopled by his posterity. See HITTITES.

HETRURIA, or ETRURIA, in ancient geography, a celebrated country of Italy, west of the Tiber. It originally contained twelve different nations, which had each their respective monarch. Their names were Veientes, Clusini, Perusini, Cortonenses, Arretini, Vetuloni, Volaterrani, Russellani, Volscinii, Tarquinii, Falisci, and Cæretani. The inhabitants were famous for their confidence in omens, dreams, auguries, &c. They all proved powerful and resolute enemies to the rising empire of the Romans, and were conquered only after much effusion of blood.

HETTSTADT, or HECKSTADT, a mining town of Prussian Saxony, on the Wipper, in the county of Mansfeld. The mines of the neighbourhood, though less extensively worked than formerly, are considerable; and here is an elegant furnace for melting silver. Population 2750. Five miles north of Mansfeld, and nine north of Eisleben.

HEVÆI, in ancient geography, the Hivites, one of the seven nations who occupied Canaan; a numerous people, and the same with the Kadmonæi, who dwelt at the foot of Hermon and partly of Libanus, or between Libanus and Hermon, Judges iii. 3. To this Bochart refers the fables concerning Cadmus and Harmonia, changed to serpents; the name hevi denoting a wild animal, such as is a serpent. Cadmus, who is said to have carried the use of letters to Greece, seems to have been a Kadmonean; of whom the Greeks say that he came to their country from Phœnicia.

HEVELIUS, or HEVELKE (John), an astronomer of the last century, was born at Dantzic in the year 1611. He studied in Germany, England, and France, and every where obtained the esteem of the learned. He was the first who discovered a libration in the moon, and he made several important observations on the other planets. He also discovered several fixed stars, which he named the firmament of Sobieski, in honor of John III. king of Poland. His wife was also well skilled in astronomy. In 1763 and 1769 he published a description of the instruments with which he made his observations, under the title of Machina Cœlestis. But in September of that year, while he was in the country, his house at Dantzic was burnt down, by which he lost not only his observatory and all his valuable instruments, but also a great number of copies of his Machina Cælestis. He died in 1687, aged seventy-six. In 1690 were published his Firmamentum Sobiscianum, and Prodromus Astronomiæ et novæ Tabulæ solares, unà cum Catalogo Stellarum fixarum, in which he gives the necessary preliminaries for taking an exact catalogue of the stars. He was made a burgo-master of Dantzic; which office he is said to have executed with the utmost integrity.

HEVES, a palatinate of Upper Hungary, lately united with that of Outer Solnak. The two districts contain a population of about 180,000. The products are corn, wine, tobacco, and alum. The inhabitants, almost all of Hungarian descent, are mixed with a few Sclavonians, Germans, and gipsey wanderers. The province is named from the small town of Heves, but the diets are held at Erlau; and the archbishop of that place is upper palatine.

HEURNIUS, or VAN HEURN (John), M. D., a learned Dutch physician, born at Utrecht in 1543. He studied at Louvaine, Paris, Padua, and Pavia. On his return he was elected a magistrate of Amsterdam; after which he became professor of anatomy, and rector of the university at Leyden, where he died in 1601. He wrote commentaries on Hippocrates, and various treatises on different diseases.

HEW, *v. a.* } Part. hewn, or hewed. Sax.
HEW'ER, *n. s.* } heapan; Teut. *hauen;* Goth. and Swed. *huga.* To cut by blows with an edged instrument; to form or shape with an axe; to form with labor or exertion: hewer, one whose employment is to cut wood or stone: when used with the particles *down*, it signifies to fell; *up*, to excavate from below; *off*, to separate.

Thou hast *hewed* thee *out* a sepulchre here, as he that *hewed* him *out* a sepulchre on high. *Isaiah* xxii.

Upon the joint the lucky steel did light,
And made such way that *hewed* it quite in twain.
Spenser.

Yet shall the axe of justice *hew* him *down*,
And level with the root his lofty crown. *Sandys.*

Brave followers, yonder stands the thorny wood,
Which, by the heavens' assistance and your strength,
Must by the roots be *hewn up* yet ere night.
Shakspeare.

Scarce can I speak, my choler is so great:
Oh! I could *hew up* rocks and fight with flint. *Id.*

I had purpose
Once more to *hew* thy target from thy brawn,
Or lose my arm for't. *Id.*

He that depends
Upon your favours, swims with fins of lead,
And *hews down* oaks with rushes. *Id.*

One Vane was so grievously *hewn*, that many thousands have died of less than half his hurts, whereof he was cured. *Hayward.*

Nor is it so proper to *hew out* religious reformations by the sword, as to polish them by fair and equal disputations. *King Charles.*

He from the mountain *hewing* timber tall,
Began to build a vessel of huge bulk. *Milton.*

At the building of Solomon's temple there were fourscore thousand *hewers* in the mountains. *Browne.*

The gate was adamant; eternal frame;
Which, *hewed* by Mars himself, from Indian quarries came,
The labour of a god. *Dryden's Fables.*

Next unto bricks are preferred the square *hewn* stone. *Mortimer.*

This river rises in the very heart of the Alps, and has a long valley that seems *hewn out* on purpose to give its waters a passage amidst so many rocks.
Addison on Italy.

We'll force the gate where Marcus keeps his guard,
And *hew down* all that would oppose our passage.
Addison.

I now pass my days, not studious nor idle, rather polishing old works than *hewing out* new.
Pope to Swift.

HEWSON (William), a very ingenious anatomist, was born in 1739. He was assistant to Dr. Hunter, and afterwards in partnership with him; but, on their disagreement, read anatomical lectures at his own house, in which he was seconded by Mr Falconer. He wrote Enquiries into the Properties of the Blood, and the Lymphatic System, 2 vols.; and disputed with Dr. Monro the discovery of the lymphatic system of vessels in oviparous animals. He died in 1774 in consequence of absorption from a wound received in dissecting.

HEX'AGON, *n. s.* } Fr. *hexagone;* Gr. ἕξ,
HEXAG'ONAL, *adj.* } six, and γωνία, an angle.
HEXAG'ONY, *n. s.* } A figure of six sides or angles: the most capacious of all the figures that can be added to each other without any interstice; and therefore the cells in honeycombs are of that form: applied to whatever has six sides or angles.

When I read in St. Ambrose of *hexagonies*, or sexangular cellars of bees, did I therefore conclude that they were mathematicians? *Bramhall.*

As for the figures of crystal, it is for the most part *hexagonal*, or six-cornered. *Browne.*

Many of them shoot into regular figures: as crystal and bastard diamonds into *hexagonal*. *Ray.*

HEXAGYNIA, from ἕξ six, and γυνη a female, an order of plants in the class polyandria, consisting of such as have six styles. See BOTANY.

HEXAHEDRON, in geometry, one of the five Platonic bodies, or regular solids, being the same with a cube.

HEXAM'ETER, *n. s.* Gr. ἕξ and μέτρον. A verse of six feet.

The Latin *hexameter* has more feet than the English heroic. *Dryden.*

HEXAMETER VERSE. The first four feet may be either spondees or dactyls; the fifth is generally a dactyl, and the sixth a spondee.

Such are the following verses of Virgil:

1 2 3 4 5 6
Tĭtyrĕ, | tū pătŭ|læ rĕcŭ|bāns sūb | tēgmĭnĕ | fāgī,
Sĭlvēs|trēm tĕnŭ|ī mū|sām mĕdī|tārīs ă|vēnâ :
Nōs pătrī|æ fī|nēs, ēt | dūlcĭă | lĭnquĭmŭs | ārvă,
Nōs pătrī|ām fŭgī|mūs tū | Tĭtyrĕ | lēntŭs ĭn | ūmbrā ·
Fōrmō|sām rĕsŏ|nārĕ dŏ|cēs Amă|ryllĭdă | sylvās.

HEXAMILI, HEXAMILION, or HEXAMILIUM, a celebrated wall, built by the emperor Emanuel in 1413, over the isthmus of Corinth. It took its name from ἕξ six, and μιλιον, which in the Romaic signifies a mile, being six miles long. The design of it was to defend Peloponnesus from the incursions of the barbarians. Amurath II. having raised the siege of Constantinople, in 1424, demolished the hexamilium, though he had before concluded a peace with the Greek emperor. The Venetians restored it in 1463, by 30,000 workmen, employed for fifteen days, and covered by an army commanded by Bertoldo d'Este, general of the land forces, and Lewis Loredano, commander of the sea. The infidels made several attempts upon it; but were repulsed, and obliged to retire from the neighbourhood thereof; but Bertoldo being killed at the siege of Corinth, which was attempted soon after, Bertino Calcinato, who took on him the command of the army, abandoned, upon the approach of the beglerbeg, both the siege and the defence of the wall, which had cost them so dear; upon which it was finally demolished.

HEXANDRIA, in botany, from ἕξ six, and ανηρ, a man, the sixth class in Linnæus's sexual method, consisting of plants with hermaphrodite flowers, furnished with six stamina of an equal length. See BOTANY.

HEXAN'GULAR, *adj.* Gr. ἕξ and Lat. *angulus*. Having six corners.

Hexangular sprigs or shoots of crystal. *Woodward.*

HEXAPLA, from ἕξ six, and απλοω I unfold, in church history, a Bible disposed in six columns; containing the text, and versions thereof, compiled and published by Origen, with a view to securing the sacred text from future corruptions, and to correct those that had been already introduced. Eusebius relates that Origen, after his return from Rome under Caracalla, learned Hebrew, and began to collect the several versions that had been made of the sacred writings, and of these to compose his Tetrapla and Hexapla. But others say that he did not begin till the time of Alexander, after he had retired into Palestine, about A. D. 231. Besides the translation of the sacred writings called the Septuagint, made under Ptolemy Philadelphus, about A. A. C. 280, the Scriptures had been since translated into Greek by other interpreters. The first of those versions, or (reckoning the Septuagint) the second, was that of Aquila, a proselyte Jew, the first edition of which he published in the twelfth year of Adrian, or about A. D. 128; the third was that of Symmachus, published as is supposed, under Marcus Aurelius, but, as some say, under Septimus Severus, about A. D. 200; the fourth was that of Theodotion, prior to Symmachus's, under Commodus, or about A. D. 175. These Greek versions, says Dr. Kennicot, were made by the Jews from their corrupted copies of the Hebrew, and were designed to stand in the place of the Seventy, against which they were prejudiced, because it seemed to favor the Christians. The fifth was found at Jericho, in the reign of Caracalla, about A. D. 217; and the sixth at Nicopolis, in the reign of Alexander Severus, about A. D. 228: lastly, Origen himself recovered part of a seventh, containing only the Psalms.

Origen, who had held frequent disputations with the Jews in Egypt and Palestine, observing that they always objected to those passages of Scripture quoted against themselves, and appealed to the Hebrew text the better to vindicate those passages, and confound the Jews by showing that the Seventy had given the sense of the Hebrew, or rather to show, by a number of different versions, what the real sense of the Hebrew was; undertook to reduce all the several versions into a body along with the Hebrew text, so as they might easily be confronted, and afford a mutual light to each other. He made the He-

brew text his standard; and, allowing that corruptions might have happened, and the old Hebrew copies might and did read differently, he marked such words or sentences as were not in his Hebrew text, nor the later Greek versions, and added such words or sentences as were omitted in the Seventy, prefixing an asterisk to the additions, and an obelisk to the others. For this purpose he made eight columns; in the first he gave the Hebrew text in Hebrew characters; in the second, the same text in Greek characters; the rest were filled with the several versions above mentioned; all the columns answering verse for verse, and phrase for phrase; and in the Psalms there was a ninth column for the seventh version. This work Origen called Ἑξαπλα, Hexapla, q. d. sextuple, or a work of six columns, as only regarding the first six Greek versions. See TETRAPLA. Indeed, St. Epiphanius, taking in likewise the two columns of the text, calls the work Octapla, as consisting of eight columns. This celebrated work, which Montfaucon imagines consisted of fifty large volumes, perished long ago, probably with the library at Cæsarea, where it was preserved in 653; though several ancient writers have preserved pieces of it, particularly St. Chrysostom on the Psalms, Philoponus in his Hexameron, &c. Some modern writers have earnestly endeavoured to collect fragments of the Hexapla, particularly Flaminius Nobilius, Drusius, and F. Montfaucon, in two folio volumes, printed at Paris in 1713.

HEX'APOD, *n. s.* Gr. ἕξ and πόδες. An animal with six feet.

I take those to have been the *hexapods*, from which the greater sort of beetles come; for that sort of *hexapods* are eaten in America *Ray.*

HEXASTIC, *n. s.* Gr. ἕξ and στιχος. A poem of six lines.

HEXHAM, a town of Northumberland, with a market on Tuesday. It is seated on the Tyne, and had formerly, besides the fine old church, a celebrated abbey of which the ruins are scarcely now left. Its ancient and spacious church, which was founded in 674, is highly ornamented, in the inside, in the Gothic taste. In the choir was a beautiful oratory, now converted into a pew. On the screen, at the entrance of the choir, are several grotesque monastic paintings. On the west of the church are the remains of the priory, which was a very spacious building. There is a large room, with an oaken roof, which was the refectory, and is now used for public entertainments. Near this place, in 1463, was fought a bloody battle, between the houses of York and Lancaster, in which the latter was defeated. Hexham is noted for its manufactory of tanned leather, shoes, and gloves; and is twenty-two miles west of Newcastle, and 279 N. N. W. of London.

HEY, *interj.* } Dan. and Swed. *hui.*
HEY'DAY, *interj.* & *n. s.* } Hey, and heyday, are
HEY'DEGIVES, *n. s.* } expressions of joy, or exultation; frolic: and sometimes wonder, or wildness: heydigives, a wild frolic; dance; but now obsolete.

But friendly fairies met with many graces,
And light-foot nymphs can chase the lingering night
With *heydegives*, and trimly trodden traces. *Spenser.*

At your age
The *heyday* in the blood is tame, it's humble,
And waits upon the judgment. *Shakspeare.*

Thou'lt say anon he is some kin to thee,
Thou spendest such *heyday* wit in praising him.
Id.

'Twas a strange riddle of a lady,
Not love, if any loved her, *heyday!*
Hudibras.

Shadwell from the town retires,
To bless the town with peaceful lyrick,
Then *hey* for praise and panegyrick. *Prior.*

HEY (John), D D. a modern divine, was born in 1734, and educated at Catherine Hall, Cambridge; whence he removed in 1758 to a fellowship in Sidney College, where he took his degree of D. D. in 1780, and became the first professor of divinity on the Norrisian foundation. This chair he resigned in 1705. He was for many years rector of Passenham, in Northamptonshire, and of Calverton, in Buckinghamshire, but resigned both in 1814 to settle in London, where he died the following year. His works are—1. Redemption, a Seatonian prize poem; 2. Lectures on Divinity, 4 vols. 8vo.; 3. Seven Sermons on several Occasions, 8vo.; 4. Discourses on the Malevolent Sentiments, 8vo.; 5. Observations on the Writings of St. Paul.

HEYDON (John), who sometimes assumed the name of Eugenius Theodidactus, was a great pretender to skill in the Rosicrucian philosophy and astrology, in the reign of king Charles I.; and wrote a considerable number of chemical and astrological works, with curious titles. This ridiculous author was much resorted to by the duke of Buckingham, who was infatuated with judicial astrology. He employed him to calculate the king's and his own nativity, and was assured that the aspects of the heavens promised to him success and fortune. The duke also employed him in some treasonable and seditious practices, for which he was sent to the Tower. He lost much of his former reputation by telling Richard Cromwell and Thurloe, who went to him disguised like cavaliers, that Oliver would infallibly be hanged by a certain time; which he outlived several years.

HEYDON, a borough in the East Riding of Yorkshire, with a market on Thursday. It is seated on a river, which soon falls into the Humber; and was formerly a considerable town, but is now much decayed. It is a corporation, governed by a mayor, recorder, nine aldermen, two bailiffs who have the power of choosing sheriffs, and are justices of the peace. It returns two members to parliament, chosen by the burgesses, who claim their privilege either by descent, by seven years' apprenticeship to a freeman, or by an honorary gift at the discretion of the corporation. It is eight miles west from Hull, and 182 from London.

HEYLIN (Dr. Peter), an eminent English writer, born at Burford in Oxfordshire, in 1600. He studied at Hart Hall, Oxford, where he took his degrees of M. A. and D. D., and became an able geographer and historian. He was appointed one of the chaplains in ordinary to king Charles I., rector of Hemingford in Hunting-

donshire, a prebendary of Westminster, and obtained several other livings; but of these he was deprived by the parliament, who also sequestered his estate; by which means he and his family were reduced to great necessity. However, upon the Restoration, he was restored to his spiritualities; but never rose higher than to be sub-dean of Westminster. He died in 1662, and was interred in Westminster, where a neat monument was erected to his memory. His writings are very numerous: the principal of which are, 1. Microcosmus, or a Description of the Great World. 2. Cosmographia. 3. The History of St. George. 4. Ecclesia Vindicata, or the Church of England justified. 5. Historical and Miscellaneous Tracts, &c.

HEYNE (Christian Gottlob), a celebrated modern German critic, was the son of a weaver of Glogau in Silesia, and born in 1729. But at a very early age Heyne taught other children, to provide funds for the extension of his own education. He completed his education at Leipsic, where he soon obtained reputation for his classical acquirements, and was assisted by the post of librarian to count Bruhl. He also increased his narrow income by translations of French and English works. In 1755 appeared his edition of Tibullus, and soon after that of Epictetus. He was involved in great distress by the seven years' war; the entry of the Prussians into Dresden leading to the dispersion of count Bruhl's library. He was, however, taken into the family of Von Schonberg as a tutor, in which situation he married, and in 1763 succeeded Gesner as professor of rhetoric at Gottingen. Here he also became secretary to the Society of Sciences. In 1775 he formed a catalogue of the library at Gottingen, in which laborious work, extending to 150 folio volumes, he was warmly encouraged by his late majesty George III., whose three younger sons were for some time under his tuition. He died suddenly, July 12th, 1814, leaving three children by a first wife, and six by a second. His principal works are his editions of Homer and Virgil, with notes and elucidations; and Opuscula Academica, 6 vols. 8vo.

HEYTESBURY, a borough standing on the river Willey, four miles east from Warminster, and ninety-two from London. The church, formerly collegiate, is a spacious building; it is built in the form of a cross, with a tower in the centre, containing six bells; and is about 400 years old. Here is a well endowed hospital, and a grammar-school. The greater part of this town was destroyed by fire in 1766, since which the houses have been commodiously rebuilt, which has greatly improved its appearance. It consists principally of one wide street. It is an ancient borough by prescription, and sends two members to parliament, who are elected by the burgage holders. A considerable woollen manufacture is established here, which has much increased its population.

HEYWOOD (Eliza), one of the most voluminous novel writers this island ever produced; of whose origin we know no more than that her father was a tradesman, and that she was born about 1696. In the early part of her life, her pen, whether to gratify her own disposition, or the prevailing taste, dealt chiefly in licentious tales, and memoirs of personal scandal: the celebrated Atalantis of Mrs. Manley served her for a model; and the Court of Carimania, the New Utopia, with some other pieces of a like nature, were the copies her genius produced. She also attempted dramatic writing and performance, but did not succeed in either. Whatever it was that provoked the resentment of Pope, he gave full scope to it by distinguishing her as gaining one of the prizes in the games introduced in honor of dullness, in his Dunciad. Nevertheless, it is undeniable, that there is much spirit and ingenuity in her manner of treating subjects, which the friends of virtue may perhaps wish she had never meddled with at all. But, whatever offence she may have given to delicacy or morality in her early works, she appears to have endeavoured to atone for, in the latter part of her life; as no author then appeared a greater advocate for virtue. Among her riper productions may be specified, The history of Miss Betsy Thoughtless, 4 vols.; The Female Spectator, 4 vols.; Jemmy and Jenny Jessamy, 3 vols.; The Invisible Spy, 4 vols.; with a pamphlet entitled A Present for a Servant Maid. She died in 1759.

HEYWOOD (John), one of the most ancient dramatic poets, was born at North Mims, near St. Alban's in Hertfordshire, and educated at Oxford. Thence he retired to the place of his nativity; where he became acquainted with Sir Thomas More, who had a seat in that neighbourhood. This patron of genius introduced him to the princess Mary, and afterwards to her father Henry VIII., who was much delighted with his wit and skill in music, and by whom he was frequently rewarded. When Mary came to the crown Heywood became a favorite at court. On the accession of Elizabeth, being a zealous Papist, he decamped, and settled at Mechlin in Flanders, where he died in 1565. He was a man of no great learning, nor were his poetical talents extraordinary; but he possessed talents of more importance in the times in which he lived, namely, those of a jester. He wrote several plays; 500 epigrams; A Dialogue in Verse concerning English Proverbs; and The Spider and Fly, a Parable, a thick 4to. Before the title of this last work is a whole-length wooden print of the author; who is also represented at the head of every chapter of the book, of which there are seventy-seven. He left two sons, who both became eminent Jesuits.

HEZEKIAH, or EZEKIAS, Heb. חזקיהו, i.e. the strength of Jah or Jehovah, one of the best kings of Judea, succeeded his father Ahaz, A. M. 3278. His reformation of his subjects from idolatry; his grand and solemn celebration of the passover; his invitation to the Israelites to assist at it; his throwing off the Assyrian yoke; his miraculous deliverance from the invasion by Sennacherib, after the blasphemous defiance of Rabshakeh; his mortal disease, prophetic prayer, and miraculous recovery, with the fatal consequences of his vanity after it, are recorded in 2 Kings xviii. —xx.; 2 Chron. xxix.—xxxii.; and Isaiah xxxvi. —xxxix. He collected the proverbs of Solomon, contained in the xxv., xxvi., xxvii., xxviii.

chapters of that book. See Prov. xxv. Upon the miraculous retrogression of the shadow on Ahaz's dial, we need say little. Those who doubt the existence of a Deity, or deny his power over the material world, will not be convinced by any arguments. But those who believe that the Almighty, when he gave existence to matter, and subjected it to certain laws, did not thereby limit his own infinite power, will not think it more incredible, that he who created light by his word should invert the shadow of the gnomon, so as to make it appear to have gone ten degrees backward, than that a watch-maker should turn back the hour or minute-hand of a clock, in a direction contrary to the natural motion which he himself has given it. How this was done, whether by a momentary retrograde motion given to the terrestrial globe, or only by an inversion of the usual motion of the solar rays upon the gnomon, it is neither necessary nor possible to determine. See AJALON. Upon the former supposition it must have been observed over one half of the globe. That it was however observed by the Chaldean astronomers at Babylon, seems evident from Merodach-Baladan's congratulatory embassy on Hezekiah's recovery. Hezekiah died in the fifty-fourth year of his age, and twenty-ninth of his reign, A. M. 3307.

HIARBAS, a king of the Getulians, who made war against queen Dido.

HIA'TION, *n. s.* } Lat. *hio*, *hiatus*. The
HIA'TUS, *n. s.* } act of gaping; an aperture; a breach; the opening of the mouth by the succession of an initial to a final vowel.

Men observing the continual *hiation*, or holding open the cameleon's mouth, conceive the intention thereof to receive the aliment of air; but this is also occasioned by the greatness of the lungs. *Browne.*

Those *hiatus's* are at the bottom of the sea, whereby the abyss below opens into and communicates with it. *Woodward.*

The *hiatus* should be avoided with more care in poetry than in oratory; and I would try to prevent it, unless where the cutting it off is more prejudicial to the sound than the *hiatus* itself. *Pope.*

HIATUS is particularly applied to those verses where one word ends with a vowel, and the following word begins with one, and thereby occasions the mouth to be more open, and the sound to be very harsh. It is also used in speaking of MSS., to denote their defects, or the parts that have been lost or effaced.

HIBER'NAL, *adj.* Lat. *hibernus*. Belonging to the winter.

This star should rather manifest its warming power in the Winter, when it remains conjoined with the sun in its *hibernal* conversion. *Browne.*

HIBERNIA, one of the ancient names of Ireland, is derived by some from hibernum tempus, winter time, because in that season the nights are long there. But it appears more probable that it has been derived from Erin, the name given to the island by the original inhabitants; whence Jerna, the name given it by Claudian, Iverna by Ptolemy, and Juverna by Juvenal, are evidently derived. See IRELAND.

HIBISCUS, Syrian mallow, a genus of the polyandria order, and monadelphia class of plants; natural order thirty-seventh, columniferæ: CAL. double, the exterior one polyphyllous: CAPS. quinquelocular and polyspermous. Of this genus there are thirty-six species; the most remarkable are,

1. H. abelmoschus, the musk-seeded hibiscus, a native of the West Indies, where the French cultivate great quantities of it. The plant rises with an herbaceous stalk three or four feet high, sending out two or three side branches, garnished with large leaves cut into six or seven acute angles, sawed on their edges, having long foot-stalks, and placed alternately. The stalks and leaves are very hairy. The flowers come out from the wings of the leaves upon pretty long foot-stalks which stand erect. They are large, of a sulphur color, with purple bottoms; and are succeeded by pyramidical five-cornered capsules, which open in five cells, filled with large kidney-shaped seeds of a very musky odor. It is annual in this country, though biennial in places where it is native. It is propagated by seeds, and is cultivated in the West Indies by the French for the sake of its seeds.

2. H. esculentus, the eatable hibiscus, rises to five or six feet; has broad five-parted leaves, and large yellow flowers. The okra or pod is from two to six inches long, and one inch diameter. When ripe it opens longitudinally in five different places, and discharges a number of heart-shaped seeds. It is a native of the West Indies, where it is cultivated in gardens and enclosures as an article of food. The whole of it is mucilaginous, especially the pods. 'These,' Dr. Wright informs us, 'are gathered green, cut into pieces, dried, and sent home as presents, or are boiled in broths or soups for food. It is the chief ingredient in the celebrated pepper-pot of the West Indies, which is a rich olla; the other articles are either flesh meat, or dried fish and capsicum. This dish is very palatable and nourishing. As a medicine, okra is employed in all cases where emollients and lubricants are indicated.'

3. H. mutabilis, the changeable rose, has a soft spungy stem, which, by age, becomes ligneous and pithy. It rises to the height of twelve or fourteen feet, sending out branches towards the top, which are hairy, garnished with heart-shaped leaves, cut into five acute angles on their borders, and slightly sawed on their edges; of a lucid green on their upper side, but pale below. The flowers are produced from the wings of the leaves; the single are composed of five petals, which spread open, and are at first white, but afterwards change to a bluish-rose color, and, as they decay, turn purple. In the West Indies all these alterations happen on the same day, and the flowers themselves are of no longer duration, but in Britain the changes are not so sudden. The flowers are surrounded by short, thick, blunt capsules, which are very hairy; having five cells, which contain many small kidney-shaped seeds, having a fine plume of fibrous down adhering to them.

4. H. rosa Sinensis, the China rose, has an arborescent stem, and egg-pointed sawed leaves. It is a native of the East Indies; but, the seeds having been carried by the French to their West India settlements, it thence obtained the name

of Martinico rose. Of this there are the double and single flowering kinds; the seeds of the first frequently produce plants that have only single flowers, but the latter seldom vary to the double kind.

5. H. Syriacus, commonly called althæa frutex, is a native of Syria. It rises with shrubby stalks to the height of eight or ten feet, sending out many woody branches covered with a smooth gray bark, garnished with oval spear-shaped leaves, whose upper parts are frequently divided into three lobes. The flowers come out from the wings of the stalk at every joint of the same year's shoot. They are large, and shaped like those of the mallow, having five large roundish petals which join at their base, spreading open at the top in the shape of an open bell. These appear in August; and, if the season is not too warm, there will be a succession of flowers till September. The flowers are succeeded by short capsules with five cells, filled with kidney-shaped seeds; but, unless the season proves warm, they will not ripen in this country. Of this species there are four or five varieties, differing in the color of their flowers: the most common has pale purple flowers with dark bottoms; another has bright purple flowers with black bottoms; a third has white flowers with purple bottoms; and a fourth variegated flowers with dark bottoms. There are also two with variegated leaves, which are by some much esteemed. All these varieties are very ornamental in a garden. They may be propagated either by seeds or cuttings. The seeds may be sown in pots filled with light earth about the end of March, and the young plants transplanted about the same time next year. They succeed in full ground, but must be covered in winter whilst young, otherwise they are apt to be destroyed.

6. H. tiliaceus, the maho tree, is a native of both the Indies. It rises with a woody, pithy stem, ten feet high, dividing into several branches towards the top, which are covered with a woolly down, garnished with heart-shaped leaves ending in acute points. They are of a lucid green on their upper side, hoary on the under side, full of large veins, and are placed alternately. The flowers are produced in loose spikes at the end of the branches, and are of a whitish-yellow color. They are succeeded by short acuminated capsules, opening in five cells, filled with kidney-shaped seeds. It is propagated by seeds. The inner rind is very strong, and of great esteem. Dampier says, 'They (the Musketo Indians) make their lines, both for fishing and striking, with the bark of maho, which is a sort of tree or shrub that grows plentifully all over the West Indies, and whose bark is made up of strings or threads very strong: you may draw it off either in flakes or small threads, as you have occasion. It is fit for any manner of cordage, and privateers often make their rigging of it.'

7. H. trionum, Venice mallow, or flower of an hour, is a native of some parts of Italy, and has long been cultivated in the gardens of this country. It rises with a branching stalk a foot and a half high, having many short spines, which are soft, and do not appear unless closely viewed. The leaves are divided into three lobes, which are deeply jagged almost to the midrib. The flowers come out at the joints of the stalks, upon pretty long foot-stalks. They have a double empalement: the outer being composed of ten long narrow leaves, which join at their base; the inner is of one thin leaf swollen like a bladder, cut into five acute segments at the top, having many longitudinal purple ribs, and is hairy. Both these are permanent, and enclose the capsule after the flower is past. The flower is composed of five obtuse petals, which spread open at the top; the lower part forming an open bell-shaped flower. These have dark purple bottoms, but are of a pale sulphur color above. In hot weather the flowers continue but a few hours open, whence the English name; but there is a succession of flowers that open daily for a considerable time. It is propagated by seeds, which should be sown where the plants are designed to remain, for they do not well bear transplanting. They require no other culture than to be kept free from weeds, and thinned where they are too close; and, if the seeds are permitted to scatter, the plants will come up fully as well as if they had been sown.

HICCIUS DOCCIUS, *n. s.* 'Corrupted, I fancy, from hic est doctus, this, or here is the learned man.'—Dr. Johnson. Used by jugglers of themselves. A cant word for a juggler; one that plays fast and loose.

> An old dull sot, who told the clock
> For many years at Bridewell dock,
> At Westminster and Hicks's hall
> And *hiccius doccius* played in all;
> Where, in all governments and times,
> H' had been both friend and foe to crimes.
> *Hudibras*

HIC'COUGH, *n. s.* & *v. n.* } Dan. *hicken;*
HICK'UP, *v. n.* } Swedish, *hicka;* Belg. *hik, hickse.* A convulsive action of the diaphragm, producing sobs: hickup is a corruption of hiccough.

> So by an abbey's skeleton of late
> I heard an echo supererogate
> Through imperfection, and the voice restore,
> As if she had the *hiccough* o'er and o'er.
> *Cleaveland.*

> Quoth he, to bid me not to love,
> Is to forbid my pulse to move,
> My beard to grow, my ears to prick up,
> Or, when I'm in a fit, to *hickup.* *Hudibras.*

Sneezing cureth the *hiccough*, and is profitable unto women in hard labour. *Browne's Vulgar Errours.*

If the stomach be hurt, singultus, or *hiccough* follows. *Wiseman.*

HICCOUGH, or HICKUP, is a spasmodic affection of the stomach, œsophagus, and muscles subservient to deglutition, arising sometimes from some particular stimulus acting on the stomach, œsophagus, diaphragm, &c., and sometimes from a general affection of the nervous system. See MEDICINE.

HICETAS of Syracuse, an ancient philosopher and astronomer, who taught that the sun and stars were motionless, and that the earth moved round them. This is mentioned by Cicero, and possibly gave the first hint of the true system to Copernicus. He flourished about A. A. C. 344.

HICKES (George), a celebrated English divine, born in 1642. In 1681 he was made

king's chaplain, and two years after dean of Worcester. The death of Charles II. stopped his farther preferment; for, though his church principles were very high, he manifested too much zeal againt popery to be a favorite with James II. On the revolution, he with many others was deprived for refusing to take the oaths to king William and queen Mary; and soon after, archbishop Sancroft and his colleagues, considering how to maintain episcopal succession among those who adhered to them, Dr. Hickes carried over a list of the deprived clergy to king James; and with his sanction a private consecration was performed, at which it is said lord Clarendon was present. Dr. Hickes was consecrated suffragan bishop of Thetford, and died in 1715. He wrote 1. Institutiones Grammaticæ Anglo-Saxonicæ, et Mæso-Gothicæ. 2. Antiqua Literatura Septentrionalis. 3. Two treatises, one of the Christian priesthood; the other of the dignity of the episcopal order. 4. Jovian, or an answer to Julian the Apostate. Three volumes of sermons: with many temporary controversial pieces on politics and religion.

HICK'WALL, *n. s.* } Old words for a wood-
HICK'WAY, *n. s.* } pecker.

HID, *part.* }
HID'DEN, *part.* }
HIDE, *v. a.* & *v. n.* } Sax. hýban; Belg. *hoedan*; Teut. *huten*. To conceal; to withhold or withdraw from sight or knowledge: to lie concealed: hide and seek, a play in which some hide themselves and others seek them.
HIDE AND SEEK, *n. s.* }
HI'DER, *n. s.* }

For fere almost out of his wit he brayde,
And to his goddes pitously he preide
For socour; but it mighte not betide:
For drede of his him thoughte that he diede,
And ran into a garden him to *hide*.
Chaucer. The Monkes Tale.

Avaunt, and quit my sight; let the earth *hide* thee!
Shakspeare.

His reasons are as two grains of wheat *hid* in two bushels of chaff. *Id. Merchant of Venice.*

Thus fame shall be atchieved, renown on earth;
And what most merits fame, in silence *hid*. *Milton.*

Other *hidden* cause
Left them superior. *Id.*

Blame not the muse that brought those spots to sight,
Which in your splendor *hid* corrode your light.
Marvell.

Saturnian spite pursues me through the earth,
No corners left to *hide* my long-wished birth. *Id.*

Seas *hid* with navies, chariots passing o'er
The channel, on a bridge from shore to shore.
Dryden.

Nile hears him knocking at his sevenfold gates,
And seeks his *hidden* spring, and fears his nephews' fates. *Id.*

Then for my corps a homely grave provide,
Which love and me from public scorn may *hide*.
Id.

A fox, hard run, begged of a countryman to help him to some *hiding* place. *L'Estrange.*

With what astonishment and veneration may we look into our own souls, where there are such *hidden* stores of virtue and knowledge, such inexhausted sources of perfection? *Addison.*

Hell trembles at the sight, and *hides* its head
In utmost darkness, while on earth each heart
Is filled with peace. *Rowe's Royal Convert.*

Nature and nature's laws lay *hid* in night:
God said, Let Newton be, and all was light. *Pope.*

The boys and girls would venture to come and play at *hide and seek* in my hair. *Gulliver's Travels.*

HIDAGE, HIDAGIUM, was an extraordinary tax payable to the kings of England for every hide of land. This taxation was levied not only in money, but in provision, armour, &c.; and when the Danes landed in Sandwich, in 994, king Ethelred taxed all his lands by hides; so that every 310 hides found one ship furnished, and every eight hides furnished one jack and one saddle, to arm for the defence of the kingdom, &c. Sometimes the word hidage was used for the being quit of that tax; which was also called hidegild, from the Saxon, 'a price or ransom paid to save one's skin or hide from beating.'

HIDALGO, in modern history, a title given in Spain to all who are of noble family. The Hidalgos claim a descent from those valiant soldiers who retired into Castile, and the mountains of Asturias, and other remote parts of Spain, on the invasion of the Moors, where, having fortified themselves, they successively descended into the plains, in proportion to the success of their arms: from the notoriety of their persons, or the lands they became possessed of, they acquired the appellation of Hidalgos notorios, Hidalgos de solor conocido, or de casa solariega. Otalora says that the true meaning of Hidalgos de solar conocido is explained by the laws of Castile to be a well-known mansion or possession, the nature of which is particularly explained in the laws of Perditas, which describe three sorts of tenures called devisa, solariega, and behetria. By the first, lands are devised by the ancestor; solariega is a tenure upon another person's manor, and obliges the owner to receive the lord of the fee when necessity obliges him to travel; and behetria is of the nature of an allodium. In proportion as these aborigines gained ground on the Moors, and increased in their numbers, many private persons distinguished themselves by their valor, and obtained testimonies of their services called cartas de merced, which served them as a foundation of their birth and good descent, without which documents their posterity could not make it appear; and if, from lapse of time, or other unavoidable accidents, such proofs should happen to be lost or destroyed, the law affords them a remedy, by a declaration, importing, that such persons as are supposed to have had such certificates, may be relieved by making it appear that their ancestors, time immemorial, have always been held and reputed as Hidalgos, and enjoyed the privileges of such, from a strong presumption in their favor; the possession of land having equal force to any other document; which is fully set forth in the Pragmatica of Cordova.

HIDALGO Y COSTILLA (Don Miguel), a priest, who first kindled the insurrection in Mexico, which has resulted in the independence of that country. He was the resident clergyman in the town of Dolores, in the intendencia of Goanaxuato, and regarded as a man of talents in early life. His intercourse with the Indian population afforded him opportunities of perceiving their dislike to the Spaniards; and this led him to from

the plan of a general revolt. Circumstances hastened the execution of the scheme; and captain Allende, having collected a few soldiers, marched to Dolores, where he arrived on the 10th of September 1810, and joined Hidalgo. Allende and the priest, at the head of the insurgents, now pillaged the houses of the Spaniards in the town of San Miguel el Grande; and on the 29th of September gained possession of Goanaxoato, in the treasury of which town they found a large quantity of coin and silver bars. Don J. Villegas, appointed viceroy by the regency of Cadiz, arrived at this period at Mexico, and sent a body of troops against Hidalgo. His measures at first however were ineffectual; Hidalgo attached the Indians to his cause, by repealing the tax called tributos, which they had paid ever since their original conquest. From Goanaxoato he marched on Valladolid October the 20th, and was joyfully received by two regiments of militia. Soon after, being proclaimed generalissimo of the Mexican forces, he found himself at the head of eighty regiments, of 1000 men each. He now, therefore, proceeded towards Mexico, when Villegas, having but a handful of troops for its defence, applied to the archbishop of Mexico, and to the inquisition, for a sentence of excommunication against Hidalgo and his adherents. This awed the Mexicans from joining the insurgents; disappointed their expectations of assistance; and Hidalgo became irresolute. After having waited in the neighbourhood of the capital till the viceroy had recalled his troops, he began a retreat. At Aculco, however, he was overtaken and completely defeated, on the 7th of November. He then retired to Goanaxoato, whither he was followed by the Spanish army, who took the place with great slaughter. Hidalgo fled to Guadalaxara; and on the 17th of January, 1811, suffered a further and ruinous defeat at the bridge of Calderon. One of his own officers delivered him up on the 21st of March, 1811; and having previously been degraded from the priesthood he was put to death on the 27th of July that year.

HIDDENSOE, a small island of Pomerania, off the west coast of the island of Rugen. The pasture is tolerable; but the inhabitants, who amount to about 500, are chiefly fishermen. It is ten miles long and two broad. Long. 13° 10′ E., lat. 54° 35′ N.

HIDE, *n. s.* } Sax. hyde; Belg.
HIDE'BOUND, *adj.* } *hinde*; Teut. *haut*. The skin of an animal either raw or dressed; the human skin in contempt; a certain quantity of land: hidebound, being in the state in which the bark will not give way to the growth; harsh; untractable; niggardly; penurious. A horse is said to be hidebound when his skin sticks so hard to his ribs and back, that you cannot with your hand pull up or loosen the one from the other. It sometimes comes by poverty and bad keeping; at other times from over-riding, or a surfeit.

Oh, tiger's heart, wrapt in a woman's *hide*!
How could'st thou drain the life-blood of the child?
Shakspeare.

A root of a tree may be *hidebound*, but it will not keep open without somewhat put into it. *Bacon.*

One of the first things was a more particular inquisition than had been before of every *hide* of land within the precincts of his conquest, and how they were holden. *Wotton.*

And still the harsher and *hidebounder*
The damsels prove, become the fonder.
Hudibras.

His mantle, now his *hide*, with rugged hairs
Cleaves to his back; a famished face he bears.
Dryden.

The trembling weapon past
Through nine bull *hides*, each under other placed
On his broad shield. *Id.*

Pisistratus was first to grasp their hands,
And spread soft *hides* upon the yellow sands.
Pope.

Like stinted *hidebound* trees, that just have got
Sufficient sap at once to bear and rot. *Swift.*

HIDE is particularly applied to the skin of large cattle, as bullocks, cows, horses, &c. Hides are either raw, that is just as taken off the carcase: salted, or seasoned with salt, alum, and saltpetre, to prevent their spoiling: or curried and tanned. See TANNING.

HIDE OF LAND was as much as would maintain a family: some call it sixty, some eighty, and others 100 acres.

HID'EOUS, *adj.* } Fr. *hideux*. Horrible;
HID'EOUSLY, *adv.* } dreadful; deformed;
HID'EOUSNESS, *n. s.* } shocking: it is used by Spenser in a sense not now retained; detestable.

With that the chorle his clubbe gan shake;
Frowning his eyen gan to make
An *hideous* chere, as man in rage;
For yre he brent in his viage.
Chaucer. Romaunt of the Rose.

The brighte swerdes wenten to and fro
So *hideously*, that with the leste stroke,
It semed that it wolde felle an oke.
Id. The Knightes Tale.

O *hideous* hanger of dominion! *Spenser.*

I arm myself
To welcome the condition of the time;
Which cannot look more *hideously* on me,
Than I have drawn it in my fantasy. *Shakspeare.*

Some monsters in my thoughts,
Too *hideous* to be shewn. *Id. Othello.*

I fled, and cryed out death!
Hell trembled at the *hideous* name, and sighed
From all her caves, and back resounded death.
Milton.

If he could have turned himself to as many forms as Proteus, every form should have been made *hideous*. *Sidney.*

Her eyes grew stiffened, and with sulphur burn;
Her *hideous* looks and hellish form return;
Her curling snakes with hissings fill the place,
And open all the furies of her face. *Dryden.*

This, in the present application, is *hideously* profane; but the sense is intelligible.
Collier's Defence.

'Tis forced through the hiatuses at the bottom of the sea with such vehemence, that it puts the sea into the most horrible disorder, making it rage and roar with the most *hideous* and amazing noise.
Woodward's Natural History.

What avails it that indulgent heaven
From mortal eyes, has wrapt the woes to come
If we, ingenious, to torment ourselves,
Grow pale at *hideous* fictions of our own?
Armstrong.

HIDJELLE, Hijali, or Ingellee, a town in the province of Bengal, situated on the west bank of the Hooghly River, fifty-five miles S.S.W. from Calcutta. During the Mogul government it was the capital of a foujdarry or military station, comprehending 1098 square miles. This district is situated on the low margin of the river Hooghly, where it unites with the bay of Bengal. It was first dismembered from the Soubah of Orissa, and annexed to Bengal, in the reign of Shah Jehan; and is very productive in grain and salt. 'The salt land is that portion exposed to the overflowing of the tides, usually called the churs or banks; where mounds of earth, strongly impregnated with saline particles, named kalaries or working-places, are formed. Each of these heaps is estimated on a medium to yield 233 maunds (eighty 'bs. each) of salt, requiring the labor of seven manufacturers; who, by an easy process of filtration and boiling, are enabled to complete their operations from November to June, before the setting in of the periodical rains.' *Hamilton.*

HIE, *v. n.* Sax. hiegan; Goth *heya.* To hasten; to go in haste.

Thus in hir doubtes as they stode—
Waxing the se, coming the flode—
Was cried: 'To ship goe every wight:'
Then was, but *hie* that *hie* him might.
Chaucer's Dreame.

When they had marked the changed skies,
They wist their hour was spent; then each to rest
him *hies.* *Id. Faerie Queene.*

My will is even this,
That presently you *hie* you home to bed.
Shakspeare.

Well, I will *hie*,
And so bestow these papers as you bade me. *Id.*

Auster spyed him;
Cruel Auster hither *hyed* him. *Crashaw.*

The snake no sooner hist,
But virtue heard it, and away she *hyed.* *Id.*

Some to the shores do fly,
Some to the woods, or whither fear advised:
But running from, all to destruction *hie.* *Daniel.*

Thither, full fraught with mischievous revenge,
Accursed, and in a cursed hour, he *hies.* *Milton.*

Thus he advised me, on yon aged tree
Hang up thy lute, and *hie* thee to the sea.
Waller.

The youth, returning to his mistress *hies.*
Dryden.

His folded flocks secure, the shepherd home
Hies merry hearted, and by turns relieves
The ruddy milk-maid of her brimming pail.
Thomson's Seasons.

HIELMAR, a lake between Sudermannland and Nericia, in the central part of Sweden, communicating with the lake of Malar. It is about forty miles long, but of small width; and contains a number of rocks and islands. Sixty miles west of Stockholm.

HI'ERARCH, *n. s.* } Fr. *hierarque;* Gr. ἱερος,
Hierarc'hical, *adj.* } a priest, and αρχος chief.
Hi'erarchy, *n. s.* } The chief of a sacred order: hierarchy, a sacred government; rank, or subordination of holy beings; the ecclesiastical establishment.

Jehovah, from the summit of the sky,
Environed with his winged *hierarchy,*
The world surveyed. *Sandys.*

The presbytery had more sympathy with the discipline of Scotland than the *hierarchy* of England. *Bacon.*

He rounds the air, and breaks the hymnick notes
In birds, heav'n's choristers, organick throats;
Which, if they did not die, might seem to be
A tenth rank in the heavenly *hierarchy.* *Donne.*

Out of the *hierarchies* of angels sheen,
The gentle Gabriel called he from the rest.
Fairfax.

The blessedest of mortal wights, now questionless the highest saint in the celestial *hierarchy,* began to be so importuned, that a great part of the divine liturgy was addressed solely to her. *Howel.*

Angels, by imperial summons called,
Forthwith from all the ends of heaven appeared,
Under their *hierarchs* in orders bright. *Milton.*

These the supreme king
Exalted to such power, and gave to rule,
Each in his *hierarchy,* the orders bright. *Id*

When an old Scotch covenanter shall be
The champion for the English *hierarchy.*
Marvell.

While the old Levitical *hierarchy* continued, it was part of the ministerial office to slay the sacrifices. *South.*

Consider what I have written, from regard for the church established under the *hierarchy* of bishops. *Swift.*

HIERACITES, in church history, Christian heretics in the third century: so called from their leader Hierax, a philosopher of Egypt; who taught that Melchisedek was the Holy Ghost, denied the resurrection, and condemned marriage.

HIERACIUM, hawkweed; a genus of the polygamia æqualis order, and syngenesia class of plants; natural order forty-ninth, compositæ. The receptacle is naked: CAL. imbricated and ovate; the pappus simple and sessile. The most common species are,

1. H. aurantiacum, commonly called Grim the collier, has many oblong, oval, entire leaves, crowning the root; an upright, single, hairy, and almost leafless stalk, a foot high, terminated by reddish orange-colored flowers in a corymbus. These flowers have dark, oval, ash-colored, calyces; whence the name. This is the only species cultivated in gardens. It is propagated by seeds or parting the roots. The seed may be sown in autumn or spring. In June, when the plants are two or three inches high, they may be picked out and planted in beds, where they must be left till the next autumn, and then transplanted where they are to remain.

2. H. Pilos ella, the mouse-ear, has blossoms red on the outside, and pale yellow within; the cups set thick with black hairs. The flowers open at 8 A. M., and close about 2 P. M. It grows commonly in dry pastures in England; it has a milky juice, but is less bitter and astringent than is usual with plants of that class. It is reckoned hurtful to sheep. Goats eat it; sheep are not fond of it; horses and swine refuse it.

3. H. umbellatum grows to the height of three feet, with an erect and firm stalk, terminated with an umbel of yellow flowers. It is a native of Scotland, and grows in rough stony places, but is not very common. The flowers are

sometimes used for dyeing yarn of a fine yellow color.

HIERAPOLIS, in ancient geography, a town of Phrygia, abounding in hot springs, and having its name from the number of its temples. There are coins exhibiting figures of various gods who had temples here. Of this place was Epictetus the stoic philosopher. It is now called Pambouk; and is situated near the Scamander, on a portion of Mount Mesogis, six miles from Laodicea. The worship of the great Syrian goddess, called Atergatis, was established in this town; but no traces now remain of her temple. The only remarkable monument is a subterraneous canal, which conducts the water from the mountains of the north for the distance of four leagues.

HIERARCHY. Some of the rabbies reckon four, others ten, orders or ranks of angels; and give them different names according to their supposed degrees of power and knowledge.

HIERES, Isles of, is the name of a cluster of three small islands of the Mediterranean, near the south coast of France, and about eleven miles from the town of Hieres. They are called Porquerolles, Porticros, and the isle of Titan. Giens, sometimes reckoned one of them, is more properly a peninsula. Porquerolles, the largest, does not contain 100 inhabitants. Porticros, three leagues farther to the east, and more elevated, has a small harbour, but only fifty inhabitants. All of them are defended by forts.

Hieres, a town in the department of the Var France, nine miles east of Toulon. It is at the foot of a steep rock or mountain, surrounded by a beautiful plain. The old town, which stood on the high part of the mountain, has been abandoned. On entering the new town the streets are found to be mean and dirty, and singularly contrasted with the neat white houses of which they are composed. The environs are pleasant; abounding with gardens containing the best fruits, particularly oranges, and covered with verdure throughout the year. But the air of Hieres is unhealthy, owing to exhalations from the marshes, and from a salt lake in the neighbourhood. Here great quantities of salt are obtained, and exported, as well as oil, wine, and fruit, to Toulon and Marseilles. Hieres was formerly a sea-port of consequence: but the sea has now retired to the distance of a league. The celebrated Massillon was born here. Population 7000.

HIERO I., king of Syracuse, succeeded his brother Gelon, A. A. C. 478. He made war against Theron, tyrant of Agrigentum, and took Himera. He gained three crowns at the Olympic games by horse and chariot racing, for which he is celebrated by Pindar; whose conversation, with that of other literati, rendered him humane and liberal. He died A. A. C. 467.

Hiero II., king of Syracuse, was a descendant of Gelon, and was elected king A. A. C. 268. He carried on war against the Romans for some time along with the Carthaginians; but made peace, and continued ever after their firm ally. He was a relation of Archimedes; and was a prince of great learning and virtue, and encouraged arts and commerce. He died A. A. C. 225.

Hiero's Crown, in hydrostatics. Hiero II., having furnished a goldsmith with a quantity of fine gold to make a crown, suspected, upon receiving it, that he had been cheated, by his using a greater quantity of silver alloy than was necessary. He applied to Archimedes to discover the fraud without defacing the crown; which he did by this experiment: He procured a ball of pure gold and another of silver, each exactly of the same weight with the crown; and judging that if the crown were of pure gold it would be of equal bulk, and, upon putting it in water, expel an equal quantity of the water with the golden ball; if of silver, it would expel an equal quantity with the silver one; but, if of an intermediate quality, the quantity of water expelled would be in exact proportion. This upon trial he found to be the case; and, by comparing the quantities of water displaced, discovered the proportions of gold and silver in the crown.

HIEROCLES, a cruel persecutor of the Christians, and a violent promoter of the persecution under Diocletian, flourished A D. 302. He wrote some books against the Christian religion; in which he aims to show some inconsistencies in the Holy Scriptures, and compares the miracles of Apollonius Tyanæus to those of our Saviour. He was refuted by Lactantius and Eusebius. The remains of his works were collected into one volume by bishop Pearson; and published in 1654, with a learned dissertation prefixed.

Hierocles, a Platonic philosopher of the fifth century, who taught at Alexandria, and was admired for his eloquence. He wrote seven books upon Providence and Fate, dedicated to the philosopher Olympiodorus, who by his embassies did the Romans great services under Honorius and Theodosius II. But these books are lost, and we only know them by the extracts in Photius. He wrote also a Commentary upon the golden verses of Pythagoras; which is still extant, and has been several times published with those verses.

HIE'ROGLYPH, *n. s.* }
Hieroglyph'ic, *n. s.* }
Hieroglyph'ical, *adj.* }
Hieroglyph'ically, *adv.* } Fr. *hieroglyphe;* Gr. ιερος, γλυφω. An emblem; a figure by which a word was implied. Hieroglyphics were used before the alphabet was invented. Hieroglyph seems to be the proper substantive, and hieroglyphic the adjective. The art of writing in picture: charged with hieroglyphical sculpture; emblematical.

In this place stands a stately *hieroglyphical* obelisk of Theban marble. *Sandys's Travels.*

The Egyptian serpent figures time,
And, stripped, returns into his prime;
If my affection thou would'st win,
First cast thy *hieroglyphick* skin. *Cleaveland.*

A lamp amongst the Egyptians is the *hieroglyphich* of life. *Wilkins's Dædalus.*

The original of the conceit was probably *hieroglyphical*, which after became mythological, and, by a process of tradition, stole into a total verity, which was but partly true in its morality.
Browne's Vulgar Errors.

This *hieroglyphick* of the Egyptians was erected for parental affection, manifested in the protection of her young ones, when her nest was set on fire.
Id.

Others have spoken emblematically and *hieroglyphically* as the Egyptians, and the phœnix was the *hieroglyphick* of the sun. *Browne.*

The first writing men used was only the single pictures and gravings of the things they would represent, which way of expression was afterwards called *hieroglyphick*. *Woodward.*

Between the statues obelisks were placed,
And the learned walls with *hieroglyphicks* graced.
Pope.

No brute can endure the taste of strong liquor, and consequently it is against all the rules of *hieroglyphick* to assign any animals as patrons of punch.
Swift.

——— once I was well versed in the forgotten
Etruscan letters, and—were I so minded—
Could make their *hieroglyphics* plainer than
Your alphabet. *The Deformed Transformed.*

HIEROGLYPHICS were in use among the Egyptians, and that as well in their writings as inscriptions; being the figures of various animals, the parts of human bodies, and mechanical instruments. It was the custom to have the walls, doors, &c., of their temples, obelisks, &c., engraven with such figures. Hieroglyphics are properly emblems or signs of divine, sacred, or supernatural things; by which they are distinguished from common symbols, which are signs of sensible and natural things. Hermes Trismegistus is commonly esteemed the inventor of hieroglyphics: he first introduced them into the heathen theology, whence they have been transplanted into the Jewish and Christian. Sacred things, says Hippocrates, should only be communicated to sacred persons. Hence the ancient Egyptians communicated to none but their kings and priests, and those who were to succeed to the priesthood and the crown, the secrets of nature, and of their morality and history; and this they did by a kind of cabbala, which, at the same time that it instructed them, only amused the rest of the people. Hence the use of hieroglyphics, or mystic figures, to veil their morality, politics, &c., from profane eyes. This author and many others do not keep to the precise character of a hieroglyphic, but apply it to profane as well as divine things. Hieroglyphics are a kind of real characters, which do not only denote, but in some measure express the things. Thus, according to Clemens Alexandrinus, (Strom. v.) a lion is the hieroglyphic of strength and fortitude; a bullock, of agriculture; a horse, of liberty; a sphinx, of subtlety, &c. Such is the opinion that has generally been embraced, both by ancient and modern writers, of the origin and use of hieroglyphics. It has been almost uniformly maintained, that they were invented by the Egyptian priests to conceal their wisdom from the knowledge of the vulgar; but the late bishop Warburton has, with much ingenuity and learning, endeavoured to show that this account is erroneous. He thinks the first kind of hieroglyphics were mere pictures, because the most natural way of communicating our conceptions, by marks or figures, was by tracing out the images of things; and this is verified in the case of the Mexicans, whose only method of writing their laws and history was by this picture writing. But the hieroglyphics invented by the Egyptians were an improvement on this rude and inconvenient essay towards writing, for they contrived to make them both pictures and characters. In order to effect this improvement, they were obliged to proceed gradually, by first making the principal circumstance of the subject stand for the whole; as in the hieroglyphics of Horapollo, which represent a battle of two armies in array by two hands, one holding a shield and the other a bow: then putting the instrument of the thing, whether real or metaphorical, for the thing itself, as an eye and sceptre to represent a monarch, a ship and pilot the governor of the universe, &c.; and finally, by making one thing stand for or represent another, where their observations of nature, or traditional superstitions led them to discover or imagine any resemblance: thus the universe was designed by a serpent in a circle, whose variegated spots denoted the stars; and a man who had nobly surmounted his misfortunes was represented by the skin of the hyæna, because this was supposed to furnish an invulnerable defence in battle. The Chinese writing, he observes, was the next kind of improvement in the use of hieroglyphics. The Egyptians joined characteristic marks to images; the Chinese threw out the images and retained only the contracted marks, and from these marks proceeded letters. The general concurrence of different people, in this method of recording their thoughts, can never be supposed to be the effect of imitation, sinister views, or chance; but must be considered as the uniform voice of nature speaking to the rude conceptions of mankind; for not only the Chinese of the East, the Mexicans of the West, and the Egyptians of the South, but the Scythians likewise of the North, and the intermediate inhabitants of the earth, viz. the Indians, Phœnicians, Ethiopians, &c., used the same way of writing by picture and hieroglyphic. He farther shows, that the several species of hieroglyphic writing took their rise from nature and necessity, and not from choice and artifice, by tracing at large the origin and progress of the art of speech. He proceeds to show how, in process of time, the Egyptian hieroglyphics came to be employed for the vehicle of mystery. They used their hieroglyphics two ways; the one more simple, by putting the part for the whole which was the curiologic hieroglyphic; and the other more artificial, by putting one thing of resembling qualities for another, called the tropic hieroglyphic: thus the moon was sometimes represented by a half circle, and sometimes by a cynocephalus. They employed their proper hieroglyphics to record openly and plainly their laws, policies, public morals, and history, and all kinds of civil matters: this is evident from their obelisks, which were full of hieroglyphic characters, designed to record singular events, memorable actions, and new inventions; and also from the celebrated inscription on the temple of Minerva at Sais, where an infant, an old man, a hawk, a fish, and a river-horse, expressed this moral sentence: 'All you who come into the world and go out of it, know this, that the gods hate impudence.' However, the tropical hieroglyphics, which were employed to divulge, gradually produced symbols which were designed to secrete or conceal: thus Egypt was sometimes

expressed by the crocodile, sometimes by a burning censer with a heart upon it; where the simplicity of the first representation, and the abstruseness of the latter, show that the one was a tropical hieroglyphic for communication, and the other a tropical symbol invented for secrecy. Enigmatic symbols were afterwards formed by the assemblage of different things, or of their properties that were less known; and, though they might have been intelligible at first, yet when the art of writing was invented, hieroglyphics were more generally disused; the people forgot the signification of them; and the priests, retaining and cultivating the knowledge of them, because they were the repositories of their learning and history, at length applied them to the purpose of preserving the secrets of their religion. Sir John Marsham thinks that symbols were the original of animal worship in Egypt (Can. Chron. p. 58): because in these was recorded the history of their greater deities, their kings, and lawgivers, represented by animals and other creatures. The symbol of each god was well known and familiar to his worshippers, by means of the popular paintings and engravings on their temples and other sacred monuments, so that the symbol presenting the idea of the god, and that idea exciting sentiments of religion, it was natural for them, in their addresses to any particular god, to turn to his representative mark or symbol; especially when we consider, that the Egyptian priests feigned a divine original for hieroglyphic characters, in order to increase the veneration of the people for them. These would of course bring on a relative devotion to these symbolic figures, which, when it came to be paid to the living animal, would soon terminate in an ultimate worship. Another consequence of the sacredness of the hieroglyphic characters was, that it disposed the more superstitious to engrave them on gems, and wear them as amulets or charms. This magical abuse seems not to have been much earlier than the established worship of the god Serapis, which happened under the Ptolemies, and was first brought to the general knowledge of the world by certain Christian heretics and natives of Egypt, who had mixed a number of Pagan superstitions with their Christianity. These gems, called abraxas, are frequently to be met with in the cabinets of the curious, and are engraven with all kinds of hieroglyphic characters. To these abraxas succeeded the talismans. See Abraxas.

HIEROGRAMMATEI, Hierogrammatists, Ιερογραμματεις, i. e holy registers, were an order of priests among the ancient Egyptians, who presided over religion and learning. They had the care of the hieroglyphics, and were the expositors of religious doctrines. They were regarded as a kind of prophets; and it is said, that one of them predicted to an Egyptian king, that an Israelite (meaning Moses), eminent for his qualifications and achievements, would depress the Egyptian monarchy. The hierogrammatei were always near the king, to assist him with their information and counsels. The better to fit them for this, they made use of the knowledge they had acquired in the motions of the celestial luminaries, as well as the writings of their predecessors, wherein their function and duties were delivered. They were exempted from all civil employments, were reputed the first persons in dignity next the king, and bore a kind of sceptre in form of a ploughshare. After Egypt became a Roman province they sunk into neglect.

HIEROG'RAPHY, *n. s.* Gr. ἱερὸς and γράφω. Holy writing.

HIEROMANCY, Hieromantia, ιερομαντεια, in antiquity, that species of divination which predicted future events from observing the various things offered in sacrifice. See Divination and Sacrifice.

HIEROMENIA, in ancient Greek chronology, the month in which the Nemean games were celebrated, called also Boedromion.

HIEROMNEMON, Gr. from ιερος, sacred, and μνημων, a remembrancer, an officer in the ancient Greek church, whose principal function was to stand behind the patriarch at the sacraments, ceremonies, &c., and show him the prayers, psalms, &c., which he was to rehearse. He also clothed the patriarch in his pontifical robes, and assigned the places of all those who had a right to be around him when seated on his throne, as the master of the ceremonies now does to the pope.

Hieromnemon, in Grecian antiquity, a delegate chosen by lot, and sent to the great council of the Amphictyons, to take care of what concerned religion. The hieromnemones were reckoned more honorable than the other members of that assembly, the general meetings of which were always summoned by them, and their names were prefixed to the decrees made by that council.

Hieromnemon was also the name of a stone used by the ancient Greeks in divination, but no description of it is extant.

HIER'OPHANT, *n. s.* Gr. ιεροφάντης. One who teaches rules of religion; a priest.

Herein the wantonness of poets, and the crafts of their heathenish priests and *hierophants*, abundantly gratified the fancies of the people. ***Hale.***

Hierophant, Hierophanta, or Hierophantes, from ἱερος, holy, and φαινω, I appear; a priest among the Athenians, who was properly the chief person that officiated in the eleusinia. This office was first executed by Eumolpus, and continued in his family for near 1200 years; though, when any person was appointed to this dignity, he was required always to live in celibacy. Apollodorus observes, that the hierophantes instructed persons initiated into their religion in the mysteries and duties thereof, and hence he derived his name: for the same reason he was called prophetes, the prophet. He had officers under him to assist him, who were also called prophetes, and exeges, i. e. explainers of divine things. They dressed and adorned the statues of the gods, and bore them in processions and solemn ceremonies.

HIEROPHYLAX, an officer in the Greek church, keeper of the holy utensils, vestments, &c.

HIERTING, or Jetting, a sea-port town of Denmark, in North Jutland, at the mouth of the Warde, with a good harbour: twenty-two miles north-west of Ripen. Long. 8° 22′ E., lat. 55° 29′ N.

HIG'GLE, *v. n.*
HIG'GLEDY-PIGGLEDY, *adv.*
HIG'GLER, *n. s.*
} Probably a corruption of haggle. To be penurious; to sell provisions from door to door: the adverb is a cant word for confusedly.

In good offices and due retributions we may not be pinching and niggardly: it argues an ignoble mind, where we have wronged, to *higgle* and dodge in the amends. *Hale.*

Base thou art!
To *higgle* thus for a few blows,
To gain thy knight an op'lent spouse. *Hudibras.*

Why all this *higgling* with thy friend about such a paltry sum? Does this become the generosity of the noble and rich John Bull? *Arbuthnot.*

HIGH, *adj.* Sax. þeaþ, þiȝ; Goth., Swed., and Teut. *ha;* Dan. *hæy.*

Long upwards; rising above from the surface, or from the centre: opposed to deep, or long downward.

Their Andes, or mountains, were far *higher* than those with us; whereby the remnants of the generation of men were, in such a particular deluge, saved. *Bacon.*

The *higher* parts of the earth being continually spending, and the lower continually gaining, they must of necessity at length come to an equality. *Burnet's Theory.*

High o'er the rest by nature reared
The oak's majestic boughs appeared
Beneath a copse of various hue
In barbarous luxuriance grew. *Beattie.*

Here the fat cook piles *high* the blazing fire,
And scarce the spit can turn the steer entire. *Gay.*

Elevated in place; raised aloft; opposed to low.

And we wol reuled ben at his devise
In *highe* and lowe: and thus by on assent,
We ben accorded to his judgment.
Chaucer. The Prologue to the Canterbury Tales.

No man, she sawe, and yet yshone the mone:
And *hye* upon a rocke she wenten sone
And sawe his barge ysailing in the se.
Id. Legende of Good Women.

They that stand *high* have many blasts to shake them,
And, if they fall, they dash themselves to pieces.
Shakspeare. Richard III.

High o'er their heads a mould'ring rock is placed,
That promises a fall, and shakes at ev'ry blast.
Dryden.

Reason elevates our thoughts as *high* as the stars, and leads us through the vast spaces of this mighty fabrick; yet it comes far short of the real extent of even corporeal being. *Locke.*

Exalted in nature.

The *highest* faculty of the soul. *Baxter.*

Elevated in rank or condition: as high priest.

He wooes both *high* and low, both rich and poor. *Shakspeare.*

O mortals! blind in fate, who never knew
To bear *high* fortune, or endure the low. *Dryden.*

Exalted in sentiment.

Solomon lived at ease, nor aimed beyond
Higher design than to enjoy his state. *Milton.*

Difficult; abstruse.

The god of love, ah, benedicite!
Howe mighty and howe gret a lord is he!
For he can maken of lowe hertes, *hie,*
And of *hie* lowe and lyke for to die;
And harde hertes he can maken fre.
Chaucer. The Cuckowe and the Nightingale.

Fast did they fly as them their feete could bear,
High over hilles and lowly over dales.
Spenser. Faerie Queene.

They meet to hear and answer such *high* things. *Shakspeare.*

Boastful; ostentatious.

His forces, after all the *high* discourses, amounted really but to eighteen hundred foot. *Clarendon.*

Arrogant; proud; lofty.

The governor made himself merry with his *high* and threatening language, and sent him word he would neither give nor receive quarter. *Clarendon.*

Severe; oppressive.

When there appeareth on either side an *high* hand, violent prosecution, cunning advantages taken, and combination, then is the virtue of a judge seen. *Bacon.*

Noble; illustrious.

Trust me, I am exceeding weary.
—I had thought weariness durst not have attacked so *high* blood—It doth me, though it discolours the complexion of my greatness to acknowledge it. *Shakspeare.*

Violent; tempestous; loud. Applied to the wind.

More ships in calms on a deceitful coast,
Or unseen rocks, than in *high* storms are lost. *Denham.*

Spiders cannot weave their nets in a *high* wind. *Duppa.*

At length the winds are raised, the storm blows *high;*
Be it your care, my friends, to keep it up
In its full fury. *Addison's Cato.*

Tumultuous; turbulent; ungovernable.

Not only tears
Rained at their eyes; but *high* winds worse within,
Began to rise; *high* passions, anger,
Mistrust, suspicion, discord, hate, shook sore
Their inward state of mind. *Milton.*

Can heav'nly minds such *high* resentment show,
Or exercise their spite in human woe? *Dryden.*

Full; complete: applied to time; now used only in cursory speech.

High time now 'gan it wax for Una fair,
To think of those her captive parents dear.
Faerie Queene.

Sweet warriour, when shall I have peace with you?
High time it is this war now ended were. *Spenser.*

It was *high* time to do so, for it was now certain that forces were already upon their march towards the West. *Clarendon.*

It was *high* time for the lords to look about them. *Id.*

Raised to any great degree: as, a high pleasure; high luxury; a high performance; a high color.

Solomon lived at ease, and ful
Of honour, wealth, *high* fare. *Milton.*

High sauces and spices are fetched from the Indies. *Baker.*

Advancing in latitude from the line.

They are forced to take their course either *high* to the North, or low to the South. *Abbot.*

At the most perfect state; in the meridian: as, by the sun it is high noon: whence probably the foregoing expression, high time.

It is yet *high* day, neither is it time that the cattle should be gathered. *Gen.* xxix. 7.

Far advanced into antiquity.

The nominal observation of the several days of the

week is very *high*, and as old as the ancient Egyptians, who named the same according to the seven planets. *Browne.*

Dear; exorbitant in price.

If they must be good at so *high* a rate, they know they may be safe at a cheaper. *South.*

Capital; great; opposed to little: as, high treason, in opposition to petty.

HIGH, *n. s.* High place; elevation; superior region: only used with *from* and *on*.

Which when the king of gods beheld *from high*,
He sighed. *Dryden.*

On HIGH. Aloft; above; into superior regions.

Wide is the fronting gate, and raised on *high*,
With adamantine columns threats the sky. *Dryden.*

HIGH is much used in composition with variety of meaning.

HI'GH-BLEST. Supremely happy.

The good which we enjoy from heaven descends;
But that from us ought should ascend to heaven,
So prevalent, as to concern the mind
Of God *high-blest*, or to incline his will,
Hard to belief may seem. *Milton.*

HI'GH-BLOWN. Swelled much with wind; much inflated.

I have ventured,
Like little wanton boys that swim on bladders,
These many Summers on a sea of glory;
But far beyond my depth: my *high-blown* pride
At length broke under me, and now has left me,
Weary, and old with service, to the mercy
Of a rude stream, that must for ever hide me.
Shakspeare.

HI'GH-BORN. Of noble extraction.

Cast round your eyes
Upon the *high-born* beauties of the court;
There chuse some worthy partner of your heart.
Rowe.

HI'GH-BUILT, *adj.* Of lofty structure.

I know him by his stride,
The giant Harapha of Gath; his look
Haughty as is his pile, *high-built* and proud. *Milton.*

Covered with lofty buildings.

In dreadful wars
The *high-built* elephant his castle rears,
Looks down on man below, and strikes the stars.
Creech.

HIGH-CO'LORED. Having a deep or glaring color.

A fever in a rancid oily blood produces a scorbutic fever, with *high-coloured* urine, and spots in the skin. *Floyer.*

HI'GH-DESIGNING. Having great schemes.

His warlike mind his soul devoid of fear,
His *high-designing* thoughts were figured there.
Dryden.

HI'GH-FED. Pampered.

A favourite mule, *high-fed*, and in the pride of flesh and mettle, would still be bragging of his family. *L'Estrange.*

HI'GH-FLAMING. Throwing the flame to a great height.

Hecatombs of bulls to Neptune slain,
High-flaming, please the monarch of the main.
Pope.

HI'GH-FLIER, *n. s.* One that carries his opinions to extravagance.

She openly professeth herself to be a *high-flier*; and it is not improbable she may also be a Papist at heart. *Swift.*

HI'GH-FLOWN, *adj.* High and flown, from fly.

Elevated; proud.

This stiff necked pride nor art nor force can bend,
Nor *high-flown* hopes to Reason's lure descend.
Denham.

Next brave Philotimus in post did ride:
Like rising ladders was his climbing mind;
His *high-flown* thoughts had wings of courtly pride.
Fletcher's Purple Island.

Turgid; extravagant.

This fable is a *high-flown* hyperbole upon the miseries of marriage. *L'Estrange.*

HI'GH-FLYING. Extravagant in claims or opinions.

Clip the wings
Of their *high-flying* arbitrary kings.
Dryden's Virgil.

HI'GH-HEAPED, *adj.*

Covered with high piles.

The plenteous board *high-heaped* with cates divine,
And o'er the foaming bowl the laughing wine. *Pope.*

Raised into high piles.

I saw myself the vast unnumbered store
Of brass, *high-heaped* amidst the regal dome.
Pope.

HI'GH-HEELED. Having the heel of the shoe much raised.

By these embroidered *high-heeled* shoes,
She shall be caught as in a noose. *Swift.*

HI'GH-HUNG. Hung aloft.

By the *high-hung* taper's light
I could discern his cheeks were glowing red.
Dryden.

HI'GHLAND, *n. s.* High and land. Mountainous region.

Ladies in the *highlands* of Scotland use this discipline to their children in the Winter, and find that cold water does them no harm. *Locke.*

The wondering moon
Beholds her brother's steeds beneath her own;
The *highlands* smoaked, cleft by the piercing rays.
Addison.

HIGHLANDS OF SCOTLAND. See SCOTLAND.

HIGHLAND COUNTY, a county of the state of Ohio, United States, bounded south by Adam's county, east by Pike, north by Ross, Clinton, and Fayette, and west by Clermont. It is watered by Brush and Point creeks, and by the upper streams of the little Miami. Its surface is hilly, and the climate healthy, but it is thinly settled. Hillsborough is the chief town.

HI'GHLANDER, *n. s.* From highland. An inhabitant of mountains; mountaineer.

His cabinet council of *highlanders*. *Addison.*

HIGHLANDERS, a general appellation for the inhabitants of the mountainous parts of Scotland, to the north and north-west including those of the Hebrides. They are a branch of the ancient Celtæ, and are undoubtedly the descendants of the first inhabitants of Britain, as appears from the many monuments of their language, still retained in the most ancient names of places in all parts of the island. The Highlanders, or, as they are often termed by ancient authors, the Caledonians, were always a brave, warlike, and hardy race of people; and, in the remotest times, seem to have possessed a degree of refinement in sentiments and manners then unknown to the other nations that surrounded them. This appears

not only from their own traditions and poems, but also from the testimony of many ancient authors. This civilisation was probably owing in a great measure to the order of the bards, or Druids, and some other institutions peculiar to this people. The ancient Highlanders lived by hunting alone, till some time after the era of Fingal, who was one of their kings towards the close of the third century. For some ages after that period, they turned their chief attention to the pastoral life, which afforded a less precarious subsistence. Till of late, agriculture in most parts of the Highlands made little progress. The Highlanders always had a king, and enjoyed a government of their own, till Kenneth II. having subdued the Pictish kingdom, in 845, transferred thither the seat of royalty. This event proved very unfavorable to the Highlands, which from this period began to decline. The country, no longer awed by the presence of the sovereign, fell into anarchy. The chieftains began to extend their authority, to form factions, and to foment divisions and feuds between contending clans. The laws were either too feeble to bind them, or too remote to take notice of them. Hence sprung all those evils which long disgraced the country, and disturbed the peace of its inhabitants. Robbery or plunder, provided it was committed on any one of an adverse clan, was countenanced: and their reprisals on one another were perpetual. Thus quarrels were handed down from one generation to another, and the whole clan was bound in honor to espouse the cause of every individual that belonged to it. The genius of the people was thus greatly altered; and the Highlanders of a few ages back were almost as remarkable for their irregular and disorderly way of life, as their predecessors had been for civilisation and virtue. But one of the strongest features that marked the character of the Highlanders, in every age, was their hospitality and benevolence to strangers. At night the traveller was always sure to find a hearty welcome in whatever house he should go to; and the host thought himself happier in giving the entertainment than the guest in receiving it. Even with regard to their enemies, the laws of hospitality were observed with the most sacred regard. They who fought against each other in the day, could join in the night feast, and even sleep together, in the same house. From the same principle, they were, in most cases, so faithful to their trust, that they rarely betrayed any confidence reposed in them. A promise they thought as binding as an oath, and held it equally inviolable and sacred. The Caledonians in all ages have been much addicted to poetry and music. The poems of Ossian, so universally repeated, and so highly esteemed by every Highlander, are a strong proof of the early proficiency of this people in the poetical art. The genius and character of the Gaelic poetry is well known. It is tender, simple, beautiful, and sublime. Among the ancient Highlanders, the harp was the chief instrument of music. It suited the mildness of their manners, and was well adapted to the peace and quiet which they enjoyed under their own kings. In a later period, however, when the constant quarrels of their chiefs, and the endless feuds of contending clans, turned all their thoughts to war, it was forced to give place to the bag-pipe, an instrument altogether of the martial kind, and therefore well suited to the state of the country at that time. Their dress consisted of a light woollen jacket, or tartan, woven in squares of various colors, in which red, green, blue, and black are most prevalent. The kilt is a short petticoat of the same stuff, reaching to the knees; and the hose, or short stockings, are woven in diamonds of red and white, tied under the knee with garters, often beautifully ornamented: the Highlanders have generally a pouch made of the skin of a badger, fox, or other animal, hanging before, in which they keep their tobacco and money, and this part of their dress is generally adorned with silver buttons and tassels; their plaid is also of tartan, consisting of twelve or thirteen yards of cloth, wrapped round them in a graceful manner, fastened round the middle by a belt, falling to the knees behind, and confined by a broach or silver pin to the top of the left shoulder: this is often their only cover, both within doors and when obliged to repose in the fields. The truis or trews, which are a sort of tartan pantaloons, are only worn by the gentry, instead of the kilt. Indeed, Sir John Sinclair contends, that the trews were the most ancient dress of the Highlanders, and that the kilt is of comparatively modern introduction. The Highlanders generally affected to have their dress of the color of the heath on which they reposed, probably from a principle of security in time of war, or that they might not be discovered while they lay in the heaths, waiting for their game. Their ancient arms were the broad sword and target, Lochaber axes, and a dirk, to which, before the act for disarming the Highlanders, in 1748, the pistol stuck into the girdle had been added. Always armed with a dirk and pistol, they were ready to resist an assault, or revenge a provocation, as soon as it was given. This circumstance contributed to render them polite and guarded in their behaviour to one another. When embodied by their chieftain, they were armed with a broad sword, a dagger, a target, a musket, and two pistols. In close engagement, and in broken ranks, they were irresistible. The only foe they dreaded was cavalry. As soon as the battle was over, most of the troops dispersed, and returned home to dispose of their plunder, and to provide for their families. Their religion was deeply tinctured with superstition. They believed in ghosts and apparitions; by appearances in the heavens they predicted future events; they practised charms and incantations for the cure of various diseases; and to some individuals they thought the divinity had communicated a portion of his prescience. The language of the Highlanders is still the Gaelic; which, with many of their customs and manners, has been secured to them by their mountains and fastnesses, amidst the many revolutions which the rest of the island has undergone in so long a course of ages. That it has been formerly a good deal cultivated, appears from the style of its poems and tales, and from several ancient MSS. that have come down to the present times. To strangers the Gaelic has a forbidding aspect

on account of the number of its quiescent consonants (which are retained to mark the derivation of words and their variations in case and tense), but its sound is abundantly musical and harmonious, and its genius strong and masculine. See GAELIC. The Highlanders have begun of late years to apply to learning, agriculture, and especially to commerce, for which their country, every where indented with arms of the sea, is peculiarly favorable. Cattle are the chief staple of the country; but it produces more grain than would supply its inhabitants, if so much of it were not consumed in whisky. That article, however, is thought by physicians to be necessary for the health of the natives, when taken in moderation, on account of the coldness of the climate and the lowness of their diet. The Highlanders are beginning to avail themselves of their mines, woods, wool, and fisheries; and by a vigorous application, with due encouragement from government, may become a prosperous and useful people. They are active, persevering, industrious, and economical. They are remarkably bold and adventurous, which qualifies them for being excellent seamen and soldiers. They are generally of a middle size, rather above it than otherwise; their eyes are lively, their features distinctly marked, and their persons strong and well made. Their countenances are open and ingenuous, and their tempers frank and communicative.

HIGH'LY, *adv.* From high.

With elevation as to place and situation; aloft.

In a great degree.

Whatever expedients can allay those heats, which break us into different factions, cannot but be useful to the public, and *highly* tend to its safety. *Addison.*

It cannot but be *highly* requisite for us to enliven our faith, by dwelling often on the same considerations. *Atterbury.*

Proudly; arrogantly; ambitiously.

What thou wouldst *highly*,
That thou wouldst holily; wouldst not play false,
And yet wouldst wrongly win. *Shakspeare.*

With esteem; with estimation.

Every man that is among you, not to think of himself more *highly* than he ought to think. *Rom.* xii.

HIGH-METTLED. Proud or ardent of spirit.

He fails not in these to keep a stiff rein on a *high-mettled* Pegasus; and takes care not to surfeit here, as he has done on other heads, by an erroneous abundance. *Garth.*

HIGH-MI'NDED. Proud; arrogant.

Because of unbelief they were broken off, and thou standest by faith: be not *high-minded*, but fear. *Rom.* xi. 20.

My breast I'll burst with straining of my courage,
But I will chastise this *high-minded* strumpet. *Shakspeare.*

HIGHMORE (Joseph), esq., an eminent painter, born in London June 13th, 1692, the son of Mr. Edward Highmore, coal merchant. Having an early and strong inclination to painting, his father, wishing to gratify him, made a proposal to his uncle, who was serjeant painter to king William III.; but, this failing, he was articled as clerk to an attorney in 1707; but so much against his inclination, that in three years he resolved to indulge his natural disposition to his favorite art; and employed his leisure hours in designing, and in studying geometry, perspective, architecture, and anatomy, without any instructors except books. By these exertions he soon arrived at such perfection in his favorite art, that he painted many pictures, which were not only valued highly in his own time, but are now the objects of admiration to painters. On the institution of the academy of painting, sculpture, &c., in London, in 1753, he was elected one of the professors. In 1754 he published in 4to. A Critical Examination of those two Paintings (by Rubens) on the ceiling of the Banqueting House at Whitehall, in which Architecture is introduced so far as relates to Perspective; together with the Discussion of a Question which has been the subject of Debate among Painters. In the solution of this question, he proved, that Rubens and other great painters were mistaken in the practice, and Mr. Kirby and several others in the theory; and in vol. XVII. of the Monthly Review, he animadverted (anonymously) on Mr. Kirby's unwarrantable treatment of Mr. Ware, and detected his errors, even when he exults in his own superior science. Mr. Highmore, in a practice of forty-six years, painted many portraits, of which several have been engraved. In the historical branch, which was then much less cultivated than it is at present, we shall only mention Hagar and Ishmael, a present to the Foundling hospital: The good Samaritan: The finding of Moses, purchased at his sale by general Lister: The Harlowe Family, as described in Clarissa, now in the possession of T. W. Payler, esq.: Clarissa herself: The Graces unveiling Nature, drawn by memory from Rubens: The Clementina of Grandison, and the Queen Mother of Edward IV. with her younger son, &c., in Westminster Abbey; in the possession of his son. He was the author of various publications which were well received; but his most capital work was his Practice and Perspective, on the principles of Dr. Brook Taylor, &c., in 1 vol. 4to., 1763. This not only evinced his scientific knowledge of the subject, but, by its perspicuity, removed the only objection that can be made to the system of Dr. Taylor. His Epistle to an Eminent Painter, published in the Gentleman's Magazine for 1778, shows that his talents were by no means impaired at the age of eighty-six. Indeed he retained them to the last, and had even strength and spirit sufficient to enable him to ride out daily on horseback the summer before he died. A strong constitution, habitual temperance, and constant attention to his health, in youth as well as in age, preserved his faculties to his eighty-eighth year, when he died March 3rd, 1780. He was interred in Canterbury cathedral, leaving one son, Anthony, educated in his own profession, and a daughter. His tints, like those of Rubens and Vandyke, instead of being impaired, are improved by time. His idea of beauty, when he indulged his fancy, was of the highest kind; and his knowledge of perspective

gave him great advantages in family pieces, of which he painted more than any one of his time. He could take a likeness by memory as well as by sitting, as appears by his picture of the duke of Lorraine (afterwards emperor), which Faber engraved; and those of king George II. (in York assembly-room); queen Caroline, the two Miss Gunnings, &c.

HI'GHMOST, *adj.* An irregular word. Highest; topmost.

Now is the sun upon the *highmost* hill
Of this day's journey. *Shakspeare.*

HIGHNESS, *n. s.* From high.

Elevation above the surface; altitude; loftiness.

The title of princes; anciently of kings.

Honour is also cleped gret dignitee and *highnesse.*
Chaucer. The Persones Tale.

Most royal majesty,
I crave no more than that your *highness* offered.
Shakspeare.

How long in vain had nature strived to frame
A perfect princess, ere her *highness* came? *Waller.*

Beauty and greatness are eminently joined in your royal *highness.* *Dryden.*

Your *highness* much mistakes me,
The first snake was a flatterer—I am none;
And for my deeds, I only sting when stung.
Byron. Deformed Transformed.

Dignity of nature; supremacy.

Destruction from God was a terror to me, and by reason of his *highness* I could not endure. *Job* xxxi.

HIGH-PRINCIPLED. Extravagant in notions of politics.

This seems to be the political creed of all the *high-principled* men I have met with. *Swift.*

HIGH-RED. Deeply red.

Oil of turpentine, though clear as water, being digested upon the purely white sugar of lead, has in a short time afforded a *high-red* tincture. *Boyle.*

HIGH-SE'ASONED. Piquant to the palate.

Be sparing also of salt in the seasoning of all his victuals, and use him not to *high-seasoned* meats.
Locke.

HIGH-SI'GHTED. Always looking upwards.

Let *high-sighted* tyranny range on,
Till each man drop by lottery. *Shakspeare.*

HIGH-SPIRITED. Bold; daring; insolent.

HIGH-STOM'ACHED. Obstinate; lofty.

High-stomached are they both, and full of ire;
In rage, deaf as the sea, hasty as fire. *Shakspeare.*

HIGHT. This is an imperfect verb, used only in the preterite tense with a passive signification: Sax. þetan, to call; Germ. *hessen,* to be called. Was named; was called.

And whan the king that Yarbas *hight* it wist,
As he that had hire loved ever his life,
And wowed hire to haven to his wife,
Soche sorow as he hath maked, and soche chere,
It is a routhe and pite for to here.
Chaucer. Legende of Good Women.

Two yonge knightes ligging by and by,
Bothe in on armes wrought ful richely;
Of whiche two, Arcite *highte* that on,
And he that other *highte* Palamon.
Id. The Knightes Tale.

The city of the great king *hight* it well,
Wherein eternal peace and happiness doth dwell.
Spenser.

Within this homestead lived, without a peer
For crowing loud, the noble Chanticleer;
So *hight* her cock. *Dryden's Nun's Priest.*

It is sometimes used as a participle passive: called; named. It is now obsolete, except in burlesque writings.

Amongst the rest a good old woman was,
Hight mother Hubberd. *Hubberd's Tale.*

Hearn he *hight.* *Pope.*

HIGH-TAST'ED. Gustful; piquant.

Flattery still in sugared word betrays,
And poison in *high-tasted* meats conveys. *Denham.*

HIGH-VI'CED. Enormously wicked.

Be as a planetary plague, when Jove
Will o'er some *high-viced* city hang his poison
In the sick air. *Shakspeare.*

HIGH-WA'TER, *n. s.* High and water. The utmost flow of the tide.

They have a way of draining lands that lie below the *high-water,* and are something above the low-water mark. *Mortimer.*

HIGHWA'Y, *n. s.* High and way. Great road; public path.

So few there be
That chuse the narrow path, or seek the right:
All keep the broad *highway,* and take delight
With many rather for to go astray. *Faerie Queene.*

Two inscriptions give a great light to the histories of Appius, who made the *highway,* and of Fabius the dictator. *Addison.*

Entering on a broad *highway,*
Where power and titles scattered lay,
He strove to pick up all he found. *Swift.*

Figuratively a train of action, with apparent consequence.

I could mention more trades we have lost, and are in the *highway* to lose. *Child on Trade.*

HI'GHWAYMAN, *n. s.* Highway and man. A robber that plunders on the public roads.

'Tis like the friendship of pickpockets and *highwaymen,* that observe strict justice among themselves.
Bentley.

A remedy like that of giving my money to an *highwayman,* before he attempts to take it by force, to prevent the sin of robbery. *Swift.*

HI'GH-WROUGHT. Accurately finished; nobly labored.

Thou triumphest, victor of the *high-wrought* day,
And the pleased dame, soft smiling, leadest away.
Pope.

HIJAR (Duke de), a Spanish grandee, member of the modern Junta of Bayonne, and grand master of the ceremonies to king Joseph Buonaparte. He was of an ancient Castilian family, and born in 1775; during the life of his father he was known by the title of the duke d'Alliaga, and engaged in the study of literature and the fine arts. In 1808 he was summoned to Bayonne by the order of Napoleon; and, after the second abdication of king Charles, appointed to the office of master of the ceremonies to the new sovereign Joseph. He however abandoned the cause of the intruder as soon as the partizans of Ferdinand VII. took active measures to support his authority. Hence the duke was included in the list of Castilian nobles proscribed by the decree of Burgos; on which he retired to London, and remained there till the progress

of events had brought about the restoration of Ferdinand. He was then recalled to Madrid, and in 1814 appointed Spanish ambassador to France. He died in 1817, a short time after having received the order of the Golden Fleece.

HILARIA, in antiquity, feasts celebrated annually with great pomp and joy, by the Romans, on the 8th of the kalends of April, or 25th of March, in honor of Cybele. Every person dressed himself as he pleased, and took the badges of whatever dignity or quality he fancied. The statue of the goddess was carried in procession through the streets, accompanied by multitudes in the most splendid attire. The day before the festival was spent in mourning. Cybele represented the earth, which at this time of the year begins to feel the kindly warmth of the spring; so that this sudden transition from sorrow to joy was an emblem of the vicissitude of the seasons. The Romans took this feast originally from the Greeks, who called it *αναβασις* q. d. ascensus; the eve of that day they spent in tears and lamentations, and thence denominated it *καταβασις*, descensus. Afterwards the Greeks took the name *ιλαρια* from the Romans; as appears from Photius, in his extract of the life of the philosopher Isidore. Casaubon maintains, that, beside this particular signification, the word was also a general name for any joyful or festival day, whether public, or private and domestic. But Salmasius does not allow of this. Tristan (tom. i. p. 482) distinguishes between hilaria and hilariæ. The former, according to him, were public rejoicings; and the latter prayers made in consequence thereof; or even of any private feast or rejoicing, as a marriage, &c. The public lasted several days; during which all mourning and funeral ceremonies were suspended.

HILARION, the founder of the monastic life in Palestine, was born at Gaza, A. D. 291, of a pagan family, but embraced Christianity; and, having visited St. Anthony the anchoret in Egypt, followed his example, on returning to his own country, and obtained a great number of followers. He returned at last to the island of Cyprus, where he died in 371.

HILAR'ITY, *n. s.* Lat. *hilaritas*. Merriment; gaiety.

> Averroes restrained his *hilarity*, and made no more thereof than Seneca commendeth, and was allowable in Cato; that is, a sober incalescence for wine.
>
> *Browne.*

HILARIUS, an ancient father of the Christian church, who flourished in the fourth century. He was born, as St. Jerome informs us, at Poictiers, of a good family; who gave him a liberal education in the pagan religion. He was advanced to the bishopric of Poictiers A. D. 355, according to Baronius; and became a most zealous champion for the orthodox faith, particularly against the Arians, who were then gaining ground in France. He assembled several councils there, in which the determinations of the synods of Rimini and Seleucia were condemned. He wrote a treatise concerning synods; and a famous work in twelve books on the Trinity, which is much admired. He died in the end of the year 367. His works have been published; but the last and best edition was given by the Benedictines at Paris in 1693.

HILARIUSE (Joseph), an eminent antiquary, born at Enzesfeld, in Austria, in 1737. In 1751 he joined the Jesuits, and became eminent as a teacher of rhetoric and grammar in the college at Vienna, of which he was appointed præfectus rei nummariæ. To acquire a perfect knowledge of ancient coins, he visited Italy; and, in 1770, having renounced the vows of his order, he was appointed director of the imperial cabinet of ancient coins, and dean of philosophy and the fine arts. He was a man of a cheerful temper, extensive knowledge, and irreproachable morals. He died in 1798.

HILARODI, ancient poets among the Greeks, who went about singing songs, somewhat graver than the Ionic pieces, accompanied with some instrument. From the streets they were at last introduced into tragedy, as the magodi were into comedy. They appeared dressed in white, and were crowned with gold. At first they wore shoes; but afterwards they assumed the crepida, being only a sole tied over with a strap.

HILARY (St.), or St. Helier, the chief town in the Isle of Jersey, having a very commodious harbour on the east side of St. Aubin's Bay, four miles east of St. Aubin's. The town consists of several good streets, and the courts of justice for the island are held here. In the centre of the town stands the court-house, a very stately structure, and near it the parish church, where the service is performed both in French and English. The harbour is defended by a strong castle, the residence of the governor; it is surrounded by deep trenches and strong walls, and the entrance is by a drawbridge secured by an iron gate. A workhouse and a public hospital have been erected here. Three gazettes are published here weekly in French, and one in English. There are three packets hence to Weymouth weekly, and regular traders to Southampon, and in summer there is a steam boat. On the top of a high rocky hill, near the town, was discovered, in the year 1785, a mass of stones ranged in a circular form, some perpendicular, and others lying horizontally on the former. It was called a Druidical temple, and was completely covered with earth at the time of discovery. General Conway, then governor, had the stones removed to Park Place, in Berkshire, where they were again erected and disposed in their original form.

Hilary (St.), a saint of the Roman Calendar, born at Arles in 401. He succeeded Honoratus as bishop of Arles, and presided in the council at Rome in 441. He wrote, 1. Homilies, under the name of Eusebius of Emessa. 2. The Life of St. Honoratus. 3. Opuscula. He died in 449, aged forty-eight.

HILDBURGHAUSEN, Saxe, a small duchy in the interior of Germany, bounded by Saxe-Meinungen and Saxe-Coburg; it contains a territorial extent of 217 square miles, and about 32,000 inhabitants. The soil is in general poor, particularly in the north, where it comprises a part of the forest of Thuringia; and there are few manufactures: but woollens, linen, thread, glass, dye-stuffs, salt, and vitriol, are exported in small quantities. The duke holds the fourth

rank among the princes of the house of Saxe, and has a share of a vote in the smaller Germanic diet, and a full vote in the general assembly. His revenue is not more than £20,000: but his petty state has its assembly of nobles and town deputies, with an administration divided into the departments of justice, finance, education, police, public works, and the army; the latter consisting of not more than 250 men. Appeals from the local magistrates go to the council of the duchy, afterwards to the court of justice at Jena. The duke, in common with other neighbouring princes, is interested in the University of that place.

HILDBURGHAUSEN, a town in the interior of Germany, the capital of the duchy of this name, is situated on the Wurra, and contains about 2500 inhabitants. It has a gymnasium, a seminary for school-masters, and some manufactures of cloth. The states of the duchy hold their meetings in the town-hall. It is seventeen miles south-east of Meinungen, and twenty north-west of Coburg.

HILDESHEIM, a province in the south of Hanover, lying between 51° 44′ and 52° 25′ of N. lat. and adjacent to the province of Gottingen. The superficial extent is estimated at 680 square miles, and the population at 130,000. The surface is uneven, particularly in the south, where it is intersected by the Hartz Mountains, and the soil is stony, but in the middle and north it is rich and productive.

This province is watered by the Innerste, the Oker, the Ecker, and the Fuse. The chief products are corn, flax, fruit, and hops: which, as well as cattle and wool, are objects of export. The prevailing religion is the Lutheran. The revenue is estimated at £90,000. Hildesheim was once an independent ecclesiastical state, the bishopric having been founded by Charlemagne. It had a succession of warlike bishops, one of whom having undertaken a contest, in 1519, against the dukes of Brunswick and Hanover, these princes procured a ban of the empire to be issued against him, and took possession of his estates, which they did not restore till 1643, after establishing here the Lutheran doctrines. The treaty of Westphalia placed the bishopric under the protection of Hanover, and thus it continued till 1802, when it was included among the territory given to the king of Prussia. After 1807 it formed a part of the kingdom of Westphalia, and in 1815 it was added by the congress of Vienna to the kingdom of Hanover. It has its own states, and is governed as an independent province, divided into fifteen bailiwics.

HILDESHEIM, a city of Hanover, the chief town of the principality of that name, is of considerable extent, containing 11,000 inhabitants. It was formerly fortified; but its walls have been demolished, and converted into public walks, and the whole place has an old and very irregular appearance. It stands on a declivity near the Innerste, which, dividing into two branches, forms a beautiful island, covered with gardens. The Old and New Towns have each their own magistrates, but in affairs affecting the general interest, they hold meetings in common. The council and the majority of the citizens are Lutherans: the bishop and a part of the inhabitants Catholics. The large Gothic cathedral contains the Irmlnsaule, a celebrated monument of the ancient Saxons, supposed to have been the column which originally supported an image of Arminius, or Herman, the commander, who cut off the legions of Quintilius Varus, and was deified by the Saxons. This relic stands in the front of the grand choir, and supports a chandelier. The Catholics have ten other churches, the Lutherans eight. Here were formerly seven monasteries and collegiate chapters, which have been secularised. The episcopal palace, council-house, the arsenal, public stables, and the mint, are also worth notice. The chief employment of the inhabitants is brewing and the manufacture of yarn and linen. Twenty miles south-east of Hanover, and twenty west by south of Wolfenbuttel.

HILDESLEY (Mark), bishop of Sodor and Man, was the son of Mark Hildesley, rector of Houghton, and born at Marston in Kent, in 1698. He was educated at Trinity College, Cambridge, and elected a fellow in 1723. In 1724 he was appointed Whitehall preacher; in 1731 vicar of Hitchin, and in 1735 rector of Holwell. He preached generally from memory, and his exemplary conduct in his vicarage and rectory not only gained him the character of a truly primitive priest, but recommended him to the duke of Athol, as the most proper successor to the worthy bishop Wilson, in the see of Sodor and Man; whose philanthropic design of printing a translation of the whole Bible in the Manks language, bishop Hildesley brought to a happy conclusion, after his consecration in 1755; and died within ten days of its publication, December 7th, 1772.

HIL'DING, *n. s.* Sax. þild, signifies a lord; perhaps hilding means originally a little lord, in contempt, for a man that has only the delicacy or bad qualities of high rank; or a term of reproach abbreviated from hinderling, degenerate. —Johnson. A sorry paltry fellow: also used for a mean woman.

He was some *hilding* fellow, that had stolen
The horse he rode on. *Shakspeare.*

If your lordship find him not a *hilding*, hold me no more in your respect. *Id.*

A base slave,
A *hilding* for a livery, a squire's cloth. *Id.*

Laura, to his lady, was but a kitchen wench. Helen and Hero, *hildings* and harlots. *Id.*

This idle toy, this *hilding*, scorns my power,
And sets us all at nought. *Rowe's Jane Shore.*

HILL, *n. s.* }
HIL'LOCK, *n. s.* } Sax. þill þyl; Goth. *hol*, *haugel*; Teut. *huget*; Swed. *hygel*. An elevation of ground
HIL'LY, *adj.* } less than a mountain: hillock, a little hill: hilly, of unequal surface.

And, downward from an *hill*, under a bent
Ther stood the temple of Mars Armipotent.
Chaucer. The Knightes Tale.

Three sides are sure embarred with crags and *hills*,
The rest is easy, scant to rise espyed;
But mighty bulwarks fence the plainer part:
So art helps nature, nature strengtheneth art.
Fairfax

Jerusalem is seated on two *hills*,
Of height unlike, and turned side to side. *Id.*

Towards the *hilly* corners of Druina remain yet her very Aborigines, thrust amongst an assembly of mountains. *Howell.*

Sometime walking not unseen,
By hedge-row elms, on *hillocks* green. *Milton.*

Virgin daughter of Locraine,
Sprung of old Anchises' line,
May thy brimmed waves for this
Their full tribute never miss,
From a thousand petty rills
That tumble down the snowy *hills!* *Id.*

O woods, O fountains, *hillocks*, dales, and bowers,
With other echo late I taught your shades
To answer, and resound far other song.
Id. Paradise Lost.

My sheep are thoughts, which I both guide and serve;
Their pasture is fair *hills* of fruitless love.
Sidney.

Yet weigh this, alas! great is not great to the greater:
What, judge ye, doth a *hillock* show by the lofty Olympus. *Id.*

Climbing to a *hilly* steep
He views his herds in vales afar. *Dryden.*

Lo! how the Norrick plains
Rise *hilly*, with large piles of slaughtered knights.
Phillips.

Hilly countries afford the most entertaining prospects, though a man would chuse to travel through a plain one. *Addison.*

This mountain, and a few neighbouring *hillocks* that lie scattered about the bottom of it, is the whole circuit of these dominions. *Id. on Italy.*

When our eyes some prospect would pursue,
Descending from a *hill*, looks round to view.
Granville.

A *hill* is nothing but the nest of some metal or mineral which, by a plastick virtue, and the efficacy of subterranean fires, converting the adjacent earths into their substance, do increase and grow. *Cheyne.*

The gentle shepherds on a *hillock* placed,
Whose shady head a beechy garland crowned
Viewed all their flocks that on the pastures grazed:
Then down they sit, while Thenot gan the round.
Fletcher's Purple Island.

Mine be the breezy *hill* that skirts the down,
Where a green grassy turf is all I crave,
With here and there a violet bestrown,
Fast by a brook, or fountains murmuring wave;
And many an evening sun shine sweetly on my grave. *Beattie.*

The green *hills*
Are clothed with early blossoms.
Byron. Childe Harold.

Through every change the seven-*hilled* city hath
Retained her sway o'er nations.
Id. Deformed Transformed.

Hill (Aaron), a poet of considerable eminence, the son of a gentleman of Malmesbury Abbey in Wiltshire, was born in 1685. His father's imprudence having cut off his paternal inheritance, he left Westminster school at fourteen years of age, and embarked for Constantinople, to visit lord Paget the English ambassador there, who was his relation. Lord Paget received him with surprise and pleasure, provided him a tutor, and sent him to travel. He accordingly passed through Egypt, Palestine, and Turkey, and returning home with his noble patron, visited most of the courts of Europe. About 1709 he published his first poem, entitled Camillus, in honor of the earl of Peterborough, who had been general in Spain; and being in the same year made master of Drury-lane theatre, he wrote his first tragedy, Elfred, or the Fair Inconstant. In 1710 he became master of the opera-house in the Hay-market; when he wrote an opera called Rinaldo, which met with great success, being the first that Handel set to music after he arrived in England. Unfortunately Mr. Hill was a projector as well as a poet, and in 1715 obtained a patent for extracting oil from beech-nuts; which undertaking miscarried after engaging three years of his attention. He was also concerned in the first attempt to settle the colony of Georgia, from which he never reaped any advantage. Mr. Hill seems to have lived in perfect harmony with all the writers of his time, except Pope, with whom he had a short paper war, occasioned by that gentleman's introducing him in the Dunciad, as one of the competitors for the prize offered by the goddess of Dulness, in the following lines:—

Then Hill essayed; scarce vanished out of sight,
He buoys up instant, and returns to light;
He bears no token of the sabler streams,
And mounts far off among the swans of Thames.

This, though conveying an oblique compliment, roused Mr. Hill to take notice of it; which he did in a poem written during a journey to the north, entitled The Progress of Wit, a caveat for the use of an eminent writer: in the following lines Pope's too well-known disposition is elegantly, yet severely characterised:—

Tuneful Alexis on the Thames' fair side,
The ladies' play-thing and the Muses' pride;
With merit popular, with wit polite,
Easy tho' vain, and elegant tho' light;
Desiring and deserving others' praise,
Poorly accepts a Fame he ne'er repays:
Unborn to cherish, sneakingly approves;
And wants the soul to spread the worth he loves.

Pope was very indignant at the 'sneakingly approves,' in the last couplet; and indeed through the whole controversy afterwards, in which it was generally thought that Hill had much the advantage, Pope seems rather to express his repentance by denying the offence, than to vindicate himself, supposing it to have been given. Mr. Hill, besides many other poems, wrote one, called The Northern Star, upon the actions of czar Peter the Great; for which he was several years afterwards complimented with a gold medal from the empress Catharine I. according to the czar's desire. He likewise altered some of Shakspeare's plays, and translated some of Voltaire's. His last production was Merope, which was brought upon the stage in Drury-lane by Garrick. He died on the 8th of February, 1749, in the very minute of the earthquake; and, after his decease, four volumes of his works in prose and verse were published in 8vo., and his dramatic works in 2 vols.

Hill (Joseph), an English divine of the seventeenth century, born in Leeds, and educated at St. John's College, Cambridge. He became fellow of Magdalen College, whence he was ejected for non-conformity, in 1662. He became pastor of a congregation at Rotterdam, where he died in 1707. He published an enlarged edition of Schrevelius's Greek Lexicon.

Hill (Sir John), a voluminous writer, born in 1716. Having attended the botanical lectures of the Apothecary's Company, he soon made himself acquainted with the theoretical as well as practical parts of botany; and was employed by the duke of Richmond and lord Petre in the arrangement of their botanic gardens. Assisted by the liberality of these noblemen, he executed a scheme of travelling over the kingdom, to collect the most rare plants; which he afterwards published by subscription: but the profits of this undertaking did not answer his expectation. He next resorted to the stage, but, after a few unsuccessful attempts, it was found he had no pretensions to the sock or buskin; so he returned to his botanical pursuits, and his business as an apothecary. At length, about 1746, he translated from the Greek, Theophrastus's Tract on Gems, which he published by subscription; and which, being well executed, procured him friends, reputation, and money. Encouraged by this, he engaged in works of greater extent and importance. The first was A general Natural History, in 3 vols. folio. He next engaged with George Lewis Scott, esq., in furnishing a Supplement to Chambers's Dictionary. He at the same time started the British Magazine; and while he was engaged in a great number of these and other works, some of which seemed to require the continued attention of a whole life, he carried on a daily essay, under the title of the Inspector. Amidst this hurry of business, Mr. Hill was so laborious and ready in all his undertakings, and was withal so exact an economist of his time, that he scarcely ever missed a public amusement for many years: where, while he relaxed from the severer pursuits of study, he gleaned up articles for his periodical works. It would not be easy to trace Dr. Hill (for he had now procured a diploma from the university of St. Andrew's) through all his various pursuits. Being refused admission as a member of the Royal Society, he ridiculed that learned body in A Review of the Works of the Royal Society of London, 4to. 1751. This, together with his over-writing himself upon all subjects without reserve, made him sink in the estimation of the public. He found, as usual, however, resources in his own invention. He applied himself to the preparation of certain simple medicines; such as the essence of water-dock, tincture of valerian, balsam of honey, &c. The well-known simplicity of these medicines made the public judge favorably of their effects, so that they had a rapid sale. Soon after the publication of the first of these medicines he obtained the patronage of the earl of Bute, through whose interest he acquired the management of the royal gardens at Kew, with a handsome salary: and to wind up the whole of an extraordinary life, having, a little before his death, seized an opportunity to introduce himself to the knowledge of the king of Sweden, that monarch invested him with one of the orders of his court. Garrick thus characterised Hill:—

For physic and farces his rival there scarce is;
His farces are physic, his physic a farce is.

He died in 1775

HILLAH, or Hellah, a considerable town of Asiatic Turkey, in the province of Irak-Arabi, or pachalic of Bagdad. It is about sixty miles to the south of Bagdad, on the western bank of the Euphrates, on the borders of the great Syrian desert; and is remarkable as standing in the vicinity of the ruins of Babylon, which see.

The town has an extensive and well-regulated bazaar, several excellent caravanseras built of Babylonian brick, and is in general well-built. It is governed by a hakeem, appointed by the pasha of Bagdad. A quarter of the town, situated on the eastern bank, is connected with the other by a bridge of boats. The soil in the vicinity is fertile, but much neglected. The Euphrates widens as it approaches this place, where it is about 200 paces wide, and in spring about forty feet deep. The tides of the Persian Gulph are felt twenty or twenty-five miles above Korna; and flat-bottomed boats, not exceeding fifty tons burden, can pass up to Hillah about six months in the year. During the other six months the marshes of Lemloon entirely obstruct the passage.

HILLEL (senior), of Babylon, president of the sanhedrim of Jerusalem. He formed a celebrated school there, in which he maintained the oral traditions of the Jews against Shammai, his colleague, whose disciples adhered only to the written law; and this controversy gave rise to the sects of Pharisees and Sadducees. He was likewise one of the compilers of the Talmud. He also labored much to give a correct edition of the sacred text; and there is attributed to him an ancient MS. Bible, which bears his name. He flourished about A. A. C. 30, and died in a very advanced age.

Hillel, the nasi, or prince, another learned Jew, the grandson of Judas Hakkadosh, or the Saint, the author of the Mishna, lived in the fourth century. He composed a cycle; and was one of the principal doctors of the Gemara. The greatest number of the Jewish writers attribute to him the correct edition of the Hebrew text which bears the name of Hillel, mentioned above. There have been several other Jewish writers of the same name.

HILLIA, in botany, a genus of the monogynia order, and hexandria class of plants: cal. hexaphyllous: cor. cleft in six parts, and very long; the berry inferior, bilocular, and polyspermous.

HILLSBOROUGH, a borough, fair, and post-town of Ireland, in the county of Down, Ulster, sixty-nine miles from Dublin. The earl of Hillsborough has a fine seat here. The town is pleasantly situated and well-built, in view of Lisburn, Belfast, and Carrickfergus Bay; the church is magnificent, having an elegant spire, as lofty as that of St. Patrick's in Dublin, and seven painted windows. There is an excellent inn here, and a thriving manufacture of muslins. It has three fairs, and sent two members to the Irish parliament before the Union.

Hillsborough, Cape, a cape on the north-east coast of New Holland, in long. 148° 44′ E., lat. 20° 56′ S.

Hillsborough, a county of New Hampshire, United States, bounded north by Grafton

county, south by the state of Massachusetts, west by Cheshire, and east by Rockingham county. Its population are all free, and follow agriculture as their chief employment. The chief towns are Amherst and Hopkinton.

HILLSBOROUGH, one of the middle districts of North Carolina, bounded north by the state of Virginia, south by Fayetteville district, east by Halifax, and west by Salisbury.

HILT, *n. s.* Sax. hilt, from healdan, to hold. The handle of any thing, particularly of a sword.

Now sits expectation in the air,
And hides a sword from *hilt* unto the point
With crowns imperial; crowns and coronets.
Shakspeare.

Take thou the *hilt*,
And, when my face is covered as 'tis now,
Guide thou the sword. *Id. Julius Cæsar.*

Be his this sword, whose blade of brass displays
A ruddy gleam; whose *hilt*, a silver blaze *Pope.*

HIM. Saxon, him.

The oblique case of he.

Me he restored unto my office, and *him* he hanged.
Gen. xli

His wallet lay before *him*, in his lappe,
Chaucer. Prologue to the Cant. Tales.

But Juan saw not this: each wreath of smoke
Appeared to *him* but as the magic vapour
Of some alchymic furnace, from whence broke
The wealth of worlds, a wealth of tax and paper.
Byron.

The fifth, who, by a Christian mother nourished,
Had been neglected, ill-used, and what not,
Because deformed, yet died all game and bottom
To save a sire who blushed that he begot *him*. *Id.*

Him was anciently used for it in a neutral sense.

The subjunctive mood hath evermore some conjunction joined with *him*. *Accidence.*

The HIMALAYA, HIMALEH, or HIMACTAL (literally the Snowy) MOUNTAINS, is the name, sufficiently appropriate, of a vast range of mountains separating India from Thibet, or Lesser Tartary. It is in fact the highest part of the Imaus, or Emodus range of ancient writers, and extends from the defile of the Sutuleje near Cashmere, to that of the Bramapootra, being in length from north-west to south-east nearly 1000 British miles; the western extremity is in lat. 32°, and long. 77°; the eastern in lat. 24°, and long. 95°. The length of this stupendous range is various. Every account we receive of a passage through them gives a detail of many days' journey, through deserts of snow and rocks; and it is to be inferred, that on the north-east, as well as the Hindostan side, they advance to, and retreat from the low ground in an equally irregular manner. Some accounts indeed would induce the belief, that long ranges, crowned with snow-clad peaks, project in various places from the great spire, and include habitable and milder districts; for, in all the routes of which we have accounts, hills covered with snow are occasionally mentioned as occurring, even after the great deserts are passed, and the grazing country entered. The breadth, then, of this crest of snow-clad rock itself cannot fairly be estimated at less than from seventy to eighty miles. The great snowy belt, although its loftiest crest is broken into numberless cliffs and ravines, nevertheless presents a barrier perfectly impracticable, except in those places where hollows that become the beds of rivers have in some degree intersected it, and facilitated approach to its more remote recesses. Few rivers hold their course wholly through it; indeed, in the upper part, the Sutuleje alone has been traced across this rocky barrier, and there is a path along its stream, from different parts of which roads diverge, that lead in various directions through the mountains. No reasonable doubt can now exist of the very long and extraordinary course which that river takes. The routes given below will trace it particularly, nearly to its origin. Several other passes through the Himalaya exist to the south-eastward; but Europeans are unacquainted with all of them beyond Kumaoon, between which and that of the Sutuleje the passes of Joar, Darma, Nitteemana, Lamanittee, Gurooneettee, and Birjee, are found practicable for the conveyance of goods.

Beside these chief passes, there are others of more danger and difficulty that pervade the snowy range in various directions, finding outlets to the milder countries beyond. Such is the pass near the source of the river J'pannevie, that from Bhurassoo to the neighbouring districts of China; a path also said to exist near Kedarnauth, &c. &c. These are all so dangerous and toilsome, that few but the wildest inhabitants of the most inhospitable regions choose to invade their deserts of eternal rock and snow, where no living thing is seen, and no means are to be obtained for long preserving life. To the westward of the Sutuleje the passes are perhaps more frequent, certainly less difficult. The pass of Cooloo through Stanpore, by Lucktote to Gara and Ludhak, and that through Chumbee by Joocela, Mookhee, and Htoorpore, are among the best and most frequented. With those which may exist farther to the westward between Chambee and Cashmire, we are unacquainted; but it is well known that a comparatively easy and much frequented road is found from the Punjab to Cashmire, and through that valley to Ludhak, and the other states and districts of Thibet. We are also unacquainted, even by information, with the actual course through the hills to Cashmire, but it doubtless leads along the river Jy,thure, which arises in the hills bounding that valley to the north-east and east.

The limit of perpetual congelation in the Himalaya Mountains has been a matter of some controversy. A writer in the Quarterly Review has asserted that this height is below 11,000 feet above the sea, and has maintained that the height of the range itself will be found much inferior to that of the Andes. Captain Webb, from numerous heights taken with the barometer, has drawn a very different conclusion.

'Near the temple of Milum,' says Mr. Fraser, 'elevated 11,405 feet, there were large fields of oe or rye, and buckwheat; and, at an elevation of about 13,000 feet, he procured some plants of spikenard. On the 21st of June, Captain Webb's camp was 11,680 feet above Calcutta. The surface was covered with rich vegetation as high as the knee, very extensive beds of strawberries in full flower, and plenty of currant-bushes in

blossom all around, in a clear spot of rich black mould soil, surrounded by a noble forest of pine, oak, and rhododendron. On the 22d of June he reached the top of Pilgoenta-Churhaee, 12,642 feet above Calcutta: there was not the smallest patch of snow near him, and the surface was covered with strawberry plants, butter-cups, dandelion, and a profusion of other flowers. The shoulders of the hill above him, about 450 feet more elevated, were covered with the same to the top, and about 500 feet below was a forest of pine, rhododendron, and birch. These facts lead Captain Webb to infer that the inferior limit of perpetual congelation in the Himalaya Mountains, is beyond 13,500 feet, at least, above the level of Calcutta.'

These conclusions of captain Webb receive much support from the following observations of Mr. Fraser.

'On the night of the 16th we slept at Bheemkeudar, near the source of the Coonoo and Bheem streams. There is no wood near this place, even in the very bottom of the valley, and we had left even the stunted birch at a considerable distance below; but there was a profusion of flowers, ferns, thistles, &c., and luxuriant pasturage. Captain Webb's limit of wood is at least as high as 12,000 to 12,300 feet. I would therefore presume the site of Bheemkeudar to be considerably above that level, say 13,000 to 13,300 feet above Calcutta. From thence we ascended at first rather gradually, and then very rapidly, till we left all luxuriant vegetation, and entered the region of striped and scattered, and partially melting snow, for nearly two miles of the perambulator. From calculating the distance passed, and adverting to the elevation we had attained, I would presume that this was at least 1500 feet above Bheemkeudar, or from 14,500 to 15,000 feet above Calcutta.

'We proceeded onwards, ascending very rapidly, while vegetation decreased gradually to a mere green moss, with here and there a few snow-flowers starting through it; snow fast increasing, till at length we entered on what I presume was the perennial and unmelting snow, entirely beyond the line of vegetation, where the rock was bare even of lichens.' p. 327.

From these and other facts, which Mr. Fraser details, he considers the line of perpetual congelation as between 15,000 and 16,000 feet above Calcutta. In the Rol or Shatul pass, the seeds of a species of campanula were gathered at the height of 16,800 feet above the level of the sea, at a spot where the thermometer at noon, in the middle of October, stood at 27° of Fahrenheit. Shrubs were found in a vegetating state at a still greater altitude.

The spot which obtains the name of Jumnotree, or the source of the Jumna, is very little below the place where the various small streams, formed on the mountain's brow by the melting of many masses of snow, unite in one, and fall into a basin below. To this basin, however, there is no access; for, immediately above this spot, the rocks again close over the stream, and, though not so lofty as those below, they interpose a complete bar to further progress in the bed of the torrent. A mass of snow, too, had fallen from above at the farther extremity of this pass, under which the river runs. Between the two banks the view is closed by the breast of the mountain, which is of vivid green, from perpetual moisture, and is furrowed by time and the torrents into numberless ravines, and down these ravines are seen trickling the numerous sources of this branch of the Jumna. Above this green bank, rugged, bare, and dark rocky cliffs arise, and the deep calm beds and cliffs of snow, towering above all, finish the picture. Noble rocks of varied hues and forms, crowned with luxuriant dark foliage, and the stream foaming from rock to rock, form a foreground not unworthy of it.

'At the place where it is customary to perform ablution,' says Mr. Fraser, 'the rock on the north-east side of the river is very steep. Between the laminæ of this rock, which appears to be quartzose, run several small streams of warm water, forming together a considerable quantity. There are several other sources; and one in particular, from which springs a column of very considerable size, is situated in the bed of the river between two large stones, and over it falls a stream of the river water. This water is hotter than that already noticed; the hand cannot bear to be kept a moment in it, and it emits much vapor. These warm springs are of great sanctity; and the spot for bathing is at that point before mentioned, where one of a considerable size rises in a pool of the cold river water, and renders it milk warm. This jet is both heard and seen as it plays under the surface of the pool. Here all the people bathed, while the pundit said prayers, and received his dues; and here also I bathed, was prayed over, and submitted to be marked by the sacred mud of the hot springs on the forehead like the rest, and of course was obliged to make my present to the priest for his ministry.'—Page 429. In this range is also found Gungootree, the source of the GANGES (see that article); the Brahmapootra and the Indus.

The superior altitude of the Himalaya range to the mountains of the Andes has been established beyond a doubt, by the survey of captain Blake. The following are altitudes deduced from his observations, by Mr. Colebrooke:—

	Altitude in feet above the sea.
Peak without name . . .	21,935
Chandragiri, or Mountain of the Moon	23,007
Peak without name . . .	24,108
Swelagar or Nepal . . .	25,261
Dhwalagiri, or Ghasu Coti, or the White Mountain . .	28,015

The following is a Corrected TABLE of the HEIGHTS of the Principal Snowy Peaks of the HIMALAYA MOUNTAINS.

*** The letters refer to Captain Hodgson's Tables attached to his Official Survey.

STATIONS.	North Latitude.	Longitude East from Greenwich.	Elevation above the Sea in English Feet.	District or State.
	° ′ ″	° ′ ″		
A, No. 1.	30 18 30	79 45 54	23,531	Jawahir
A, No. 2.	30 22 19	79 57 22	25,749	Ditto.
P. or A. No. 3.	30 30 42	79 51 33	23,317	Ditto.
J.	30 43 33	78 48 35	17,017	Garhwal.
B. Middle Peak	30 44 01	79 16 05	23,441	Badrinath.
U.	30 46 08	79 06 01	21,162	
D.	30 47 36	79 03 11	23,062	
Q.	30 47 55	78 50 10	19,928	
Q.—C.	30 48 55	78 49 52	19,530	
C. (Jaunli Peak)	30 51 04	78 50 37	21,940	Jaunli.
M. Mount Moira	30 51 27	78 58 58	22,792	Ditto.
St. Patrick	30 51 38	79 06 41	22,798	Garhwal.
St. George	32 52 29	79 07 30	22,654	
F.—C.	30 52 46	78 51 26	21,772	Ditto.
The Pyramid	30 54 37	79 02 47	21,379	Ditto.
F.	30 54 53	78 50 02	21,964	Ditto.
G. Sri Kanta	30 57 12	78 47 33	20,296	Ditto.
Rudra Himaleh	30 58 18	79 05 40	22,390	Ditto.
Serga Ruen'r	30 59 25	79 05 35	22,906	Ditto.
Great E. or Banderpuch	31 00 00	78 32 37	20,916	Ditto.
Low E.	31 00 11	78 30 39	20,122	Ditto.
Shippur	31 00 30	79 00 57	18,681	Ditto.
Black E.	31 01 21	78 33 32	21,155	Garhwal.
H. Middle Peak	31 05 49	78 29 37	20,668	Ditto.
H. Right Peak	31 05 52	78 30 03	20,668	
H. Left Peak	31 05 55	78 29 15	20,501	
Jhala Peak	31 07 40	78 49 28	18,795	Ditto.
Tawara Peak	31 08 21	78 48 53	19,352	
The Cone or S.	31 13 51	78 31 13	21,178	Garhwal and Bissaher.
Peak *a*, No. 39, left or high	31 14 13	78 23 55	19,481	Ditto.
L. (No. 40), N. Western Peak	31 16 04	78 22 25	19,512	Ditto.
No. 46, or Needle Peak	31 19 45	78 18 19	19,044	Ditto.
Ralding	31 29 22	78 21 44	21,411	Ditto.
Rishi Gangtang	31 37 20	78 36 10	21,389	Ditto.
Western F.	31 41 18	77 44 06	18,798	Kullu and Chamba.
Purkyal	31 53 17	77 43 52	22,700	Bissaher.

HIMERA, in ancient geography, the name of two rivers in Sicily, viz.

HIMERA running into the Tuscan Sea, and now called Fiume di Termini; and another runs into the Libyan Sea, dividing Sicily into two parts, being the boundary between the Syracusians to the east, and Carthaginians to the west. These rivers rise from different springs.

HIMERA, an ancient town of Sicily, at the mouth of the Himera, on its left, or west side. It was a colony of Zancle, and afterwards destroyed by the Carthaginians.

HIMERENSES THERMÆ, in ancient geography, a town of Sicily. After the destruction of the town of Himera, by the Carthaginians, such of the inhabitants as remained settled in the same territory, near the ancient town, now called Termini. It was made a Roman colony by Augustus.

HIMSELF, *pron.* Him and self.

In the nominative the same as he, only more emphatical, and more expressive of individual personality.

It was a sparing speech of the ancients to say, that a friend is another *himself*; for that a friend is far more than *himself*. *Bacon.*

With shame remembers, while *himself* was one
Of the same herd, *himself* the same had done.
Denham.

Her eyes, her lips, her cheeks, her shapes, her features,
Seem to be drawn by love's own hand; by love *Himself* in love. *Dryden.*

It is added to a personal pronoun or noun, by way of emphatical discrimination.

He *himself* returned again. *Judges.*

God *himself* is with us for our captain. *Chron.*

And he *himself* was swete as is the rote
Of Acoris or any Setewale.
Chaucer. The Milleres Tale.

In ancient authors it is used neutrally for itself.

She is advanced
Above the clouds as high as Heaven *himself*.
Shakspeare.

In the oblique cases it has a reciprocal signification.

David hid *himself* in the field. *Samuel.*

It is sometimes not reciprocal.

I perceive it was not altogether your brother's evil disposition made him seek his death; but a provoking merit set a work by a reproveable badness in *himself*.
Shakspeare.

Nothing in nature can so peculiarly gratify the noble dispositions of humanity, as for one man to see another so much *himself* as to sigh his griefs, and groan his pains, to sing his joys, and do and feel every thing by sympathy. *South.*

By HIMSELF. Alone; unaccompanied.

Ahab went one way *by himself*, and Obadiah went another way *by himself*. *Kings.*

He thoughte wel that every man
Wol helpe *himself* in love, if that he can;
And, eke deliver *himself* out of prison.
Chaucer. The Knightes Tale.

Each on *himself* relied,
As only in his arm the moment lay
Of victory. *Milton.*

But when by shame constrained to go on board,
He heard how the wild cannon nearer roared,
And saw *himself* confined like sheep in pen;
Daniel then thought he was in lyon's den. *Marvell.*

Some write, confined by physick; some by debt;
Some, for 'tis Sunday; some because 'tis wet.
Another writes because his father writ,
And proves *himself* a bastard by his wit. *Young.*

HIN, *n. s.* Heb. חין. A measure of liquids among Jews, containing about ten pints.

With the one lamb a tenth deal of flour, mingled with the fourth part of an *hin* of beaten oil.
Exod. xxix. 40.

HINCKLEY, a town of Leicestershire, with a market on Monday. It has a large handsome church, with a lofty spire; and a considerable stocking manufactory. It is twelve miles south-west of Leicester, and ninety-one N.N.W. of London.

HINCMAR, or HINCMARUS, archbishop of Rheims, A. D. 845, was a zealous defender of the liberties of the Gallican church, but was obliged to fly from Rheims when the Normans invaded that province. He died at Epernay in 882. His works were printed in 1645, in 2 vols. folio.

HIND, *n. s.* The female of the red deer: a servant: a peasant or rustic.

Canst thou mark when the *hinds* do calve? *Job.*

And many an hart and many an *hinde*,
Was both before me and behinde.
Chaucer. Boke of the Duchesse.

The n'as baillif, ne herde, ne *hine*,
That he ne knew his sleight and his covine.
Id. Prologue to the Cant. Tales.

How he slew, with glancing dart amiss,
A gentle *hind*, the which the lovely boy
Did love as life. *Faerie Queene.*

A couple of Ford's knaves, his *hinds*, were called forth by their mistress, to carry me in the name of foul cloaths to Datchet-lane. *Shakspeare.*

The Dutch, who came like greedy *hinds* before,
To reap the harvest their ripe years did yield,
Now look like those, when rolling thunders roar,
And sheets of lightning blast the standing field.
Dryden.

Nor Hercules more lands or labours knew,
Not though the brazen-footed *hind* he slew. *Id.*

He cloathed himself in coarse array,
A laboring *hind* in shew. *Id. Fables.*

Fearful as is the hare or hunted *hind*,
Her face and breast she oft with crosses signed;
No customs would she break or change her settled mind. *Fletcher's Purple Island.*

HIND, *adj.*
HIN'DER, *v. a., v. n., & adj.*
HIN'DERANCE, *n. s.*
HIN'DERER, *n. s.*
HIN'DERING, *part.*
HIN'DERLING, *n. s.*
HIN'DERMOST, *adj.*
HIND'MOST, *adj.*

Adjec. compar. hinder; superlat. hindmost. Saxon, þynban. Backward; contrary in position to the face; as hind legs. Sax. þineman, þine, þinþrian. The word hinder signifies to prevent, as by going behind, and pulling a person back; to raise impediments; to obstruct: hinder, the position contrary to the face. Hinderling, a worthless degenerate animal: hindermost, or more properly hindmost, the last; that which comes in the rear: hinderance, an impediment, is used with the particles *of* and *to* before the thing hindered, with *to* before the person.

Hinder me not, seeing the Lord hath prospered my way. *Gen.* xxiv. 56.

He put the handmaids and their children foremost, and Leah and her children after, and Rachel and Joseph *hindermost*. *Genesis.*

He met thee by the way, and smote the *hindmost* of thee, even all that were feeble behind. *Deut.* xxv.

The whole world shined with clear light, and none were *hindered* in their labour. *Wisd.* xvii. 20.

Full many a worthie man, and wise,
Han *hindered* and idoen to die
These losingeous with her flatterie.
Chaucer. Romaunt of the Rose.

Tucked he was, as is a frere, aboute;
And ever he rode the *hinderest* of the route.
Id. Prologue to the Cant. Tales.

False opinions, touching the will of God to have things done, are wont to bring forth mighty and violent practices against the *hinderances* of them, and those practices new opinions, more pernicious than the first; yea, most extremely sometimes opposite to the first. *Hooker.*

They must be in every Christian church the same, except mere impossibility of so having it be the *hinderance*. *Id.*

Like to an entered tide they all rush by,
And leave you *hindermost*. *Shakspeare.*

You minimus of *hindering* knot-grass made! *Id.*

'Tis not his wont to be the *hindmost* man,
Whate'er occasion keeps us from him now. *Id.*

Brakes, great *hinderers* of all plowing, grow. *May.*

If the alms were *hindered* only by entreaty, the *hinderer* is not tied to restitution, because entreaty took not liberty away from the giver. *Taylor.*

Bears, fighting with any man, stand upon their *hinder* feet, and so this did, being ready to give me a shrewd embracement. *Sidney.*

Solitude damps thought and wit; too much company dissipates and *hinders* it from fixing. *Temple.*

What *hinderance* have they been to the knowledge of what is well done? *Dryden.*

Have we not plighted each our holy oath,
One soul should both inspire, and neither prove
His fellow's *hinderance* in pursuit of love? *Id.*

Let him retire, betwixt two ages cast,
The first of this and *hindmost* of the last,
A losing gamester. *Id.*

This objection *hinders* not but that the heroick action of some commander, enterprised for the Christian cause, and executed happily, may be written. *Id.*

What *hinders* younger brothers, being fathers of families, from having the same right. *Locke.*

As the *hinder* feet of the horse stuck to the mountain, while the body reared up in the air, the poet with great difficulty kept himself from sliding off his back. *Addison.*

He must conquer all these difficulties, and remove all these *hinderances* out of the way that leads to justice. *Atterbury.*

The stag
Hears his own feet, and thinks they sound like more,
And fears his *hind* legs will o'ertake his fore. *Pope.*

The race by vigor, not by vaunts, is won;
So take the *hindmost*, hell—he said, and run. *Id.*

HINDBERRIES, *n. s.* The same as raspberries.—Ainsworth.

HINDOSTAN (from Pers. *Hindoo*, black, and *stan*, place), the place or country of the Blacks, called by the aboriginal inhabitants Bahrat, or Bahrat Kind, the dominions of Bahrat, is a region of Asia, occupying from about the eighth to the thirty-fifth degree of north latitude, and from the sixty-eighth to the ninety-second degree of east longitude. Its general boundaries on every side but the east are well defined; and are, northward, the great Himalaya range, the Indus west; the Indian Ocean and the Bay of Bengal south; and the eastern hills and forests of Tipperah and Chittagong east. Excepting in Bootan, the primitive religion of BRAHMA (which see) every where prevails; nor is it to be found beyond these limits, except in Assam and Cassay. The length, from north to south, is nearly 1900 miles. Its greatest breadth is about 1500 miles. In estimating the area, the southern triangle is found to contain about 710,000 square miles, and the northern one 570,000, so that the whole surface comprises 1,280,000 square miles. Taking the population at 100,000,000, the number of individuals to a square mile will be seventy-eight.

The following is an ABSTRACT of the present STATE OF HINDOSTAN and its RULING POWERS: distinguishing the extent of their respective Territories, and the number of the Inhabitants.

	Geographical Square Miles.	Population.
I. BRITISH POSSESSIONS.		
Bengal, Bahar, and Benares	162,000	29,000,000
Acquisitions in Hindostan Proper, and Orissa since 1799	60,000	10,000,000
Under the Bengal Presidency	222,000	39,000,000
Under the jurisdiction of the Madras Presidency	125,000	12,000,000
Ditto of the Bombay Presidency	10,000	2,500,000
Total of British Hindostan	357,000	53,500,000
II. BRITISH ALLIES AND TRIBUTARIES.		
The Nizam	76,000	8,000,000
The Peshwa and Guicowar	53,000	5,000,000
Nabob of Oude	13,000	2,000,000
Mysore Rajah	22,000	2,000,000
Travancor and Cochin Rajahs	5,000	500,000
Total under British jurisdiction and influence	526,000	71,000,000
III. INDEPENDENT PRINCIPALITIES.		
Under the dominion and influence of Scindia, Holkar, and other Mahratta chiefs	75,000	6,000,000
Ditto of the Nagpoor Rajah	58,000	3,000,000
Ditto of the Nepaul Rajah	63,000	2,000,000
Ditto of the Lahore Rajah and the Seiks	54,000	4,000,000
	776,000	86,000,000
Under the Rajahs of Joudpoor, Jyenagur, Odeypoor, and other Rajpoot Chiefs; the Ameers of Sinde, the Cabul government, and Chief of Cashmere; the Rajahs of Bootan, Assam, and innumerable Goand, Coolee, and other petty Native Chiefs	244,000	15,000,000
Total of Hindostan	1,020,000	101,000,000

This region is divided by its great natural features into Northern Hindostan, Hindostan Proper, the Deccan, and the South of India.

1. *Northern Hindostan* comprehends Cashmere on the west, and Bootan on the east, with the intermediate mountainous provinces, situated between the first range that rises from the plains on the northern frontiers of Delhi, Oude, Bahar, and Bengal, and the lofty Himalaya ridge bordering on Thibet. The whole tract last-mentioned is subject to the Ghoorkhali state of Nepaul, and has been but little explored. The appellations by which the districts are most commonly known are, Serinagur, or Gerwal, Badrycazrama, Kemaoon, Jemlah, the twenty-four Rajahs, Lamjungh, Gorcah, Nepaul, Mocwanpoor, Morung, and Kyraut. The inhabitants of this wild country have never been permanently subdued or civilised by any of the various masters of India.

2. *Hindostan Proper* contains the eleven large soubahs, or provinces, originally formed by the emperor Acbar, and is bounded on the south by the Nerbuddah River, and the Deccan. The names of its provinces are Lahore, Mooltan, including Sinde, Gujrat, Ajmeer, Delhi, Agra, Malwah, Allahabad, Oude, Bahar, and Bengal. This is considered the most civilised and richest part of Hindostan, and contained the seats of its most famous empires, both Hindoo and Mahommedan. The inhabitants also (Bengal excepted) may be considered as a superior race, both physically and intellectually, to the population of the other divisions.

3. The *Deccan* is bounded on the north by the course of the Nerbuddah River, and from its source by an imaginary line extending in the same parallel of latitude to the mouth of the Hooghly. To the south its boundaries are the Krishna and Malpurba rivers. Within this space are comprehended Aurungabad, Khandesh, Beder, Hyderabad, Nandere, the Northern Circars, Berar, Gundwana, Orissa, and great part of Bejapoor. Having been invaded at a much later period than Hindostan Proper, it contains a much greater proportion of Hindoo inhabitants.

4. The *South of India* has the figure of a triangle, of which its northern boundary, the river Krishna, is the base, and the coasts of Coromandel and Malabar the sides. The provinces herein comprehended are a small part of Bejapoor, the Balaghaut ceded districts, the Carnatic Northern, Central, and Southern; Mysore, Canara, Malabar, Barramahal, Coimbetoor, Dindigul, Salem, and Kistnagherry, Cochin, and Travancor. In this division of Hindostan the Mahommedans did not obtain a footing until a very recent period, and some part was never subdued by them.

The whole of Hindostan is watered by noble rivers, most of which have retained their ancient appellations. The principal in point of magnitude are the Brahmapootra, the Ganges, the Indus, the Sutuleje, the Krishna, the Godavery, the Jumna, the Nerbuddah, the Cavery, the Goggrah, the Tuptee, the Mahanuddy, the Megna, the Soane, the Chumbul, the Beyah, the Gunduck, and the Ravey.

Its most remarkable mountains are the great Himalaya ridge on the north, the hills of Kemaoon and Sewalic, the Eastern and Western Ghauts, and the Vindhyan chain of mountains, which cross it nearly parallel to the course of the Nerbuddah, and pass through the provinces of Bahar and Benares.

The chief cities and towns are all now possessed by the British. The three largest and most populous are Surat, Benares, and Calcutta; the next in rank are Delhi, Madras, Bombay, Agra, Lucknow, Patna, Moorshedabad, Dacca, Poona, Hyderabad in the Deccan, Nagpoor, Catmandoo, Oojain, Jyenagur, Amritsir, Lahore, and Seringapatam.

As each of the more important divisions of Hindostan obtains our particular attention, in its alphabetical place, a few remarks on some common features of this interesting region are all that can be necessary in this place.

The climate here varies of course with the latitude, but still more with the relative height of places. Though often considered otherwise, it appears in point of fact to be as healthy as any other region of the world of the same extent. Its hottest parts are the Northern Circars, and the sandy plains through which the Indus flows. Dr. Roxburgh, speaking of the land breezes of Coromandel, says:—'Should the sea-breeze fail, as sometimes happens, the land wind decreases gradually until it dies away in the beginning of the night, which, on account of its calmness, is dismal to a degree; next morning a little motion of the air is again perceptible; but, at the usual time, the wind sets in as strong and as hot as before. Every thing we put our hands upon is distressing to the touch, which must be the case when the temperature of the body is inferior to that of the atmosphere. This we experienced for almost a fortnight in the year 1799, in the Northern Circars, when the thermometer at eight o'clock at night stood at 108°, and at noon at 112°. Shades, globe-lamps, and tumblers, then very often crack and break to pieces, and the wooden furniture warps and shrinks so much that even the nails fall out of the doors, tables, &c. In their greatest intensity, however, I have never seen the thermometer rise higher than 115°, viz. in the coolest part of the house; though some say they have observed it at 130°.'

It is in this district that the noxious state of the air, in the season of vegetation, creates what is called the hill fever; supposed to arise from the union of putrid vegetable exhalations with the fog so constantly prevailing: and here the bamboos frequently take fire in the hot season from their own friction in the wind. Even the native tribes cannot bear long exposure to these hot winds, and shut up their houses against them: Europeans generally cool their apartments by means of straw, grass, or matting, constantly watered.

On the coasts of Coromandel and Malabar, the climate and seasons are very different at the same time. The whole of the year being divided into wet and dry; while one coast is saturated with rain, the other is scorched by heat. In the mountainous parts, the rain falls much earlier. In the north-west of Hindostan, towards the banks of the Indus, the thermometer generally varies from 90° to 100° during the months of

June and July. At Surat, the annual variations are from 59° to 96°; and at Bombay from about 64° to 98°. The hottest months on the Malabar coast are April and May. At Cochin, during the former, the thermometer sometimes rises to 105°.

Though the mountains of the northern confines are clad in perpetual snow, winter is unknown on the plains. The heat is here frequently extreme; while thunder, lightning, and hurricanes are often so tremendous, that nothing experienced in Europe, can give an adequate idea of them; and most parts are deluged with rain at particular seasons. Near the coast the winds blow alternately from the land and sea; but, in the interior, the refreshing influence of the sea-breeze is not felt. In Bengal Fahrenheit's thermometer often rises to 110°, in the hottest part of the year. During March, April, and May, with the early part of June, the season is dry and hot in this province. The four succeeding months are generally rainy; while January and February are subject to excessive fogs.

At Calcutta the range of the thermometer is sometimes 40°; the following list shows the greatest and least temperature of the seven months, from October to April inclusive, with the prevailing winds of that period.

Months.	Maximum.	Minimum.	Winds.
October . .	94°	70°	North.
November .	89	60	ditto.
December .	88½	52	North-east.
January . .	85	63	ditto.
February .	92	68	ditto.
March . . .	104	72	South.
April . . .	110	72	ditto.

The whole of Mysore, enclosed by the eastern and western ghauts consists of a table land about 3000 feet above the sea, from which rise several chains and groups of hills, that give birth to many of the rivers that water the lower grounds near the coast: this is perhaps more temperate and healthy than any other tract of equal extent within the tropics. The torrents of rain, which are poured so copiously on both the coasts, have their force broken by the mountains on each side, and only reach the interior in frequent and agreeable showers.

In Bengal, and some other places, the rain often pours down with such continued violence, that four or five inches frequently fall in a single day, during the first two months of the monsoon. The annual quantity in the lower parts of this province is generally between seventy and eighty inches. When the rain ceases, and the sky becomes clear, the moisture of the ground renders the evaporation great, and this, as the weather cools, causes the dews to be excessively penetrating, and the fogs thick. Here a large quantity of moisture is now retained by the marshes, woods, and jungles, full of decayed vegetable matter, which protracts the power of vegetation through the winter. The barometer is remarkably steady in most parts of India throughout the year, at the medium of thirty inches.

Hindostan has little variety of soil, considering its extent. It is almost universally a light, porous, black, mould; except in the more elevated parts, which are stony; and some few districts towards the western borders are sandy. The valleys have rich alluvial deposits. Cultivation is in the rudest state; and has been stationary for ages: it depends largely on irrigation, and in travelling through the country an opinion may always be formed of the wisdom of the government, and condition of the people, from the number and state of preservation of the water-courses. Rice is the principal article of nourishment of the natives, and the first object of attention in the cultivation of it is to have the soil plentifully supplied with water.

In Hindostan Proper the harvest is divided into two periods, the Khereef and the Rubbee; the former is cut in September and October, the latter in March and April.

The ploughs here merely scratch the soil to the depth of two or three inches; and the harrow in many districts consists of a single rake, in others the want of it is supplied by the branch of a tree.

In the lower parts of the country, where the soil is annually enriched by the overflowings of the rivers, and particularly in those of Bengal, habitations placed on elevated mounds, and fields above the rest of the country, appear like islands in the water. During the prevalence of the flood, the only means of communication between distant places is a navigation over the fields, where the ears of rice are frequently floating on the surface. The peasants go in this manner to the markets, accompanied by their families and domestic animals, from an apprehension that the water may suddenly increase, and drown their children and establishment. On the subject of the agriculture of Bengal Mr. Hamilton makes some remarks applicable to the whole of Hindostan.

'A cultivator,' he observes, 'who employs servants, employs one for each plough, and pays him monthly wages, which on an average does not exceed one rupee per month, and in a very cheap district the wages are so low as half a rupee; but the task on a medium of one-third of an acre per day is completed by noon. The cattle are then left to the herdsman's care, and the ploughman follows other occupations during the remainder of the day. Generally he cultivates some land on his own account, and this he commonly rents from his employer for a payment in kind. If the herd be sufficiently numerous to occupy one person, a servant is entertained, and receives food, money, and clothing, to the value of one rupee and a half per mensem. The plough itself costs less than a rupee. The cattle employed in husbandry are of the smallest kind, the cost on an average being not more than five rupees each. The price of labor may be computed from the usual hire of a plough with its yoke of oxen, which may be stated on the medium to be about four-pence per day. The cleaning of the rice is executed with a wooden pestle and mortar, the allowance of husking it being nearly uniform; the person performing this contracting to deliver back five-eighths of the

weight in clean rice, the surplus, with the chaff or bran, paying for the labor. Five quarters of rice per acre are reckoned a large produce, and a return of fifteen for one on the seed.'

Other staple productions of Hindoo agriculture are tobacco, sugar, silk, cotton, and indigo. Hindostan also produces generally the fruits of the torrid zone; mangoes, oranges, pine-apples, mulberries, and grapes are common.

In nothing does Hindostan differ so much from Europe as in its forest trees. The fir, of all our trees, is the only one that is indigenous there, and it is only found in the northern mountains. Its best timbers are teak, saul, and toone; it has also a variety of woods for furniture. The fish differ considerably from those of Europe; but the quadrupeds and birds are the same as are to be found in several other warm countries. The tiger, lion, and elephant, are met with; and every department of zoology is rich in species.

The diamond takes the lead in the mineral riches of India; sapphires, topazes, and rubies, are also found, as well as gold; but the particular regions distinguished for these, as well as the details of the commerce and manufactures generally, are noticed in the description of the various provinces, districts, and towns.

Two distinct professions of religion are recognised here, the Hindoo and the Mahommedan; but the professors of the former faith are about seven times as numerous as those of the latter. There are also many Christians intermixed with the other classes of the population; and a few Parsees, or followers of Zoroaster, particularly on the western coast, with some of the ancient Jaimas in other parts.

Of the peculiarities of the Hindoo religion, Mr. Mill, in his history of British India, observes, 'Besides the causes which usually give superstition a powerful sway in ignorant and credulous ages, the order of priests obtained a greater authority in India than in any other region of the globe; and this again they employed with astonishing success in multiplying and corroborating the ideas on which their power and consequence depended. Every thing in Hindostan was transacted by the deity. The laws were promulgated, the people were classified, the government was established, by the divine being. The astonishing exploits of the divinity were endless in that sacred land. For every stage of life, from the cradle to the grave, for every hour of the day, for every function of nature, for every social transaction, God prescribed a number of religious observances. And meditation upon his incomprehensible attributes, as it was by far the most difficult of all human operations, so was it that glorious occupation which alone prepared the intense votary for the participation of the divine nature.' See BRAHMINS.

The Mahommedans are divided into the two great sects of Soonies and Shiahs. The first acknowledge Abubekir, Omar, and Osman, as the legitimate successors of Mahomet; while the latter curse these personages, and call them usurpers, saying that Aly was the first lawful caliph. Except in this point, there is not much difference between them; but there is a number of subdivisions; and they have as many saints as are to be found in the Romish kalendar. They are also divided into four great tribes of Shaikh, Syed, Patau, and Mogul. The first are either descended from Arabs, or converts to their religion. The second claim their descent from Mahomet, and are the same as the Emirs of Turkey, but are generally descendants of Persians. The third are Afghauns or their descendants; and the fourth persons of Mogul or Tartar origin. The third class of inhabitants are the Seiks, who possess the province of Lahore. Their religion is described as pure deism: but the common people retain many of the tenets of their Hindoo or Mahommedan ancestors.

Various languages are spoken in Hindostan; but the correspondence of the higher orders of people is generally carried on in Persian. The Hindoostanee, being a mixture of Persian and the current language of the Hindoos, may be esteemed the most useful of the vernacular tongues, there being but few villages from Cashmeer to Cape Comorin in which some person does not understand it. The learned and religious language of the Hindoos is Sanscrit, and of the Mahommedans, Arabic.

Marriage is considered among the Hindoos as a religious duty; as it is 'by this that a man enters on the second state of existence, and takes his place in society;' and, as none but male descendants can perform the obsequies to the manes of their ancestors, it is thought an irreparable calamity to die without male issue. Scarcely any state can be more degrading, however, than that of the women among the Hindoos. Till three years after their nuptial age they are entirely at the disposal of their father; and it is one of the sacred duties of a parent to place his daughter in a situation to become a mother. If he neglects this, till the time above specified, he forfeits all control over her, and she is then at liberty to choose for herself. When married she is immured in her husband's dwelling, and her dependence upon him is perpetual and entire. 'By a girl, or by a young woman,' say the institutes of Menu, 'or by a woman advanced in years, nothing must be done even in her own dwelling place according to her own mere pleasure: in childhood a female must be dependent on her father; in youth on her husband; her lord being dead, or her sons; a woman must never seek independence.' If ever so ill treated, she is commanded to revere her husband as a superior being. Polygamy is tolerated, but females, except among the Nairs, are not permitted to marry a second time. A husband can dismiss his wife on numerous pretences; but there is nothing that can dissolve the wife from her matrimonial engagement. She is never permitted to eat in the presence of her husband. 'The young wife,' says the abbé Dubois, 'beaten by her husband, and harassed by her mother-in-law, who treats her as a slave, finding no remedy for ill usage but in flying to her father's house—recalled by fair promises of kinder treatment—the word broken—recourse had to the same remedy—but at last the children which she brings into the world, and other circumstances compel her to do her best, by remaining in her husband's house, with the show of being contented with her lot.—The object for

which a Hindoo marries is not to gain a companion to aid him in enduring the evils of life, but a slave to bear children, and be subservient to his rule.' Marriages are contracted at an early age by both parties. An unmarried man at twenty-five, and a female at fifteen, would be considered as extraordinary occurrences. Girls are generally married between the age of seven and nine; but remain at their father's house for a few years till they are considered fit to go home.

In former ages human sacrifices were common in Hindostan, and numerous acts of religious suicide still occur. Children are thrown to sharks in the Ganges, devotees plunge themselves into the sacred and fatal stream, widows expire on the funeral piles of their husbands, and it is considered as one of the grandest achievements of piety for the deluded objects of Indian superstition to sacrifice themselves to the honor of their gods on solemn festivals. On these occasions the image of the supposed deity, as at Juggernauth, mounted on a ponderous car, is drawn in procession by a multitude of priests and worshipers. The devotees, even parents, with children in their arms, throw themselves before the wheels of his car, and are instantly crushed to death.

The Hindoos are generally below the Europeans in stature, and their muscular strength is less than their bodily frame seems to indicate. The form of the females is slender and delicately proportioned, and 'their skins,' says Mr. Orme, 'are of a polish and softness beyond that of all their rivals on the globe.'

The Hindoo has been well described as a kind of sensitive plant; his imagination and his passions are easily inflamed, and his whole mental powers seem to be in unison with the delicacy of his structure. The simplicity of his food, and the smallness of his consumption, as well as the climate, have, undoubtedly, an effect in producing that feebleness which so strongly marks him. Many Hindoos abstain from the use of animal food, in consequence of their peculiar religious belief; and where a total prohibition does not exist it is but little used. Their agility is manifested in those contortions and feats which render them the most complete tumblers and jugglers in the world. Their messengers will travel, and their troops march, quicker than the most robust Europeans. Among the distinguishing traits of the Hindoo character must be classed indolence, falsehood, avarice, apathy, filth, and indelicacy. It is a maxim with them, that 'it is more happy to be seated than to walk, it is more happy to sleep than to awake, but the happiest of all is death.' This listlessness is not merely the effect of the climate and manner of living, but it is an evident and natural consequence of their mode of native government and religion. Even Mr. Scott Waring, comparing the females of India with those of Persia, observes, 'their terms of reproach are indelicate in the utmost degree. I will not disgust the reader by noticing any of them, but I may safely aver that it is not possible for language to express, or imagination to conceive, more indecent or grosser images.'

Hindostan was but little known to those ancient writers whose works have come down to us, prior to the expedition of Alexander. It appears from Arian that he entered the country of Cabul, about the year 326 B. C., and found it possessed by several petty chiefs. Crossing the Indus he was opposed by Poor, or Porus, on the banks of the Behut (Hydaspes); after defeating whom he continued his route across the Chunaub and Ravee rivers, until he reached the Bayeh or Setlege (Hyphasis), whence he returned by the same road to the Behut. Embarking here in boats, he proceeded to Pattala (Tatta), at which place having landed, he continued his march through Mekran to Persia. This expedition appears to have had little effect on the politics of Hindostan.

The reigns of Bickermajeet and Chunderpaul are placed in the centuries before and after our era; and there is a tradition, that about this time one of the kings of Persia invaded Hindostan. The next event of consequence which occurred was the introduction of some of the pastoral tribes of Scythians into the mountains which separate Hindostan from Balkh. This, as may be collected from De Guisne's History of the Huns, and other circumstances, took place about the beginning of the fifth century. For a considerable period they conducted themselves peaceably, and by degrees spread over all the region lying between Persia and the Indus. They were at first known by their Tartar name of Alkai, or Altai, but subsequently by that of Afghaun.

At the end of the seventh century the Arabs, having subdued all Persia, invaded Cabul, and were for a time successful; but in the year 697 they were defeated by the Hindoos, and their general, Khaled Ben Abdullah, with a number of his followers, made prisoners. The general obtained permission to settle with his followers in the mountains of Paishawur, where, intermarrying with the Afghauns, they converted them to the Mahommedan religion. It is from this union that several of the tribes sprung who now erroneously boast of being descended from the famous Khaled. The Afghauns, in process of time having much increased, descended from the mountains, and the Hindoos endeavoured in vain to drive them back.

The next important point in the history of this country was the occupation of the city of Ghizne, by the Persian chief Abistagy, and the foundation of the Ghiznean empire by his successor Subactageen, whose son, the celebrated Mahmoud, supported by the Afghanns, invaded Hindostan seven times between the years 1001 and 1030, and subdued the country as far as the Jumna. The Ghiznean empire existed till the year 1189, when it was put an end to by an Afghaun chief named Mohammed Ghory, who captured Lahore, and caused the last prince of that dynasty to be put to death. Mohammed Ghory extended his conquests to Benares. He was assasinated in 1206: upon which Cattub mounted the throne, and became the first Mussulman king of Delhi, extending his dominions to the mouths of the Ganges. The Afghauns kept possession of the capital, and the title of emperors

of Hindostan, till the year 1398, when Timour, or Tamerlane, invaded it, took Delhi, and compelled the weak Mahmoud to seek his safety in flight. And now another formidable Mahommedan power, called the Bhamenee Sultans, became established at Kulberga, in the Deccan, or south of Hindostan; when several of the governors of provinces threw off their allegiance to the court of Delhi, and assumed independence. Timour remained but a few months in India; and Mahmoud returned to his capital, and to the nominal title of emperor, which he retained for fourteen years; his power, however, was but nominal. Upon his death, a Syed took possession of the throne, and had for his successors, his son, grandson, and great-grandson; but the only territory remaining to them was a small district round Delhi.

In 1450 Beloly, of the Afghaun tribe of Lody, took possession of the throne, which he, and his son, and grandson, retained till 1525; when Ibrahim was defeated by the Mogul prince Zehire Addeen Mohammed Baber. During the period these two last dynasties sat on the throne of Delhi, four other independent Mahommedan powers had been established in the Deccan, or south, on the ruin of the first, or Bhausenee family of Kulberga, viz. the Adilshahy of Bejapore; the Bereed, or Ahmedshahy, of Beider; the Nizam Shahy of Ahmednagur; and the Cuttabshahy of Golcondah. The Hindoo Bijanagur prince also retained considerable power. The provinces of Bengal, Joanpore, and Gujerat, were also become distinct kingdoms.

Sultan Baber, the founder of the Mogul dynasty of Hindostan, was the son of Omar, who was the son of Abu Syed, the son of Mohammed, the son of Miran Shah, the son of Timour, or Tamerlane, on which account his is sometimes called the Timourean dynasty. Baber extended the Mogul conquests to the borders of Bengal, but died after a short reign of five years, and was succeeded by his son Homayon. This prince subdued both the provinces of Gujerat and Bengal, which had been long independent of Delhi; but in the year 1540 received two signal defeats from Shere Khan, an Afghaun of the tribe of Soor, and was compelled to seek refuge in Persia. Shere took the title of Shere Shah, and governed Hindostan with great ability for ten years, until he was killed at the siege of Callenger, a strong fortress in Bundelcund. His son Selim died in 1551, after a reign of nine years. During these two reigns, caravanseras were erected at every ten miles along the high road from Bengal to the banks of the Indus. On the death of Selim, his cousin Mohammed, having first murdered a youth who was the heir, took possession of the throne; but was in his turn dispossessed by a competitor named Ibrahim, who was also driven out by Sekunder, a nephew of the emperor Selim.

In 1554 the Mogul emperor Homayon, having returned to Hindostan with some Persian auxiliaries, defeated Sekunder in the vicinity of Sirhind, and again took possession of the throne; which, however, he enjoyed but a short period, as he died at Delhi in the following year, and was succeeded by his son Akbar. From 1555 till 1707, the throne of Hindostan was occupied by Akbar, Jehangire, Shah-Jehan, and Aurungzebe, under the title of Aalumgire, four of the most powerful monarchs that ever governed that kingdom. Their territories extended from Candahar to Arracan, which, in a straight line, would measure 2000 miles; and they subdued the four Mahommedan states of the Deccan, or south of India. But from this period the Mogul empire began to decline. The attacks of the Mahrattas, the Rajpoohs, and the Seiks, joined to domestic dissentions, shook the throne, till the year 1720, when it was occupied by the emperor Mohammed Shah. It was during this reign that the Mahrattas, in the year 1735, carried their arms to the vicinity of Delhi; and in 1739 Nadir Shah of Persia took and plundered Delhi, and separated from Hindostan all the countries to the west of the Indus. After this the Mahrattas obtained possession of several of the provinces; the nizam or governor of the Deccan threw off his allegiance, and the mandates of the Mogul emperor were disobeyed. After an unfortunate reign, of twenty-seven years, Mohammed Shah died, and was succeeded, in 1747, by his son Ahmed Shah, who was deposed and blinded in the year 1753, and succeeded by Aalumgire II. During this reign the city of Delhi was twice taken and sacked by the Afghaun king of Cabul, and the Mahrattas; which events completely annihilated the little remaining power of the emperor. In 1761 the prince Ali Goher obtained the title of emperor Shah Alum II.; and, after residing for some years under the protection of the English at Allahabad, raised a small force, and took possession of the ruins of his capital. He was at length cruelly blinded by a Rohillah chieftain; he, however, continued his nominal reign, under the protection of the Mahrattas, till 1803, when Delhi was taken by the British. He died in the year 1806, after a long and disastrous reign of forty-four years. With this prince the Mogul dynasty may be said to have terminated: under the article INDIA will be found a sketch of the rise and progress of our important possessions here.

HINGE, *n. s.* & *v. a.* Dan. *hæng*, from Goth. *gæng*; Goth. and Teut. *ang*, a hook. Joints on which a door or gate turns; the four cardinal points of the compass: figuratively a governing rule, or principle of action: to be off the hinges is a phrase signifying a state of indisposition, irregularity, or disorder: hinge to furnish with hinges; to bend.

Be thou a flatterer now, and *hinge* the knee,
And let his very breath, whom thoul't observe,
Blow off thy cap. *Shakspeare*

Then from the *hinge* their strokes the gates divorce,
And where the way they cannot find, they force.
Denham.

If when the moon is in the *hinge* at East,
The birth breaks forward from its native rest;
Full eighty years, if you two years abate,
This station gives. *Creech's Manilius.*

At the gate
Of heaven arrived, the gate self-opened wide,
On golden *hinges* turning. *Milton.*

The man's spirit is out of order, and *off the hinges*; and, till that be put into its right frame, he will be perpetually disquieted. *Tillotson.*

The other *hinge* of punishment might turn upon a law, whereby all men, who did not marry by the age

of five and twenty, should pay the third part of their revenue. *Temple.*

Heaven's imperious queen shot down from high;
At her approach the brazen *hinges* fly,
The gates are forced. *Dryden.*

Methinks we stand on ruins, Nature shakes
About us, and this universal frame
So loose, that it but wants another push
To leap *from off its hinges.* *Id.*

HINGHAM, or HENGHAM (Sir Ralph de), an English lawyer of the thirteenth century, was the proprietor of an estate at Hingham, in Norfolk. He appears also to have held a canonry in St. Paul's cathedral, London, and was one of the justices of the king's bench, and a justice itinerant under Edward I., among the number of those first appointed. He was the chief commissioner for the government of the kingdom, while Edward visited Palestine; but, after the king's return, was dismissed from office for bribery, and fined 7000 marks, on the non-payment of which he was imprisoned, and afterwards banished, with nine of his brethren. Hingham was in disgrace till the accession of Edward II., in 1308, when he was raised to the office of chief justice of the common pleas, but died the same year. He is chiefly known from Selden having published, in the original Latin, with English notes, a treatise of his entitled Summa Magna et Parva, relating to the ancient forms of pleadings; and composed a register of writs mentioned by Dugdale.

HINGHAM, a market town and parish of Norfolk, ninety-nine miles north from London. The buildings are tolerably neat, but the streets are irregular. The church is a very large building with a lofty tower, erected in the reign of Edward III. In the church were held seven guilds, each having a stipendiary chaplain serving at the respective altars, constituting a choir. The tower is very high and large, and contains eight bells. The river Yare has its source near this town. Market on Saturday.

HINGHAM, a port town of Plymouth county, Massachusetts, fourteen miles south-east from Boston, and 455 from Washington. It lies on the south side of Boston harbour, and contains three congregational churches, a woollen manufactory, and a well endowed academy. It has some trade, and is a place of considerable resort of company from Boston in the summer. Population about 2400.

HING-HOA, a city of China of the first rank, in the province of Fo-kien, near the sea-coast. The walls are thick, and the streets well paved. The city is adorned with several triumphal arches, and majestic public buildings. Silk and rice are its chief commodities. It is 900 miles south of Pekin.

HINOJOSA, a town of Spain in Cordova. It is surrounded with mountains, and has a manufacture of coarse cloth, much worn by the Franciscans. Inhabitants 4000. Eighteen miles north of Llerena.

HINT, *v. a.* & *n. s.* Fr. *enter, indice;* Latin *indicium.* To bring to mind by a slight allusion; to mention imperfectly; to insinuate: used with the particle *at*, it implies a slight reference to some subject; a suggestion or intimation.

On this *hint* I spake,
She loved me for the dangers I had past.
Shakspeare. Othello.

Let him strictly observe the first stirrings and intimations, the first *hints* and whispers of good and evil, that pass in his heart. *South.*

Actions are so full of circumstances, that, as men observe some parts more than others, they take different *hints*, and put different interpretations on them. *Addison.*

Speaking of Augustus's actions, he still remembers that agriculture ought to be some way *hinted at* throughout the whole poem. *Id. On the Georgicks.*

Willing to wound, and yet afraid to strike,
Just *hint* a fault, and hesitate dislike. *Pope.*

In waking whispers, and repeated dreams,
To *hint* pure thought, and warn the favoured soul.
Thomson.

HIP, *n. s.*, *v. a.* & *interj.* } From Sax. þeopa.
HIP'PISH, *adj.* } The joint of the
HIP'SHOT, } thigh; the haunch.
HIP'WORT. } To have on the hip.

A low phrase. To have an advantage over another. It seems to be taken from hunting, the hip or haunch of a deer being the part commonly seized by the dogs: to sprain the hip: hip-hop a cant word: hip, an exclamation, as the Latin *heus;* hippish, fanciful, hypochondriac; hipshot, having a dislocated hip: hipwort a plant; hip the fruit of the dogrose. See HEPS.

——— And of a gode brede
Hire *hippes* were. *Chaucer. Boke of the Duchesse.*

Eating *hips*, and drinking watery foam. *Hubberd's Tale.*

His horse was *hipped.* *Shakspeare.*

How now, which of your *hips* has the most profound sciatica? *Id.*

If this poor brach of Venice, whom I cherish
For his quick hunting, stand the putting on,
I'll have our Michael Cassio *on the hip.* *Id.*

Why should you want? Behold, the earth hath roots;
The oaks bear masts, the briars scarlet *hips.* *Id.*

Years of store of haws and *hips* do commonly portend cold winters. *Bacon's Natural History.*

So shepherds use
To set the same mark on the *hip*
Both of their sound and rotten sheep. *Hudibras.*

Hippocrates affirmeth of the Scythians, that, using continual riding, they were generally molested with the sciatica or *hip* gout. *Browne's Vulgar Errours.*

Against a stump his tusks the monster grinds,
And ranched his *hips* with one continued wound.
Dryden.

Why do you go nodding and waggling so like a fool, as if you were *hipshot*? says the goose to the gosling. *L'Estrange.*

Your different tastes divide our poet's cares;
One foot the sock, t'other the buskin wears:
Thus, while he strives to please, he's forced to do't,
Like Volscius *hip-hop* in a single boot. *Congreve.*

HIP, in the materia medica, the fruit of the dogrose or wild brier. See ROSA. It contains an acidulous, yet sweetish pulp; with a rough prickly matter enclosing the seeds from which the pulp ought to be carefully separated before it be taken internally. The Wirtemberg College observes, that from a neglect of this, pulp of hips sometimes occasions a pruritus and uneasiness about the anus; and the conserve of it has been known to excite violent vomiting. The conserve is the only officinal preparation of this fruit which possesses any medical virtues, but is merely used by the apothecaries as a vehicle

for other remedies. The Edinburgh College omit it.

Hip, in architecture, the angle formed by two parts of the roof when it rises outwards. Hips are also those pieces of timber which are placed at the corners of a roof. They are much longer than rafters, on account of their oblique position.

HIPPARCHIA, a celebrated lady born at Maronea in Thrace, in the time of Alexander the Great. Her attachment to learning and philosophy was so great, that, having attended the lectures of Crates the cynic, she fell in love with him, and resolved to marry him, though he was both old and deformed. Crates himself was prevailed upon by her friends, to try to dissuade her from her singular choice, which he did by displaying his poverty, his cloak, his bag, and his deformity, but all in vain. At last he told her she could not be his wife, unless she resolved to live as he did. This she cheerfully agreed to, assumed the habit of the order, and accompanied him every where to public entertainments, &c., which was not customary with the Grecian ladies. She wrote several tragedies, Philosophical Hypotheses, and Reasonings and Questions proposed to Theodorus the Atheist: but none of her works are extant.

HIPPARCHUS, an eminent astronomer, born at Nice, in Bithynia, who flourished between the 154th and 163rd Olympiads. His Commentary upon Aratus's Phenomena is still extant. This astronomer was acquainted with the particular motion of the fixed stars from west to east, by which their longitude changes; and, by foretelling eclipses, he taught mankind not to fear them. Pliny, who relates this, admires him for making a review of all the stars; by which his descendants would be enabled to discover whether they are born and die, whether they change their places, and whether they increase and decrease.

HIPPIA, in botany, a genus of the polygamia necessaria order, and syngenesia class of plants. The receptacle is naked; there is no pappus; the seeds are naked with broad margins; cal. hemispheric, and subimbricated: the radius consists of ten corollæ, obscure, and rather cleft into three. Species four, small plants resembling the tansy.

HIPPISLEY (Sir John Coxe), bart. D.C.L. F.R. and A.S., was descended of an ancient Somersetshire family, and the only surviving son of William Hippisley, esq., of Yatton, was born in 1765. Having graduated as D.C.L. at Hertford College, Oxford, in 1776, he became a member and bencher of the Inner Temple; but on his return from Italy, in 1780, he was appointed through the interest of lord North to an office of trust in India, which he held during the wars with Hyder Ali and Tippoo Saib. Returning to England in 1790, he was elected member of parliament for Sudbury, of which borough he became recorder, and represented it also in five parliaments. Mr. Hippisley in 1796 negociated a marriage between the duke of Wirtemberg and the princess royal of England, on which occasion he was raised to the baronetage. Being an active magistrate and a warm supporter of many useful institutions, he distinguished himself on several occasions in the house by his speeches, especially upon Irish affairs, and was a strenuous supporter of Catholic emancipation. He published an octavo volume in favor of this measure in 1806, a speech on Mr. Grattan's motion in 1812, and a series of letters to the earl of Fingal in 1813. He was also the author of a treatise on Prison Discipline, printed in 1823, recommending the hand crank-mill for the treadmill, as a punishment for convicts. His death took place May 3d, 1825.

HIPPO, or Hippon, in ancient geography, two towns on the coast of Africa, now called Bicerta and Bona.

HIPPOBOSCA, the horse fly, in zoology, a genus of insects belonging to the order of diptera. The beak consists of two valves, is cylindrical, obtuse and hanging; and the feet have several claws. There are four species, distinguished by their wings, &c. The most remarkable is the hippobosca equina, the pest of horses and cows. This insect is broad, flat, shining, and as it were scaly. Its head, thorax, and abdomen, are yellow, undulated with brown; and the legs are intersected with yellow and brown. The wings, crossed one over the other, exceed the length of the body by above one-half; they are transparent, tinged with a little yellow towards their outward edge, and have a spot near that edge of a brown color. These insects are very difficult to be killed, on account of the hard crustaceous shell which covers them; and they fix so close and fast to the poor animals with their claws, that they cannot rub or bite them off without wounding themselves.

HIPPOCASTANUM, the common horse-chestnut. See Æsculus. It may be here added, that, from several experiments in the French Memoires d'Agriculture, it appears that the fruit of the horse-chestnut affords a wholesome nourishment for cattle, and may even be employed with success in fattening them. It is said to render the tallow of those fattened with it particularly firm. The milk yielded by cows fed upon it is also said to be thicker and richer than that produced from any other food. The fruit of this tree has been likewise used as food for sheep and poultry, and as soap for washing. It was much employed in powder as a sternutatory by an itinerant oculist, and has been recommended by some others in certain states of ophthalmia, headach, &c., in which errhines are indicated. Its effects as a sternutatory may also be obtained, by using it under the form of infusion or decoction drawn up into the nostrils. It is entirely with a view to its errhine power, that it has a place in the Pharmacopœia of the Edinburgh College.

HIPPOCE'NTAUR, *n. s.* Gr. ιπποκενταυρος; Fr. *hippocentaure*. A fabulous monster, half horse and half man.

> How are poetical fictions, how are *hippocentaurs* and chimeras to be imagined, which are things quite out of nature, and whereof we can have no notion?
>
> *Dryden.*

Hippocentaurs, from ιππος, a horse, κεντεω, I spur, and ταυρος, a bull. A people of Thessaly, inhabiting near mount Pelion, became

thus denominated, because they were the first that taught the art of mounting animals; which occasioned some of their neighbours to imagine that the beast and man were but one creature. The hippocentaurs should seem to have differed from the centaurs in this, that the latter rode only on bullocks, and the former on horses, as the names intimate. See CENTAUR.

HI'PPOCRAS, *n. s.* Fr. *hypocras*, quasi vinum Hippocratis. A medicated wine.

> Sack and the well-spiced *hippocrass*, the wine,
> Wassail the bowl, with ancient ribbands fine.
> *King.*

HIPPOCRAS is composed of wine, with spices and other ingredients, and is much used in France, as a cordial after meals. There are various kinds of it, according to the kind of wine and other ingredients used: as white, red, claret, and strawberry hippocras; hippocras without wine; cyder hippocras, &c. The London Dispensatory directs it to be made of cloves, ginger, cinnamon, and nutmegs, grossly powdered, and infused in canary with sugar; to this infusion may be added, milk, a lemon, and some slips of rosemary, and the whole strained through flannel. It is recommended as a cordial, and in paralytic and nervous cases.

HIPPOCRATES, the greatest physician of antiquity, was born in the island of Coos, in the eightieth Olympiad, and flourished during the Peloponnesian war. He was the first on record who laid down precepts concerning physic; and according to his biographer, Soranus, was descended from Hercules and Æsculapius. He was first a pupil of his father Heraclides, then of Herodicus, then of Gorgias of Leontium, the orator, and, according to some, of Democritus of Abdera. After being instructed in physic and the liberal arts, and losing his parents, he left Coos, and practised physic all over Greece; where he was so much admired for his skill, that he was publicly sent for to Perdiccas, king of Macedonia, who was then thought to be consumptive. But Hippocrates, as soon as he arrived, pronounced the disease to be entirely mental. For, upon the death of his father Alexander, Perdiccas fell in love with Philas, his father's mistress; which Hippocrates discerning by the change her presence always wrought upon him, a cure was soon effected. Being entreated by the people of Abdera to come and cure Democritus of a supposed madness, he went; but, upon his arrival, instead of finding Democritus mad, he pronounced all his fellow citizens so, and Democritus the only wise man among them. He heard many lectures from him; which made Celsus and others imagine, that Hippocrates was the disciple of Democritus, though it is probable they never saw each other till this interview. Hippocrates had also public invitations from other countries. Thus, when a plague invaded the Illyrians and Pæonians, the kings of those countries entreated him to come to their relief: he did not go: but, learning from the messengers the course of the winds there, he concluded that the distemper would come to Athens; and, foretelling what would happen, applied himself to take care of the city and the students. He was indeed such a lover of his country, that when his fame had reached as far as Persia, and Artaxerxes entreated him, with a promise of great rewards, to come to him, he refused to go, saying that 'he had food, clothing, and a habitation in his own country: that it would be unworthy of him to aspire to the wealth or grandeur of the Persians, or to cure barbarians who were the enemies of Greece.' He also delivered his own country from a war with the Athenians, by prevailing with the Thessalians to come to their assistance, for which he received very great honors from the Coans. The Athenians also honored him greatly; they admitted him next to Hercules in the Eleusinian ceremonies; gave him the freedom of the city; and voted a public maintenance for him and his family in the prytanæum at Athens, where none were maintained but such as had done signal service to the state. He died among the Larissæans, some say in his ninetieth year, some in his eighty-fifth, others in his 104th, and some in his 109th. The best edition of his works is that of Foesius, in Greek and Latin. Hippocrates wrote in the Ionian dialect.

HIP'POCRATES'S SLEEVE, *n. s.* A woollen bag, made by joining the two opposite angles of a square piece of flannel, used to strain syrups and decoctions for clarification.

HIPPOCRENE, in ancient geography, a fountain of Mount Helicon, on the borders of Bœotia, sacred to the Muses. Ovid makes Hippocrene and Aganippe the same. See AGANIPPE.

HIPPOCREPIS, common horse-shoe vetch, in botany, a genus of the decandria order, and diadelphia class of plants: natural order thirty-second, papilionaceæ. The legumen is compressed and crooked, with many incisions on the interior suture. There are five species; all low herbaceous trailing plants, with yellow flowers. They are propagated by seeds; but, having no great beauty, are seldom kept in gardens.

HIPPODROME, or HIPPODROMUS, from Gr. ἱππος, a horse, and δρομος, a course. In antiquity, a course wherein chariot and horse races were performed, and horses exercised. The Olympian hippodrome, or horse-course, was a space of ground 600 paces long, surrounded with a wall, near Elis, on the banks of the Alpheus. It was uneven, and in some degree irregular, on account of the situation; in one part was a hill of a moderate height, and the circuit was adorned with temples, altars, and other embellishments. See STADIUM. There is a famous hippodrome at Constantinople, which was begun by Alexander Severus, and finished by Constantine. The circus, called by the Turks atmeican, is 400 paces long, and above 100 paces wide. At the entrance there is a pyramidal obelisk of granite in one piece, about fifty feet high, terminating in a point, and charged with hieroglyphics. The Greek and Latin inscriptions on its base show that it was erected by Theodosius; the machines that were employed to raise it are represented upon it in basso-relievo. There are some vestiges in England of the hippodromus, in which the ancient inhabitants of this country performed their races; the most remarkable is that near Stonehenge, which is a long tract of ground, about

350 feet, or 200 Druid cubits wide, and more than a mile and three quarters, or 6000 Druid cubits, in length, enclosed quite round with a bank of earth, extending directly east and west. The goal and career are at the east end. The goal is a high bank of earth, raised with a slope inwards, on which the judges are supposed to have sat. The metæ are two tumuli, or small barrows, at the west end of the course. These hippodromes were called in the language of the country rhedagua, the racer rhedagwr, and the carriage rheda, from the British word rhedeg, 'to run.' One of these hippodromes, about half a mile south of Leicester, retains evident traces of the old name rhedagua, in the corrupted one of Rawdikes. There is another, says Dr. Stukely, near Dorchester; another on the banks of the Lowther, near Penrith in Cumberland; and another in the valley, just without the town of Royston.

HIPPOGRIFF, *n. s.* Gr. ιππος and γρυψ; Fr. *hippogriffe*. A winged horse; a being imagined by Ariosto.

He caught him up, and without wing
Of *hippogriffe* bore through the air sublime.
Milton.

HIPPOLYTE, (St.), a small town of France, in the department of Doubs, Franche Comté, the chief place of the canton, and about eighteen miles south of Montbelliard. It is a post-town, and contains about 3500 inhabitants. Its situation is very picturesque, in the bottom of a valley, surrounded with high mountains, at the confluence of the rivers Doubs and Desoubre. On arriving at this spot an agreeable prospect meets the eye; it wanders delighted over ridges of mountains, cultivated hills, and delightful valleys near the town, of which the point of the steeple is just seen peeping out from the foot of the mountain. The verdure of the hemp which is cultivated in the valley, the vines, which cover the hills even to the tops, the majestic gloom of the forests which extend over the most elevated of the mountains, and the black smoke issuing from the numerous forges, give an indescribable charm to this smiling and animated picture. Here are manufactures of clock-makers' tools, jewellery, and gravers; likewise of hats, pipes, and brass work; tan-houses, dye-houses, cheese factories, &c.; and in the neighbourhood are blast-furnaces, forges, and flatting-mills.

HIPPOLYTE, (St.), a handsome town of the department of the Gard, Languedoc, the chief place of the canton of Vigan. It has a tribunal of commerce, and a council of manufactures, and is a post-town, with 5500 inhabitants. It is pleasantly situated at the foot of the Cevennes Mountains, on the Vidourle, not far from the source of that river. A canal running through it furnishes several fountains with water, and works a great number of mills. This town is rendered remarkable from the circumstance, that an insult offered to a priest, who was carrying the host through it to a sick person, furnished a pretext for the revocation of the edict of Nantes, which involved so many thousands in banishment and ruin on account of their religious opinions. It has manufactories of silk and cotton stockings, woollen stuffs, and glue, and large tan-yards; and carries on a commerce in fruits and silk.

HIPPOLYTE, in fabulous history, a queen of the Amazons, who was conquered by Hercules, and married to Theseus: by whom she had

HIPPOLYTUS, famous in fabulous history for his virtue and his misfortune. His stepmother Phædra fell in love with him, and when he refused to pollute his father's bed, she accused him to Theseus of offering violence to her person. Her accusation was readily believed, and Theseus entreated Neptune to punish the incontinence of his son. Hippolytus fled from the resentment of his father; and, as he pursued his way along the sea shores, his horses were so frightened at the noise of sea-calves which Neptune had purposely sent there, that they ran among the rocks till his chariot was broken, and his body torn to pieces. Temples were raised to his memory, particularly at Trœzene, where he received divine honors. Diana is said to have restored him to life.

HIPPOMANE, the manchineel tree, a genus of the monadelphia order, and monœcia class of plants: natural order thirty-eighth, tricoccæ: MALE has an amentum and bifid perianthium, without any corolla: the FEMALE perianthium is trifid; there is no corolla; the stigma is tripartite; and the plum or capsule tricoccous. The species are,

1. H. biglandulosa, with oblong bay leaves, is a native of South America, and grows to as large a size as the mancinella, from which it differs mostly in the shape of its leaves.

2. H. mancinella, with oval sawed leaves, is a native of all the West India islands. It has a smooth brownish bark; the trunk divides upward into many branches, garnished with oblong leaves about three inches long. The flowers come out in short spikes at the end of the branches, but make no great appearance, and are succeeded by fruit of the same shape and size with a golden pippin. The tree grows to the size of a large oak. Strangers are often tempted to eat the fruit of this species; the consequences are, an inflammation of the mouth and throat, pains in the stomach, &c., which are very dangerous, unless remedies are speedily applied. The wood is much esteemed for making cabinets, book-cases, &c., being very durable, taking a fine polish, and not being liable to become worm-eaten: but, as the trees abound with a milky caustic juice, fires are made round their trunks, to burn out this juice; otherwise those who fell the trees would be in danger of losing their sight by the juice flying in their eyes. This juice raises blisters on the skin wherever it falls, turns linen black, and makes it fall out in holes. It is also dangerous to work the wood after it is sawn out; for, if any of the sawdust happens to get into the eyes of the workmen, it causes inflammation; to prevent which, they generally cover their faces with fine lawn during the time of working the wood. It is with the juice of this tree that the Indians poison their arrows.

3. H. spinosa, with holly leaves, is a native of Campeachy, and seldom rises above twenty feet high; the leaves greatly resemble those of the

common holly, and are set with sharp prickles at the end of each indenture. They are of a lucid green, and continue all the year. These plants, being natives of very warm climates, cannot be preserved in this country without a stove; nor can they by any means be made to rise above five or six feet high, even with that assistance. They are propagated by seeds; but must have very little moisture, or they will certainly be killed by it.—These trees have all a very poisonous quality, abounding with an acrid milky juice of a highly caustic nature.

HIPPOMANES, from ἱππος, a horse, and μανια, madness, a sort of poison famous among the ancients as an ingredient in amorous philters, or love charms. Authors are not agreed about the nature of the hippomanes. At the end of Bayle's Dictionary is a very learned dissertation on the hippomanes, and all its virtues real and pretended.

HIPPONA, or EPONA, from ἱππος, a horse, in ancient mythology, the goddess of horses. See EPONA.

HIPPONAX, a Greek poet, born at Ephesus, A.A.C. 540. He cultivated the same satirical poetry as Archilochus, and was not inferior to him in the beauty and vigor of his lines. His satirical raillery obliged him to fly from Ephesus. As he was naturally deformed, two brothers, Buphalus and Anthermus, made a statue of him; which, by the ugliness of its features, exposed the poet to universal ridicule. Hipponax, resolving to revenge the injury, wrote such bitter invectives and satirical lampoons against them, that they hanged themselves in despair.

HIPPOPHAE, sea-buckthorn; a genus of the tetrandria order, and dicœcia class of plants; natural order sixteenth, calycifloræ: MALE CAL. bipartite: COR. none: FEMALE CAL. blind: COR. none: there is one style, and a monospermous berry. The chief species are,

1. H. Canadensis, with a shrubby brown stem, branching eight or ten feet high, with oval leaves, and male and female flowers on different plants.

2. H. rhamnoides, with a shrubby stem, branching irregularly eight or ten feet high, having a dark brown bark. It is armed with a few thorns, and has spear-shaped, narrow, sessile leaves, of a dark green above, and hoary underneath. Both these species are very hardy, and may be propagated in abundance by suckers from the roots, by layers, and by cuttings of their young shoots. They are retained in gardens on account of their two-colored leaves in summer; and, in winter, on account of the appearance of the young shoots, which are covered with turgid, irregular, scaly buds. Goats, sheep, and horses, eat this species; cows refuse it.

HIPPOPHAGI, in ancient geography, a people of Scythia, so called from their living on horse-flesh; the fare at this day of the Tartars, their descendants. Also a people of Persia.

HIPPOPODES, or HIPPOPODIÆ, from ἱππος, horse, and πους, a foot, in ancient geography, an appellation given to a certain people situated on the banks of the Scythian Sea, who were supposed to have had horses' feet. The Hippopodes are mentioned by Dionysius, Mela, Pliny, and St. Augustine. It is conjectured that they had this appellation given them on account of their swiftness or lightness of foot. Mr. Pennant supposes them to have been the inhabitants of the Bothnian Gulf, and that they were the same sort of people as the Finni Lignipedes of Olaus. They wore snow shoes; which he thinks might fairly give the idea of their being, like horses, hoofed and shod.

HIPP'OPOTAMUS, *n. s.* Gr. ἱππος and ποταμος. The river horse. An animal found in the Nile.

HIPPOPOTAMUS, the river horse, is a genus of quadrupeds belonging to the order of belluæ, the characters of which are these: They have four foreteeth in the upper jaw, disposed in pairs at a distance from each other; and four prominent fore-teeth in the under jaw, the intermediate ones being longest. There are two tusks in each jaw; those of the under one very long, and obliquely truncated; in both they stand solitary, and are recurvated. The feet are hoofed on the edges. There is but one known species, viz. the hippopotamus amphibius, or river horse. The head of this animal is of an enormous size, and the mouth vastly wide. The ears are small and pointed, and lined within very thickly with short fine hairs. The eyes and nostrils are small in proportion to the bulk of the animal. On the lips are some strong hairs scattered in patches. The hair on the body is very thin, of a whitish color, and scarcely discernible at first sight. There is no mane on the neck, as some writers assert, only the hairs on that part are rather thicker. The skin is very thick and strong, and of a dusky color. The tail is about a foot long, taper, compressed, and naked. The hoofs are divided into four parts. The legs are short and thick. In bulk it is second only to the elephant. The length of a male has been found to be seventeen feet, the circumference of the body fifteen, the height nearly seven, the legs nearly three, the head above three and a half, and the girth nearly nine. The mouth, when open, is above two feet wide; and furnished with forty-four teeth of different figures (including the cutting teeth and the canine). The cutting, and particularly the canine teeth of the lower jaw, are very long, and so hard and strong that they strike fire with steel. This circumstance, it is probable, gave rise to the fable of the ancients, that the hippopotamus vomited fire from his mouth. The substance of the canine teeth is so white, so fine, and so hard, that it is preferable to ivory for making artificial teeth. The cutting teeth, especially those of the under jaw, are very long, cylindrical, and chamfered. The canine teeth are also long, crooked, prismatic, and sharp, like the tusks of the wild boar. The grinders are square or oblong, like those of man, and so large that a single tooth sometimes weighs three pounds. The tusks, according to Dr. Sparman, are twenty-seven inches long. With such powerful arms, and such a prodigious strength of body, the hippopotamus might render himself formidable to every other animal. But he is naturally of a mild disposition, and is only formidable when provoked. His bulk is so great, that twelve oxen have been found necessary to draw one ashore, which had been shot in a river above

the Cape; and, according to Hasselquist, its hide is a load for a camel. Though he delights in the water, and lives in it as freely as upon land, yet he has not, like the beaver or otter, membranes between his toes. The great size of his belly renders his specific gravity nearly equal to that of water, and makes him swim with ease. These animals inhabit the rivers of Africa, from the Niger to Berg River, many miles north of the Cape of Good Hope. They formerly abounded in the rivers nearer the Cape, but are now almost extirpated. They are not found in any of the African rivers which run into the Mediterranean, except the Nile, and even there only in Upper Egypt, and in the fens and lakes of Ethiopia, which that river passes through. From the unwieldiness of his body, and the shortness of his legs, the hippopotamus is not able to move fast upon land, and is then extremely timid. When pursued, he takes to the water, plunges in, sinks to the bottom, and is seen walking there at full ease; he cannot, however, continue there long without often rising towards the surface; and in the day-time is so fearful of being discovered, that, when he takes in fresh air, the place is hardly perceptible; for he does not venture even to put his nose out of the water. In rivers unfrequented by mankind he is less cautious, and puts his whole head out of the water. If wounded, he will rise and attack boats or canoes with great fury, and often sink them by biting large pieces out of the sides: and frequently people are drowned by these animals; for they are as bold in the water as they are timid on land. It is reported that they will at once bite a man in two. In shallow rivers the hippopotamus makes deep holes in the bottom, in order to conceal his great bulk. When he quits the water, he usually puts out half his body at once, and smells, and looks around; but sometimes rushes out with great impetuosity, and tramples down every thing in his way. During the night he leaves the rivers in order to pasture; when he eats sugar-canes, rushes, millet, rice, &c., consuming great quantities, and doing much damage in the cultivated fields. But as he is so timid on land, it is not difficult to drive him off. 'The Egyptians,' Hasselquist informs us, 'have a curious manner of freeing themselves in some measure from this destructive animal. They remark the places he frequents most, and there lay a great quantity of peas: when the beast comes on shore hungry and voracious, he falls to eating what is nearest him; and, filling his belly with the peas, they occasion an insupportable thirst: he then returns immediately into the river, and drinks upon these dry peas large draughts of water, which suddenly causes his death; for the peas soon begin to swell with the water, and not long after the Egyptians find him dead on the shore, blown up as if killed with the strongest poison.' The river-horse also feeds on roots of trees, which he loosens with his great teeth; but never eats fish, as is asserted by Dampier. The hippopotami sleep in the reedy islands in the middle of the stream, and on these they bring forth their young. A herd of females has but a single male: they bring one young at a time, and that on the land, but suckle it in the water. They are capable of being tamed. Belon says, 'he has seen one so gentle as to be let loose out of a stable and fed by its keeper, without attempting to injure any one.' They are generally taken in pitfalls, and the poor people eat the flesh. In some parts the natives place boards full of sharp irons in the corn grounds; which these beasts strike into their feet, and so become an easy prey. Sometimes they are struck in the water with harpoons fastened to cords, and ten or twelve canoes are employed in the chase. The hippopotamus was known to the Romans. Scaurus treated the people with the sight of five crocodiles and one hippopotamus during his ædileship, and exhibited them in a temporary lake. Augustus produced one at his triumph over Cleopatra. This animal is the behemoth of Job; who admirably describes its manners, its food, and its haunts, chap. xl. ver. 15—24. An entertaining account of the hippopotamus is given in Sparman's Voyage to the Cape of Good Hope, where these animals are called sea-cows. After giving a particular narrative of a hunting expedition, for two days, upon which he and Mr. Immelman had set out, on the 24th of January, 1776, accompanied by other three Europeans, and two Hottentots, and wherein he himself was once in imminent danger of his life from one of these animals, Mr. Sparman proceeds as follows:—'The same night (the 26th) we betook ourselves again to our posts; and at half after eight, it being already very dark, a sea-cow began at intervals to put its head up above the water, and utter a sharp, piercing, and very angry cry, which seemed to be between grunting and neighing. Perhaps this cry may be best expressed by the words heurkh, hurkh, huh-huh: the two first being uttered slowly, in a hoarse, but sharp and tremulous sound, resembling the grunting of other animals; while the third or compound word is sounded extremely quick, and is not unlike the neighing of a horse. It is true, it is impossible to express these inarticulate sounds in writing; but perhaps one may make nearer approaches to it than to the gutturo-palatial sounds of the Hottentot language. At eleven o'clock came the same or some other hippopotamus, and visited the posts we occupied. He did not, however, dare to come up, though we heard him nibble the boughs, which hung over the surface of the water, as well as a little grass and a few low shrubs, which grew on the inside of the river's banks. We were, however, in hopes, that this way of living would not long suffice animals, one of which only requires almost a larger portion than a whole team of oxen. Thus far at least is certain, that if one should calculate the consumption of provision made by a sea-cow from the size of its fauces, and from that of its body and belly, which hangs almost down to the ground, together with the quantity of grass which I have at different times observed to have been consumed by one of them, in spots whither it has come over night to graze, the amount would appear almost incredible. We passed the following night at the same posts, the sea-cows acting much as before. On the 28th, after sun-rise, just as we were thinking of going home to our

waggons, there comes a female hippopotamus, with her calf, from some other pit or river, to take up her quarters in that which we were then blockading. While she was waiting at a rather steep part of the river's banks, and looking back after her calf, which was lame, and came on but slowly, she received a shot in her side, upon which she directly plunged into the river, but was not mortally wounded; for Flip, the farmer's son, the drowsiest of all sublunary beings, who had shot her, and that instant could hardly be awakened by two Hottentots, was still half asleep when he fired his piece. And happy was it for him, that the enormous beast did not make towards his hiding or rather sleeping place, and send him into the other world to sleep for ever. In the mean while his shot was so far of service, that one of my Hottentots ventured to seize the calf, and hold it fast by its hind legs, till the rest of the hunting party came to his assistance; upon which the calf was fast bound, and with the greatest joy borne in triumph to our waggons; though, while they were taking it over a shallow near the river, the Hottentots were very much alarmed, lest the wounded mother, and the other sea-cows should be induced by the cries of the calf to come to its rescue; the creature, as long as it was bound, making a noise a good deal like a hog that is going to be killed, or has got fast between two posts. The sound, however, proceeding from the hippopotamus calf was more shrill and harsh. It showed likewise a considerable share of strength in the attempt it made to get loose, and was quite unmanageable and unwieldy; the length of it being three feet and a half, and the height two feet, though the Hottentots supposed it to be no more than a fortnight, or at most three weeks old. When at last it was turned loose it ceased crying; and when the Hottentots had passed their hands several times over its nose, in order to accustom it to their effluvia, it began directly to take to them.' 'While the calf was yet alive,' he adds, 'I made a drawing of it, a copy of which may be seen in the Swedish Transactions for 1778. After this it was killed, dissected, and eaten up in less than three hours time. The reason of this quick despatch was partly the warmth of the weather, and partly our being in absolute want of any other fresh provisions. We found the flesh and fat of this calf as flabby as one might have expected from its want of age, and consequently not near so good as that of the old sea-cows; of which I found the flesh tender, and the fat of a taste like marrow, or at least not so greasy and strong as other fat. It is for this reason likewise that the colonists look upon the flesh and fat of the sea-cow as the wholesomest meat that can be eaten; the gelatinous part of the feet in particular, when properly dressed, being accounted a great delicacy. The dried tongues of these animals are also considered, even at the Cape, as a rare and savoury dish. On my return to Sweden, I had the honor to furnish his majesty's table with a dried sea-cow's tongue, two feet and eight inches long. With respect to form, the tongue of a full-grown hippopotamus is very blunt at the tip, and is in fact broadest at that part: if at the same time it is slanted off towards one side, and marked with lobes, as I was informed it is, this circumstance may, perhaps, proceed from the friction it suffers against the teeth, towards the side on which the animal chiefly chews; at least some traces of this oblique form were discoverable on the dried tongue I am speaking of. The hide of the adult hippopotamus bears a great resemblance to that of the rhinoceros, but is rather thicker. Whips made of this hide are likewise stronger, and, after being used some time, are more pliable than those made of the hide of the rhinoceros usually are, though they are not so transparent as these latter are when new. That the hippopotamus actually lives in salt water, I have seen evident proofs at the mouths both of the Kromme and Camtour rivers, particularly in the latter, on my journey homewards; where many of these animals blowed themselves in broad day light, and thrust their heads up above the water; and one of them, in particular, which had been wounded by an ill-directed shot on the nose, neighed from anger and resentment. In Krakekamma I saw on the beach manifest traces of a hippopotamus which had come out of the sea, but had retired thither again directly.

'The method of catching the hippopotamus consists (besides shooting it) in making pits for it, in those parts which the animal passes, in his way to and from the river: but this method is peculiar to the Hottentots; and is only practised by them in the rainy season, as the ground in summer is too hard for that purpose. It is said that they have never succeeded in killing this huge aquatic animal with poisoned darts, though this way of killing game is practised with advantage by the Hottentots for the destruction both of the elephant and rhinoceros. The hippopotamus is not so quick in its pace on land as the generality of the larger quadrupeds, though perhaps it is not so slow and heavy as M. de Buffon describes it to be; for both the Hottentots and colonists look upon it as dangerous to meet a hippopotamus out of the water; especially as, according to report, they had had a recent instance of one of these animals, which, from certain circumstances, was supposed to be in rut, having for several hours pursued a Hottentot, who found it very difficult to make his escape. Having already exceeded the limits I had prescribed to myself, I do not intend to dwell here on the anatomy of the hippopotamus we caught; particularly as the internal conformation of the calves is somewhat different from that of the adult animal. I shall therefore only briefly mention the following particulars: the stomachs were four in number, and consequently one more than in the fœtus examined by M. Daubenton, which was kept in spirits. Compare Buffon, tom. xii. tab iv. fig. 2. The two first stomachs were each of them about seven inches long and three inches in diameter; the third was nine inches in length, and a little wider than the two former; the fourth was seven inches long, and at the upper part five inches broad, but decreased by degrees on one side till it terminated in the pylorus, which had an aperture an inch in width, being about half as wide again as the cardia. I did not observe any such valves as M. Dauben-

ton has delineated. The first stomach was found mostly empty, it containing only a few lumps of cheese or curd; it likewise differed from the rest by the superior fineness of its internal coat. The internal membrane of the second stomach was rather coarser, and had many small holes in it; it likewise contained several clods of caseous matter, together with a great quantity of sand and mud. The third stomach had very visible folds, both longitudinal and transversal, on the inside of it, and contained caseous lumps of a yellow color and harder consistence than the others, together with several leaves quite whole and fresh, and at the same time some dirt. The interior membrane of the fourth stomach was very smooth, though it was not without folds; in the stomach itself there was a good deal of dirt, with a small quantity of curds, which were whiter than they were in any of the other stomachs. This fourth stomach in a great measure covered the rest, being situated on the right side of the animal, and was found to have the upper part of the melt adhering to its superior and interior edge. This latter viscus, which was one foot long and three inches broad, diverged from it downwards on the left side. The intestinal canal was 109 feet long; the liver measured fourteen inches from right to left, and seven or eight from the hind part to the fore part. On its anterior edges it had a large notch, being in other respects undivided and entire; it was of an oblique form, being broadest towards the left side, where I discovered a gall-bladder five inches in length. In the uterus there was nothing particularly worthy of observation. I found two teats, and the heart surrounded with much fat; the length of this muscle was five inches, and the breadth about four inches and a half. The communication between the auricles, called the foramen ovale, was above an inch in diameter. Each lung was eleven inches long, and undivided: but, at the superior and exterior parts of the right lung, there were two globules or processes, elevated half an inch above the surface; and on the side corresponding to it in the left lung, and in the upper part of it, there was a little excrescence, terminating in a point: somewhat below this, yet more forwards, there was found likewise a process half an inch in height. Directly over the lower part of the communication formed between the right and left lungs, there was a kind of crest or comb, measuring an inch from the top to the basis. One of my brother sportsmen said, he had once observed a peculiar kind of vermin on the body of one of these amphibious animals; but on the calf we caught we found nothing but a species of leech, which kept only about the anus, and likewise a good way up in the straight gut, where, by a timely abstraction of the blood, they may be of use to these large amphibious animals; and particularly may act as preservatives against the piles, repaying themselves for their trouble in kind; most of them were very small; but on the other hand there was a considerable number of them. The only large one I saw of this species, being somewhat more than an inch in length, I described and made a drawing of: this is inserted by the name of the Hirudo Capensis, corpore supra nigricante, medio longitudinaliter sub-brunneo, subtus pallidè fusco, in the elegant Treatise on Worms, which M. Adolphus Nodeer, first secretary of the patriotic society, is preparing for the press. Instead of the lighter colored streak upon the back, there was discoverable in some of these leeches one and sometimes two longitudinal brownish lines, which grew fainter and fainter towards the extremities. This huge animal has doubtless obtained its present name, merely in consequence of the neighing sound it makes, as otherwise in its form it bears not the least resemblance to a horse, but rather to a hog. Neither does it in the least resemble the ox; so it could be only the different stomachs of this animal which could occasion it to be called sea-cow at the Cape; and perhaps it is for the same reason that the Hottentots call it the t'gao, which nearly approaches to t'kau, the name by which the buffalo is known among these people. Mr. Maxwell, in his account of Coango, says 'I never had the good fortune to kill a hippopotamus, although I have often attempted it by muffling the oars and warily approaching them, but they always took the alarm and retreated to deep water. This inclines me to think, that one of their number stands sentinel while the others sleep. They presented, however, many oportunities of being fired at, rearing their huge heads abruptly out of the water, sometimes only a few yards from the boat, putting us under no small apprehension by their tremendous bellowing and threatening aspect. Many a volley was fired at them, but whether the hide is proof against ball, or the current carried the wounded out of our reach, we could not ascertain.

Hippopotamus Fossil. Zoologists are acquainted with one living species of hippopotamus only, but late observations have proved that the bowels of the earth contain the fossil remains of two perfectly distinct species, one of which appears not to differ in any respect from the one still existing; the other being, as it were, a miniature copy of the larger, is nearly of the size of the wild boar. The discovery of this latter we owe to the indefatigable Cuvier, who has likewise proved the existence of the other species in a fossil state. Several authors, prior to that celebrated naturalist, have mentioned fossil bones of the great African hippopotamus, but subsequent observations proved that they had been rather too rash in forming their diagnosis.

Some writers, on the other hand, have been in the possession of real fossil remains of the hippopotamus without being aware of it. Thus Aldrovandus has figured several molares of this animal under the name of elephant's teeth, while the real elephant's teeth, of which he has likewise given a representation, were considered by him as belonging to some large unknown animal. The only authors who have been more correct, both in the application of the name of hippopotamus, and in their observations respecting the fossil remains of the animal in question, are Antoine de Jussieu and Daubenton; the fossil bones described by the former, as early as 1724, cannot be doubted to be really those of the river horse; and those indicated by Daubenton under the same name, and deposited (promiscuously with

others, which belong to the mastodonte, in the museum at Paris, were the first that served to convince Cuvier of the existence of fossil remains of

1. *The great or common hippopotamus.*—One of the last-mentioned specimens of osseous remains, consists in a portion of the right side of the lower jaw containing two molar teeth; the other in a single molar tooth. The place where they were found is not known with certainty. A third specimen, examined by Cuvier, is a fragment of the upper jaw, with two molar teeth, in the collection of M. de Drée; it is penetrated by a ferruginous substance, but does not bear any indication of its origin; it is not, however, improbable that it was found in the neighbourhood of Montpelier.

More satisfactory than the preceding specimens, with regard to its locality, was one in the collection of M. Miot. This bone, which was known to have been gathered in the Val d'Arno, in Tuscany, is an astragalus, resembling that of a hog, to which animal the hippopotamus approaches more than to any other, with regard to the conformation of all its parts. The place where bones of the hippopotamus are actually found being thus ascertained, Cuvier applied to Fabbroni at Florence, who sent him drawings of two molar teeth, and one representing a fragment of a tusk or canine tooth, which Cuvier soon ascertained to belong to the animal in question. Respecting the canine tooth, it is observed by Fabbroni, that it differs from that of the African hippopotamus in its diameter being greater compared with its length, and also in its spiral curvature being much more distinct. He adds, that these teeth are scattered in various parts of the upper valley of Arno, but unaccompanied either by jaws or other bones.

Cuvier thinks there is no material difference either between these fossil teeth or the astragalus he has examined, and those of the living species; and indeed it is remarkable, that the animal, whose existence in a fossil state had at first appeared doubtful to geologists, should be one whose fossil remains far more strikingly resemble the bones of the still existing species, than any other fossil remains which naturalists have referred to living animals, such as the elephant, the rhinoceros, &c.

2. *The small fossil hippopotamus.*—The mass out of which Cuvier extracted the remains of this species (but the geological relation of which is unfortunately unknown), resembles the osseous breccia of Gibraltar, Dalmatia, and Cette, except that the matrix, instead of being calcareous and stalactitical, is a homogeneous sandstone, which uniformly fills up all the intervals between the bones; the bones also form a far more considerable portion of the mass than is the case in the Gibraltar rock. After having performed the difficult operation of disengaging all the separate osseous fragments, M. Cuvier found that they belonged to an animal of which no traces had hitherto been discovered, but which was unquestionably a congener of the common hippopotamus. The teeth were found to agree in all essential points with those of the other species; and the remainder of the osseous fragments, which were next examined, confirmed, without a single exception, what had been indicated by the characters of the teeth.

HIPPURIS, mare's-tail; a genus of the monogynia order and monandria class of plants; natural order fifteenth, inundatæ: CAL. none, nor any petals; the stigma is simple; and there is one seed. There are two species, one a native of Britain, and which grows in ditches and stagnant waters. The flower of this plant is found at the base of each leaf, and is as simple as can be conceived; there being neither empalement nor blossom; and only one chive, one pointal, and one seed. It is a very weak astringent. Goats eat it; cows, sheep, horses, and swine, refuse it.

HIPPUS, an affection of the eyes, that makes them represent objects in the like kind of motion as when on horseback.

HIRAM, a king of Tyre, contemporary with Solomon, whom he supplied with cedar, gold, silver, and other materials for building the temple. He died A. A. C. 1000.

HIRAM, an artist of Tyre, who assisted in the erection of Solomon's temple, and other public buildings at Jerusalem, flourished A. A. C. 1015.

HIRCH-HORN, a town of Germany, in the circle of the Lower Rhine, with a strong castle; seated on the side of a hill on the Neckar, and in the palatinate. Mr. Crutwell places it in the electorate of Mentz, seven miles east of Heidelberg, and twelve south of Erbach. Long. 9° 0′ E., lat. 49° 28′ N.

HIRE, *v. a.* & *n. s.* } Sax. þyrnan, þyne;
HIRE'LING, *n. s.* & *adj.* } Dan. *hyre*; Swed.
HI'RER, *n. s.* } *hyra*; Belgic *huur*.

To procure any thing for temporary use at a certain price: the price so paid to engage a servant in temporary service; the wages paid to them: to bribe; to let at a certain price: hireling one who serves for wages, in a good or bad sense; a prostitute; a venal person: hirer in Scotland is one who keeps small horses to let.

They that were full, *hired* out themselves for bread; and they that were hungry, ceased. 1 *Sam.* ii.

They weigh silver in the balance, and *hire* a goldsmith, and he maketh it a god. *Isa.* xlvi. 6.

From thennesforth the Jewes han conspired
This innocent out of this world to chace:
An homicide han they *hired*,
That in an aleye had a privee place
And as the child gan forthly for to pace
This cursed Jew him hent and held him fast
And cut his throte and in a pit him caste.
Chaucer. The Prioresses Tale.

About him lefte he no mason
That stone could laie, ne no querreour;
He *hired* hem to make a tour.
Id. Romaunt of the Rose.

The *hireling* longs to see the shades descend,
That with the tedious day his toil might end,
And he his pay receive. *Sandys.*

Great thanks and goodly meed to that good sire;
He thence departing gave for his pains *hire*.
Spenser.

I cannot strike at wretched kerns, whose arms
Are *hired* to bear their staves. *Shakspeare.*

I have five hundred crowns,
The thrifty *hire* I saved unto your father. *Id.*

In the framing of Hiero's ship there were three hundred carpenters employed for a year, besides many other *hirelings* for carriages. *Wilkins's Dædalus.*

Though little was their *hire*, and light their gain,
Yet somewhat to their share he threw. *Dryden.*

All arts and artists Theseus could command,
Who sold for *hire*, or wrought for better fame. *Id.*

'Tis frequent here to see a freeborn son
On the left hand of a rich *hireling* run.
Id. Juvenal.

His sordid avarice rakes
In excrements, and *hires* the jakes. *Id.*

Themetes first, 'tis doubtful whether *hired*,
Or so the Trojan destiny required,
Moved that the ramparts might be broken down.
Dryden.

Then trumpets, torches, and a tedious crew
Of *hireling* mourners for his funeral due. *Id.*

Men that *hire* out their words and anger; that are more and less passionate, according as they are paid for it, and allow their client a quantity proportionable to the fee which they receive. *Addison.*

Now she shades thy evening walk with bays,
No *hireling* she, no prostitute to praise. *Pope.*

HIRE (Philip de la), an eminent French mathematician and astronomer, born at Paris in 1640. His father, who was painter in ordinary to the king, designed him for the same profession: but he devoted himself to mathematical studies, and was nominated, together with M. Picard, to make the necessary observations for a new map of France, by the directions of M. Colbert. In 1683 he was employed in continuing the famous meridian line begun by M. Picard; and was next engaged in constructing the grand aqueducts projected by Louis XIV. He died in 1718, after having written a great number of works, besides several occasional papers dispersed in Journals, and in Memoirs of the Academy of Sciences.

HIRPINI, in ancient geography, a people of Italy, next to the Samnites, to the south-east and descendants from them; situated to the north of the Picentini, and to the west of the Apuli, having on the north the Appennines and a part of Samnium. The name is from Hirpus, a term denoting in their language a wolf; either because under the conduct of this animal the colony was led and settled, according to Strabo; or because, like that prowling animal, they lived on plunder, according to Servius.

HIRSCHBERG, a town of Silesia, in the principality of Jauer, famous for its trade and manufactures. In 1549 it was burnt; in 1633 pillaged by the Saxons; and in 1634 burnt by the Imperialists. It is twenty-two miles south-east of Buntzlau.

HIRSCHBERG, a well-built commercial town in the principality of Jauer, Silesia, at the confluence of the Bober and the Zacke. It is the chief place of a circle, and contains 6000 inhabitants, chiefly Lutherans. The support of the inhabitants is chiefly a trade in linen, and fine lawn; here are also some woollen manufactures. This town was burnt down in 1549; in 1633 it was pillaged by the Saxons; and in 1634 again burned by the Imperial troops. It is twenty-three miles W.S.W. of Jauer, and thirty-five west of Schweidnitz.

HIRSCHFELD, or HERSFELD, a southern district and town of Hesse-Cassel. The district is 168 square miles in extent, with a population of 22,000, and divided into eight bailiwics: it is in general very fertile, but in part covered with wood. The town is walled and situated on the Fulda, which is here navigable. It contains 5500 inhabitants, and has a well regulated Calvinistic gymnasium. It has also some manufactures of cloth and leather. Twenty-five miles north of Fulda.

HIRSCHING (Frederic Charles Gottlob), a learned German professor, was born at Uffenheim, December 21st, 1762. He had been nominated supernumerary professor of philosophy at Erlangen, but had scarcely at his death entered on the functions of his office. He is chiefly known for his researches on history and geography. His best works are—A Description of the Principal Libraries of Germany, Erlangen, 1786, 4 vols. 8vo.; An Account of the most Curious Pictures, and collections of Engravings, 6 vols. 8vo.; and A Dictionary of Celebrated Persons of the Eighteenth Century, continued after his death by J. H. M. Ernesti and others, at Cobourg. Hirsching's portion of the work consists of the first five volumes. He died at Erlangen, March 11th, 1800.

HIRSUTE, *adj.* Latin *hirsutus.* Rough; rugged.

There are bulbous, fibrous, and *hirsute* roots: the *hirsute* is a middle sort, between the bulbous, and fibrous; that, besides the putting forth sap upwards and downwards, putteth forth in round. *Bacon.*

HIRTELLA, in botany, a genus of the monogynia order; and pentandria class of plants. There are five petals; the filaments are very long, persisting and spiral; the berry is monospermous; the style lateral. Species four; natives of Guiana and the West Indies.

HIRUDO, the leech, a genus of insects belonging to the order of vermes intestinæ. The body moves either forward or backward. There are several species, principally distinguished by their color. The most remarkable are the following:—

H. geometra, the geometrical leech, grows to an inch and a half in length; and has a smooth and glossy skin of a dusky-brown color but in some seasons greenish spotted with white. When in motion its back is elevated into a kind of ridge; and it then appears as if measuring the space it passed over like a compass, whence its name. Its tail is remarkably broad; and it holds as firmly by it as by the head. It is common on stones in shallow running waters; and is often found on trouts and other fish after spawning time.

H. medicinalis, the medicinal leech, the form of which is well known, grows to the length of two or three inches. The body is of a blackish-brown color, marked on the back with six yellow spots, and edged with a yellow line on each side; but both the spots and the lines grow faint, and almost disappear, at some seasons. The head is smaller than the tail, which fixes itself very firmly to any thing the creature pleases. It is viviparous, and produces but one young one at a time, which is in July. It is an inhabitant of

clear running waters, and is well known for its use in bleeding. The leech's head is armed with a sharp instrument that makes three wounds at once. It consists of three sharp tubercles, strong enough to cut through the skin of a man, or even of an ox or horse. The mouth is as it were the body of the pump, and the tongue or fleshy nipple the sucker; by the working of this piece of mechanism, the blood is made to rise up to the conduit which conveys it to the animal's stomach, which is a membranaceous skin divided into twenty-four small cells. The blood which is sucked out is there preserved for several months almost without coagulating, and proves a store of provision to the animal. The nutritious parts, pure and already digested by animals, require not to be disengaged from the heterogeneous substances: nor indeed is there any thing like an anus discoverable in the leech; mere transpiration seems to be all that it performs, the matter fixing on the surface of its body, and afterwards coming off in small threads. Of this an experiment may be tried by putting a leech into oil, where it keeps alive for several days; upon being taken out and put into water, there appears to loosen from its body, a kind of slough shaped like the creature's body. The organ of respiration seems to be situated in the mouth; for if, like an insect, it drew its breath through vent holes, it would not subsist in oil, as by it they would be stopped up. This is the only species that is used in medicine; being applied to the skin to draw off blood. If the leech does not fasten, a drop of sugared milk is put on the spot it is wished to fix on, or a little blood is drawn by means of a slight puncture, after which it immediately settles. The leech when fixed should be watched, lest it should find its way into the anus when used for the hemorrhoids, or penetrate into the œsophagus if employed to draw the gums; otherwise it would make great havock in the stomach or intestines. In such a case, the best and quickest remedy is to swallow some salt; the application of which makes it quit its hold when it sucks longer than is intended. Salt of tartar, volatile alkali, pepper, and acids, make it also leave the part on which it was applied. Cows and horses have been known to receive them in drinking into the throat. The usual remedy is to force down some salt, which makes them fall off. If, on the contrary, it is intended that the leech should draw a larger quantity of blood, the end of its tail is cut off; and it then sucks continually to make up the loss it sustains. The discharge occasioned by the puncture of a leech is usually of more service than the process itself. When too abundant, it is easily stopped with brandy, vinegar, or other styptics, or with a compress of dry linen rag bound strongly on the bleeding orifice.

H. muricata, the muricated leech, has a taper body, rounded at the greater extremity, and furnished with two small tentacula, or horns, strongly annulated and rugged upon the rings, the tail dilated. It inhabits the Atlantic Ocean, and is by the fishermen called the sea-leech. It adheres to fish, and generally leaves a black mark on the spot.

H. sangui-suga, the horse-leech, is of a larger size than the medicinal leech. Its skin is smooth and glossy; the body is depressed; the back is dusky; and the belly is of a yellowish-green, having a yellow lateral margin. It inhabits stagnant waters. At Ceylon, travellers who walk bare-legged are molested by the great numbers of leeches concealed under the grass. All leeches vary in their color at some seasons, but they are generally of a dusky greenish-brown or yellow, and often variegated. They are very restless before a change of weather, if confined in glasses. They suck blood with greater avidity than the medicinal, and are dangerous to apply to the skin for that reason.

HIRUNDO, in ornithology, a genus of birds of the order of passeres. There are numerous species, chiefly distinguished by their color. The most remarkable are the following:—

1. H. ambrosiaca, the ambergris swallow. It is about the size of a wren, with a gray plumage and a very forked tail; the bill is blackish, and the legs are brown. It inhabits Senegal, and is said to smell very strong of ambergris.

1. H. apus, the swift, is a large species, being nearly eight inches long, with an extent of wing nearly eighteen inches, though the weight of the bird is only one ounce. Their feet are so small, that the action of walking and rising from the ground is extremely difficult, but they have full compensation, being furnished with ample means for an easy and continual flight. It is more on the wing than any other swallow; its flight is more rapid, and that attended with a shrill scream. It rests by clinging against some wall, or other apt body: whence Klein styles this species hirundo muraria. It breeds under the eaves of houses, in steeples, and other lofty buildings; and makes its nest of grasses and feathers. Its feet are of a particular structure, all the toes standing forward: the least consists of only one bone; the others of an equal number, viz. two each; in which they differ from those of all other birds; a construction, however, nicely adapted to the purposes in which their feet are employed. The swift is a summer inhabitant of these kingdoms. It comes the latest, and departs the soonest, of any of the tribe; not always staying till the middle of August, and often not arriving before the beginning of May. A pair of these birds were found adhering by their claws, and in a torpid state, in February 1766, under the roof of Longnor Chapel, in Shropshire; on being brought to a fire, they revived, and moved about in the room. The materials of its nest it collects either as they are carried about by the winds, or picks them up from the surface in its sweeping flight. Its food is undeniably the insects that fill the air. Its drink is taken in transient sips from the water's surface. Even its amorous rites are performed on high. The swift is a most alert bird, rising very early and retiring to roost very late; and is on the wing in the height of summer at least sixteen hours. In the longest days it does not withdraw to rest till nine in the evening, being the latest of all day birds. Just before they retire whole groups of them assemble high in the air, and squeak, and shoot about with wonderful rapidity. But this bird is never so much alive as in sultry thundery

weather, when it expresses great alacrity, and calls forth all its powers. When the hen has sat hard all day, she rushes forth just as it is almost dark, and stretches and relieves her weary limbs, and snatches a scanty meal for a few minutes, and then returns to her duty of incubation. Swifts, when wantonly shot while they have young, discover a little lump of insects in their mouths, which they pouch and hold under their tongue. In general, as already observed, they feed in a much higher district than the other species; they also range to vast distances; since locomotion is no labor to them, who are endowed with such wonderful powers of wing. At certain times in the summer, however, they have been observed hawking very low for hours together over pools and streams; and, upon enquiring into the object of their pursuit that induced them to descend so much below their usual range, it has been found that they were taking phryganeæ, ephemeræ, and libellulæ (cadew-flies, may-flies, and dragon-flies), that were just emerged out of their aurelia state. They are out all day long, even though wet, feeding, and disregarding the rain. But windy weather, and particularly with heavy showers, they dislike; and on such days withdraw, and are scarcely ever seen. 'There is a circumstance respecting the color of swifts,' Mr. White remarks, 'which seems not to be unworthy our attention. When they arrive in the spring, they are all over of a glossy dark soot color, except their chins, which are white; but, by being all day long in the sun and air, they become quite weather-beaten and bleached before they depart, and yet they return glossy again in the spring. Now if they pursue the sun into lower latitudes, as some suppose, in order to enjoy a perpetual summer, why do they not return bleached? Do they not rather perhaps retire to rest for a season, and at that juncture moult and change their feathers, since all other birds are known to moult soon after the season of breeding? Swifts are very anomalous in many particulars, dissenting from all their congeners not only in the number of their young, but in breeding once in a summer; whereas all the other British hirundines breed invariably twice. They retire, as to the main body of them, by the 10th of August, and sometimes a few days sooner; and every straggler invariably withdraws by the 20th, while their congeners, all of them, stay till the beginning of October; many through all that month, and some occasionally to the beginning of November. This early retreat is mysterious and wonderful, since that time is often the sweetest season in the year. But, what is more extraordinary, they begin to retire still earlier in the most southerly parts of Andalusia, where they can be no ways influenced by any defect of heat; or, as one might suppose, defect of food. Are they regulated in their motions with us by a failure of food, or by a propensity to moulting, or by a disposition to rest after so rapid a life, or by what? This is one of those incidents in natural history, that not only baffles our searches, but almost eludes our guesses. Swifts never perch on trees or roofs, and so never congregate with their congeners. They are fearless while haunting their nesting places, and are not to be scared with a gun; and are often beaten down with poles and cudgels as they stoop to go under the eaves. Swifts are much infested with those pests to the genus called hippoboscæ hirundinis; and often wriggle and scratch themselves in their flight, to get rid of that clinging annoyance. And young ones, overrun with these insects, are sometimes found under their nests, fallen to the ground; the number of vermin rendering their abode insupportable. The Swedes have bestowed a very pertinent name on this swallow, calling it ring-swala, from the perpetual rings or circles that it takes round the scene of its nidification. As these birds are apt to catch at every thing on the wing, many have taken them by a bait on a cock-chafer tied to a thread, which they have swallowed as freely as a fish theirs. In the Isle of Zant the boys are said to get on an elevated place, and, merely with a hook baited with a feather, have caught five or six dozen of them in a day. Besides our island, the swift is known to inhabit the whole of the European continent; and has also been noticed at the Cape of Good Hope, and Carolina in North America. Hence, most likely, it is a general inhabitant of both the old and new continents.

3. H. borbonica, the wheat swallow, is about the size of the swift: the plumage above is blackish brown; beneath gray, marked with longitudinal brown spots: the tail is even at the end: the bill and legs are black. This species inhabits the Isle of France; frequenting places sown with wheat, and glades of woods; affecting elevated situations, and frequently seen perched on trees and stones. It follows herds of cattle for the sake of the flies that surround them; and is frequently seen in the wake of ships in great numbers, in the road near the isle, for the same purpose. It is often observed in the evenings about the clefts in the mountains, where it is said to pass the night, and where it makes its nest; which is composed of straw and feathers. It lays two eggs, of a gray color, dotted with brown.

4. H. Cayennensis, the white-colored swallow, is about the size of the martin: the head and bill are black; the chin and throat white, passing from the last in a narrow collar round the neck; between the bill and eye is a streak of white, which forks off into two, one passing a little above, and the other a little way beneath the eye; the rest of the plumage is black, with a gloss of violet; but the greater coverts, nearest the body, are brown edged with white: the quills and tail are black, the last forked; the legs are black, and all the four toes placed before, as in the swift, and covered with feathers to the claws. This bird makes its nest in the houses at Cayenne. It is of a large size, in shape of a truncated cone; five inches one way by three the other, and nine inches in length. It is composed of the down of dog's bane, well woven together; the cavity divided obliquely about the middle, lengthways, by a partition, which spreads over that part of the nest where the eggs lie, which is pretty near the base: a small parcel of the same soft down, forming a kind of plug, is placed over the top, serving to keep the young

brood from the impression of the air; whence we may suppose them to be very tender.

6. H. esculenta, the edible swallow, is of a blackish-gray color, inclining a little to green; but on the back to the tail, as well as on the belly, this blackish color gradually changes into a mouse color. The whole length of the bird, from the bill to the tail, is about four inches and a half, and its height from the bill to the extremity of the middle toe three and a quarter. The distance from the tip of the one wing to that of the other, when extended, is ten and a quarter. The largest feathers of the wing are about four inches in length. The head is flat; but, on account of the thickness of the feathers, appears round, and to be of a large size in proportion to the rest of the body. The bill is broad, and ends in a sharp extremity, bent downwards, in the form of an awl. The width of it is increased by a naked piece of skin, somewhat like parchment, which, when the bill is shut, lies folded together; but which, when the bill opens, is considerably extended, and enables the bird to catch with greater ease, while on wing, the insects which serve it for food. The eyes are black, and of a considerable size. The tongue, which is not forked, is shaped like an arrow. The ears are flat, round, naked spots, with small oblong openings, and are entirely concealed under the feathers of the head. The neck is very short, as well as the legs and bones of the wings. The thighs are wholly covered with feathers, and the very tender lower parts of the legs, and the feet themselves, are covered with a skin like black parchment. Each foot has four toes, three of which are before, and one turned backwards. They are all detached from each other to the roots; and the middle one, together with the claw, is fully as long as the lower part of the leg. Each toe is furnished with a black, sharp, crooked claw, of a considerable length, by which the animal can, with great facility, attach himself to crags and rocks. The tail is fully as long as the body together with the neck and the head. When extended it is in the form of a wedge, and consists of ten large feathers. The first four on each side are long; and, when the tail is closed, extend almost an inch beyond the rest. The other feathers decrease towards the middle of the tail, and are equal to about the length of the body. But the most curious part of the natural history of this bird consists in the nest, which is composed of such materials as render it not only edible, but one of the greatest dainties of the Asiatic epicures. These nests are found in vast numbers in certain caverns, in various isles in the Sooloo Archipelago, situated between long. 117° and 120°, and lat. 5° and 7°, particularly in three small isles, or rather rocks; in the caverns of which the nests are found fixed to the stones in astonishing numbers. They are also found in amazing quantities on a small island called Toc, in the straits of Sunda, the caverns of which are lined with the nests; but no where in greater abundance than about Croee, near the south end of Sumatra, four miles up a river of that name. But they are not peculiar to the above places; for they are likewise common from Java to Cochinchina on the north, and from the point of Sumatra west, to New Guinea on the east, where the sea is said to be covered with a viscous substance like half-melted glue, which the bird is supposed either to take up from the surface with its bill during flight, or to pick from the rocks when left there by the waves Of these nests, it is said, the Dutch alone export from Batavia 1000 pickles, upwards of 1300lbs. English weight, every year, which are brought from the Isles of Cochinchina, and those lying to the east of them. It is surprising that, among other luxuries imported from the east, these nests should not have found a way to our tables; being yet so scarce in England as to be kept as rarities in the cabinets of collectors. The bird itself at Sumatra is called layonglayong.

H. melba, the white-bellied swift, is in length eight inches and a half, and weighs 2 oz. 4 dr.; the bill is half an inch long, somewhat bent, and black: the upper parts of the body are of a gray brown; the wings and tail deepest, with a gloss of red and green in some lights: the throat, breast, and belly, are white; on the neck is a collar of gray brown, mixed with black: the sides are dusky, and white mixed; lower part of the belly and under tail-coverts the same as the back: the legs are flesh-colored, and covered with feathers on the fore part and inside: all the toes are placed forward, as in our swift. This bird inhabits the mountainous parts of Spain; building in the holes of rocks. It is found also on the borders of the Rhone, in Savoy, the isle of Malta, Alps of Switzerland, and rock of Gibraltar. It comes into Savoy the beginning of April, and frequents the ponds and marshes for fifteen or twenty days; after which it retires to the mountainous parts to breed. It flies higher than our swift; but feeds on the same food, and its flesh is accounted a delicate morsel. This species is not numerous. Scopoli says it builds on the summit of the mountains of Tyrol.

H. nigra, the black swallow, measures nearly six inches in length: the color of the bird is wholly black, and the tail is forked. It inhabits St. Domingo and Cayenne; but it is not numerous. It is often seen to perch on dead trees: and only inhabits dry savannahs inland. It scoops out a hole in the earth, half a foot long, with the mouth, very small, so as just to permit entrance: in this cavity it constructs the nest and rears its young.

H. purpurea, the purple swallow, is in length seven inches, and the whole body is of a deep violet, very glossy: the quills and tail are of the same color, but still deeper, and the last forked: the legs and claws are blackish, and the bill is black. The color of the female is dusky brown, with a slight tinge of violet. This species is found in summer in Carolina and Virginia: coming in May, and retiring at the approach of winter. The people are very fond of them, and make little conveniencies of boards on the outsides of their houses for the birds to build in, as is done for sparrows in England; being desirous to keep them near, as they are of much use in alarming the poultry of the approach of the hawk and other birds of prey; not only shrieking violently on the appearance of these enemies, but attack

ing them with all the efforts of our martins in Europe.

H. riparia, the sand martin, or shore bird, is four inches and three-quarters in length, with the whole upper parts of the body of a mouse-color, the throat and under parts white, the bill and legs blackish. It is common about the banks of rivers and sand-pits, where it terebrates a round and regular hole in the sand or earth, which is serpentine, horizontal, and about two feet deep. At the inner end of this burrow does the bird deposit, in a good degree of safety, her rude nest, consisting of fine grasses and feathers, usually goose-feathers,very inartificially laid together. 'Though at first,' says Mr. White, 'one would be disinclined to believe that this weak bird, with her soft and tender bill and claws, should ever be able to bore the stubborn sand-bank without entirely disabling herself; yet with these feeble instruments have I seen a pair of them make great despatch; and could remark how much they had scooped that day by the fresh sand which ran down the bank, and was of a different color from that which lay loose and bleached in the sun. In what space of time these little artists are able to mine and finish these cavities, I have never been able to discover; but it would be a matter worthy of observation, where it falls in the way of any naturalist to make his remarks. One thing is remarkable—that, after some years, the old holes are forsaken and new ones bored; perhaps because the old habitations grow foul and fetid from long use, or because they may so abound with fleas as to become untenantable. This species of swallow is strangely annoyed with fleas; and we have seen fleas, bed fleas (pulex irritans), swarming at the mouths of these holes, like bees on the stools of their hives. The sand martin arrives much about the same time with the swallow; and lays, as she does, from four to six white eggs. But as this species is cryptogame, carrying on the busines of nidification, incubation, and the support of its young in the dark, it would not be easy to ascertain the time of breeding, were it not for the coming forth of the broods, which appear much about the time, or rather somewhat earlier than those of the swallow. The nestlings are supported in common like those of their congeners, with gnats and other small insects; and sometimes they are fed with libellulæ (dragon flies) almost as long as themselves. This hirundo is said to lay only once in a year, and to produce its young more early than the rest of its tribe: though, from this last circumstance, it would seem probable that they breed at least a second time, like the house-martin and swallow. It does not always take pains to make a hole for a nest; frequently laying in cavities of quarries, and in hollows of trees, where it is convenient. When they happen to breed near hedges and inclosures they are often dispossessed of their breeding-holes by the house sparrow, which is on the same account a fell adversary to house martins. These hirundines are no songsters, but rather mute, making only a little harsh noise when a person approaches their nests. They seem not to be of a sociable turn, never with us congregating with their congeners in the autumn. They have a peculiar manner of flying; flitting about with odd jerks and vacillations, not unlike the motions of a butterfly. Doubtless the flight of all hirundines is influenced by, and adapted to, the peculiar sort of insects which furnish their food.

H. rustica, the common or chimney swallow, is distinguished from all the other species by the superior forkiness of its tail, and by the red spot on the forehead and under the chin. The crown of the head, the whole upper part of the body, and the coverts of the wings, are black, glossed with a rich purplish blue, and most resplendent in the male: the breast and belly white, and in the male tinged with red: the tail is black; the two middle feathers are plain, the others marked transversely near the ends with a white spot: the exterior feathers of the tail are much longer in the male than in the female. The food is the same with that of all the genus; viz. insects. For taking these, in their swiftest flight, their parts are admirably contrived; their mouths are very wide to take in flies, &c., in their quickest motions; their wings are long, and adapted for distant and continual flight: and their tails are forked, to enable them to turn the readier in pursuit of their prey. This species is the first comer of all the British hirundines; and appears in general on or about the 13th of April, though now and then a straggler is seen much earlier. This species, though called the chimney swallow, by no means builds altogether in chimneys, but often in barns and out-houses against the rafters; as Virgil long ago remarked, (Georg. lib. iv. 306). In Sweden she builds in barns, and is called ladw swala, the barn swallow. In the warmer parts of Europe, where there are no chimneys to houses except they are English built, she constructs her nest in porches, gateways, galleries, and open halls. But in general, with us, this species breeds in chimneys; and haunts those stacks where there is a constant fire, for the sake of warmth; generally prefering one adjoining to the kitchen, and disregarding the perpetual smoke of that funnel. Five or six or more feet down the chimney does this little bird begin to form her nest about the middle of May, which consists, like that of the house martin, of a crust or shell composed of dirt or mud, mixed with short pieces of straw to render it tough and permanent; with this difference, that, whereas the shell of the martin is nearly hemispheric, that of the swallow is open at the top, and like half a deep dish. This nest is lined with fine grasses, which are often collected as they float in the air. Wonderful is the address (Mr. White observes) which this adroit bird shows all day long in ascending and descending through so narrow a pass. When hovering over the mouth of the funnel, the vibration of her wings acting on the confined air occasions a rumbling noise like thunder. It is probable that the dam submits to this inconvenient situation, so low in the shaft, in order to secure her brood from rapacious birds, and particularly from owls, which frequently fall down chimneys, perhaps in attempting to get at these nestlings. This bird lays from four to six white eggs, dotted with red specks; and brings out her first brood about the last week in June, or the

first in July. The progressive method by which the young are introduced into life is very curious: First, they emerge from the shaft with difficulty enough, and often fall down into the room below: for a day or so they are fed on the chimney top, and are then conducted to the dead leafless bough of some tree, where, sitting in a row, they are attended with great assiduity, and may then be called perchers. In a day or two more they become fliers, but are still unable to take their own food: therefore they play about near the place where the dams are hawking for flies; and when a mouthful is collected, at a certain signal given, the dam and the nestling advance, rising towards each other, and meeting at an angle; the young one all the while uttering such a little quick note of gratitude and complacency, that one must have paid very little regard to the wonders of Nature, who has not remarked this feat. The dam betakes herself immediately to the rearing of a second brood, as soon as she is disengaged from her first; which she at once associates with the first broods of house martins; and with them congregates, clustering on sunny roofs, towers, and trees. She brings out her second brood towards the middle and end of August. Every species of hirundo drinks as it flies along, sipping the surface of the water; but the swallow only washes on the wing, by dropping into a pool for many times together; in very hot weather house martins and bank martins dip and wash a little. The swallow is a delicate songster, and in soft sunny weather sings both perching and flying, on trees in a kind of concert, and on chimney tops: it is also a bold flier, ranging to distant towns and commons even in windy weather, which the other species seem much to dislike; nay, even frequenting seaport towns, and making little excursions over the salt-water. Horsemen on wide downs are often closely attended by a little party of swallows for miles together, which play before and behind them, sweeping around, and collecting all the sculking insects that are roused by the trampling of the horses' feet: when the wind blows hard, without this expedient, they are often forced to settle to pick up their lurking prey. This species feeds much on little coleoptera, as well as on gnats and flies; and often settles on dug ground, or paths, for gravel to grind and digest its food. Mr. Pennant says, that, for a few days previous to their departure, they assemble in vast flocks on house-tops, churches, and trees, from whence they take their flight. They are supposed to take up their winter quarters in Senegal and parts adjacent; and seem to possess in turn the whole of the old continent, being known from Norway to the Cape of Good Hope on the one hand, and from Kamtschatka to India and Japan on the other. They are also found in all parts of North America, migrating north and south as with us. Kalm says, that in America they build in houses and under the outsides of the roofs; also on the mountains, in such parts of them as project beyond the bottom, as well as under the corners of perpendicular rocks.

12. H. urbica, the martin, is inferior in size to the chimney swallow, and its tail much less forked. The head and upper part of the body, except the rump, are black glossed with blue: the breast, belly, and rump are white; the feet are covered with a short white down. 'They begin to appear about the 16th of April; and for some time they in general pay no attention to the business of nidification: they play and sport about, either to recruit from the fatigue of their journey, if they do migrate at all; or else that their blood may recover its true tone and texture after it has been so long benumbed by the severities of winter. About the middle of May, if the weather be fine, the martin begins to think in earnest of providing a mansion for its family. The crust or shell of this nest seems to be formed of such dirt or loam as comes most readily to hand, and is tempered and wrought together with little bits of broken straws to render it tough and tenacious. As this bird often builds against a perpendicular wall, without any projecting ledge under, it requires its utmost efforts to get the first foundation firmly fixed, so that it may safely carry on the superstructure. On this occasion the bird not only clings with its claws, but partly supports itself by strongly inclining its tail against the wall, making that a fulcrum; and, thus steadied, it works and plasters the materials into the face of the brick or stone. But then, that this work may not, while it is soft and green, pull itself down by its own weight, the provident architect has prudence and forbearance enough not to advance her work too fast; but by building only in the morning, and by dedicating the rest of the day to food and amusement, gives it sufficient time to dry and harden. About half an inch seems to be a sufficient layer for a day. By this method, in about ten or twelve days, is formed an hemispheric nest, with a small aperture towards the top, strong, compact, and warm; and perfectly fitted for all the purposes for which it was intended. But then nothing is more common than for the house sparrow, as soon as the shell is finished, to seize on it as its own, to eject the owner, and to line it after its own manner. After so much labor is bestowed in erecting a mansion, as nature seldom works in vain, martins will breed on for several years together in the same nest, where it happens to be well sheltered and secure from the injuries of the weather. The shell or crust of the nest is a sort of rustic work, full of knobs and protuberances on the outside: nor is the inside of those that I have examined smoothed with any exactness at all; but it is rendered soft and warm, and fit for incubation, by a lining of small straws, grasses, and feathers; and sometimes by a bed of moss interwoven with wool. In this they tread or engender frequently during the time of building; and the hen lays from three to five white eggs. At first, when the young are hatched, and are in a naked and helpless condition, the parent birds, with tender assiduity, carry out what comes from their young. Were it not for this affectionate cleanliness, the nestlings would soon be burnt up and destroyed in so deep and hollow a nest, by their own caustic excrement. As soon as the young are able to shift for themselves, the dams immediately turn their thoughts

to the business of a second brood: while the first flight, shaken off and rejected by their nurses, congregate in great flocks, and are the birds that are seen clustering and hovering, on sunny mornings and evenings, round towers and steeples, and on the roofs of churches and houses. These congregatings usually begin to take place about the first week in August; and therefore we may conclude that by that time the first flight is pretty well over. Martins love to frequent towns, especially if there are great lakes and rivers at hand. They are by far the least agile of the British hirundines; their wings and tails are short, and therefore they are not capable of such surprising turns, and quick and glancing evolutions, as the swallow. Accordingly, they make use of a placid easy motion, in a middle region of the air, seldom mounting to any great height, and never sweeping long together over the surface of the ground or water. They do not wander far for food; but affect sheltered districts, over some lake, or under some hanging wood, or in some hollow vale, especially in windy weather. They breed the latest of all the swallow kind; in 1772 they had nestlings until October the 21st, and are never without young as late as Michaelmas. As the summer declines, the congregating flocks increase in numbers daily, by the constant accession of the second broods; till at last they swarm in myriads upon myriads round the villages on the Thames, darkening the face of the sky as they frequent the aits of that river, where they roost. They retire in vast flocks together about the beginning of October; but have appeared of late years in a considerable flight in this neighbourhood, for one day or two, as late as November the 3rd and 6th, after they were supposed to have been gone for more than a fortnight. They therefore withdraw, with us, the latest of any species. Unless these birds are very short-lived indeed, or unless they do not return to the district where they are bred, they must undergo vast devastations somewhere; for the birds that return yearly bear no manner of proportion to the birds that retire.

HIS, *Pronoun possessive.* Saxon þyr. The masculine possessive pronoun of he, anciently used in a neutral sense, where we now say its. It is sometimes used as a sign of the genitive case; as, the man his ground, for the man's ground. It is now rarely thus used, as its use proceeded probably from a false opinion that the *s* formative of the genitive case was *his* contracted. Sometimes used in opposition to this man's; anciently before self.

Of *his* linage am I and *his* ofspring
By veray line, as of the stok real;
And now I am so caitif and so thral,
That he that is my mortal enemy
I serve him as *his* squierly pourely.
Chaucer. The Knightes Tale.

Who can impress the forest, bid the tree
Unfix *his* earth-bound root?
Shakspeare. Macbeth.

Were I a king,
I should cut off the nobles for their lands,
Desire *his* jewels, and this other's house.
Shakspeare.

England *his* approaches makes as fierce
As waters to the sucking of a gulph.
Id. Henry V.

Opium loseth some of *his* poisonous quality if it be vapoured out, mingled with spirit of wine.
Bacon.

Where is this mankind now? who lives to age
Fit to be made Methusalem *his* page? *Donne.*

Every of us, each for *his* self, laboured how to recover him. *Sidney.*

This rule is not so general, but that it admitteth *his* exceptions. *Carew's Survey of Cornwall.*

Thus while he spake, each passion dimmed *his* face,
Thrice changed with pale ire envy and despair;
Which marred *his* borrowed visage and betrayed
Him counterfeit. *Milton's Paradise Lost.*

His mind secure does the vain stroke repeat,
And finds the drums Lewis's march did beat.
Marvell.

Whene'er I stoop he offers at a kiss;
And when my arms I stretch, he stretches *his*.
Addison.

As the wood-pigeon coos without *his* mate,
So shall my doleful dirge bewail her fate. *Gay.*

By thy fond consort, by thy father's cares,
By young Telemachus *his* blooming years. *Pope.*

'Let man's own sphere,' said he, 'confine *his* view;
Be man's peculiar work *his* sole delight.' *Beattie.*

HISINGEN, an island in the south-west of Sweden, at the mouth of the large river Gotha-Elf, on which the town of Gottenburg was first built. It is about sixteen miles long and six broad. Long. 11° 4′ 8″ E., lat. 57° 45′ N.

HISPA, in zoology, a genus of insects belonging to the coleoptera order, the characters of which are these:—The antennæ are fusiform, growing gradually larger from each extremity towards the middle, and are situated between the eyes: the thorax and elytra are covered with protuberances or spines. The H. atra, found in Britain, is all over of a deep unpolished black, and has the upper part of its body entirely covered with long and strong spines, which render it bristly like the shell of a chestnut. There is even a spine at the case of the antennæ; the thorax has a row set transversely, which are forked; and the elytra are furnished with a very great number that are single. Its being thus covered with spines makes it resemble a hedgehog in miniature. It is rather difficult to catch, letting itself fall down on the ground as soon as approached. It bears its antennæ upright before it. See Entomology.

HISPALIS, in ancient geography, a town of Bætica, in Hispania Ultra, an ancient mart or trading town on the Bætis, navigable quite up to it for ships of burden, and thence to Corduba for river barges. It was also called Colonia Romulensis. It had a conventus juridicus, a court of justice or assizes. It is now called Seville.

HISPANIA, in ancient geography, a country or kingdom of Europe, now called Spain; called Hesperia Ultima by Horace, because the westmost part of Europe; also Iberia, from the river Iberus. Its name Hispania, or Σπανια, is of Phœnician original, from its great number of rabbits; the Phœnicians, who settled several colonies on the coast, calling it Spanjah, from these animals. It has the sea on every side, except

on that next to Gaul, from which it is separated by the Pyrenees. The Romans first divided it into Hispania Citra and Ultra under two prætors. In that state it continued down to Augustus; who divided the Farther Spain into Bætica, which he left to the people to be governed by a proconsul; and Lusitania, which he added to his own provinces; calling the Hither Spain Tarraconensis. Hispania was anciently much celebrated for its fertility, of which it has greatly fallen short in modern times. Strabo says, the people were of a warlike turn; and, their bodies being formed for hardships and labor, they ever preferred war to peace, and were remarkably prodigal of life. See SPAIN.

HISPANIOLA, or St. Domingo, the largest of the Antilles or Caribbee Islands, in the West Indies. See DOMINGO (St.)

HISS, *v. a.*, *v. n.*, & *n. s.* } Sax. þircean, to
HIST, *interj.* } contemn; Dut. *hissen*. To utter a noise like that of a serpent and some other animals. It is remarkable, that this word cannot be pronounced without making the noise which it signifies. To condemn at a public execution; to explode; to procure disgrace: hiss, the voice of a serpent; censure; an expression of contempt, or disapprobation, as used in theatres: hist, an exclamation commanding silence. 'Of this word I know not the original: some have thought it a corruption of hush, hush it, husht, or hist; but I have heard that it is an Irish verb commanding silence.'—Dr. Johnson.

Every one will *hiss* him out to his disgrace.
Ecclus. xxii. 2.

The merchants shall *hiss* at thee. *Ezek.* xxvii. 36.

Men shall pursue with merited disgrace;
Hiss, clap their hands, and from his country chace.
Sandys.

Thy mother plays, and I
Play too; but so disgraced a part, whose issue
Will *hiss* me to my grave.
Shakspeare. Winter's Tale.

What's the newest grief?
—That of an hour's age doth *hiss* the speaker,
Each minute teems a new one. *Id. Macbeth.*

In the height of this bath to be thrown into the Thames and cooled glowing hot, in that surge, like a horse shoe; think of that; *hissing* hot. *Shakspeare.*

Mute silence *hist* along!
'Less Philomel will deign a song,
In her sweetest saddest plight.
Smoothing the rugged brow of night. *Milton.*

He *hiss* for *hiss* returned, with forked tongue
To forked tongue. *Id.*

He heard
On all sides from innumèrable tongues,
A dismal universal *hiss*, the sound
Of publick scorn! *Id.*

She would so shamefully fail in the last act, that instead of a plaudite she would deserve to be *hissed* off the stage. *More.*

I have seen many successions of men, who have shot themselves into the world, some bolting out upon the stage with vast applause, and others *hissed* off, and quitting it with disgrace. *Dryden.*

See the furies arise:
See the snakes that they rear,
How they *hiss* in their hair.
Id. Alexander's Feast.

Against the steed he threw
His forceful spear, which, *hissing* as it flew,
Pierced through the yielding planks. *Dryden.*

Fierce champion fortitude, that knows no fears
Of *hisses*, blows, or want, or loss of ears. *Pope.*

Hist, hist, says another that stood by, away, doctor; for here's a whole pack of dismals coming. *Swift.*

With penitential aspect as they pass,
All point at earth, and *hiss* at human pride,
The wisdom of the wise, and prancings of the great.
Young.

Thither with one consent they bend,
Their sorrows with their lives to end,
While each in thought already hears
The water *hissing* in his ears. *Beattie.*

HISSAR FEROZEH, a flat district of Delhi, Hindostan, situated between the twenty-eighth and thirtieth degrees of northern latitude, on the western side of the river Jumna. The only natural stream which runs through it is the small river Sursutty; and, in order to supply this deficiency, one of the Afghaun emperors of the fourteenth century caused two canals to be cut; the first from the Setlege, the other from the Jumna, both of which joined at the town of Hissar, whence they are supposed to have been divided into a number of small cuts. Thus a part of the district received the name of Harriana, up; but the country produces horses, camels, and cattle; and during the prosperous period of the Mogul empire it was considered as the personal estate of the heir apparent. Various petty chiefs now rule here. The chief towns are Hissar, Hansy, and Sursutty.

HISSAR FEROZEH, the capital of the foregoing district, is in the midst of a once sandy desert, where water was sold at a high price to the travellers that passed this way from Persia to Delhi. Sultan Feroz, having caused the two before-mentioned canals to be dug, laid the foundations of a town and fortress, to which he gave the name of the Fort of Feroz. It was built of stone brought from the neighbouring hills of Nosa, and now belongs to an independent chief. Long. 75° 53′ E., lat. 28° 41′ N.

HISTER, in entomology, a genus of the coleoptera order of insects. The first articulation of the antennæ is compressed and curved; the last is considerably larger than the others, and appears to be a solid knob; the head is drawn within the body; the mouth is forcipated; the elytra are shorter than the body; and the forelegs are dentated. The body is polished and very shining, and its form almost square; the thorax large and highly polished; anteriorly it is made with a slope, in the cavity of which is lodged the head, the position of which is often only discovered by the projection of the maxillæ; the head being, for the most part, so drawn under the thorax, that the insect looks as if it had none. The elytra are as it were cut off towards the extremity, and do not cover the whole of the abdomen. They are extremely smooth, and only have a few striæ, scarcely perceptible towards their outward side. Lastly, the hinder part of the abdomen, which projects beyond the elytra, is round and blunt. These insects are sometimes found in cow-dung, and often on sand. They vary prodigiously in size; but differ very little either in form or color, being all very dark. The larvæ, as well as the perfect insects, are frequently met with in the dung of horses, cows, &c.

HISTORY.

HISTO'RIAN, *n. s.*
HISTOR'ICAL, *adj.*
HISTOR'IC, *adj.*
HISTOR'ICALLY, *adv.*
HISTOR'IFY, *v. a.*
HISTORIOG'RAPHER, *n. s.*
HISTORIOG'RAPHY, *n. s.*
HIS'TORY, *n. s.*
HIS'TORY-PIECE, *n. s.*

Fr. *histoire*; Lat. *historia*; Gr. ιστορια. A writer of facts and events: historify, to relate or record in history: historiographer, ιστορια and γραφω, a writer of history: history, a narration of events, delivered with dignity; mere narration; knowledge of events narrated: history-piece, a picture representing some memorable event.

This false judge, that highte Appius,
(So was his name, for it is no fable,
But knowen for an *historical* thing notable,
The sentence of it sith is out of doute)
This false judge goth now fast aboute
To hasten his delit all that he may.
Chaucer. The Doctoures Tale.

Because the beginning seemeth abrupt, it needs that you know the occasion of these several adventures; for the method of a poet *historical* is not such as of an *historiographer*. *Spenser.*

O famous moniment of womens prayse!
Matchable either to Semiramis,
Whom antique *hietory* so high doth rayse,
Or to Hypsiphil, or to Thomiris. *Spenser.*

When that which the word of God doth but deliver *historically*, we construe as if it were legally meant, and so urge it further than we can prove it was intended, do we not add to the laws of God? *Hooker.*

What thanks sufficient, or what reeompence
Equal, have I to render thee, divine
Historian! *Milton.*

The gospels, which are weekly read, do all *historically* declare something which our Lord Jesus Christ himself either spoke, did, or suffered in his own person. *Id.*

His words or his oath,
Cannot bind him to troth,
And he values not credit or *history*,
And though he has served thro'
Two 'prenticeships now,
He knows not his trade nor his mystery. *Marvell.*

The third age they term historicon; that is, such wherein matters have been more truly *historified*, and therefore may be believed. *Browne's Vulgar Errours.*

O, muse, *historify*
Her praise, whose praise to learn your skill hath framed me. *Sidney.*

In an *historical* relation we use terms that are most proper and best known. *Burnet's Theory.*

Our country which has produced writers of the first figure in every other kind of work, has been very barren in good *historians*. *Addison.*

What poor ideas must strangers conceive of persons famous among us, should they form their notions of them from the writings of those our *historiographers*. *Id.*

With equal justice and *historick* care,
Their laws, their toils, their arms with his compare.
Prior.

I put the journals into a strong box, after the manner of the *historiographers* of some eastern monarchs.
Arbuthnot's History of John Bull.

After his life has been rather invented than written, I shall consider him *historically* as an author, with regard to those works he has left behind him.
Pope's Essay on Homer.

His works resemble a large *history-piece*, where even the less important figures have some convenient place. *Pope.*

Here rising bold the patriot's honest face;
There warriors frowning in *historick* brass. *Id.*
Justly Cæsar scorns the poet's lays;
It is to *history* he trusts for praise. *Id.*
What *histories* of toil could I declare!
But still long-wearied nature wants repair. *Id.*
Not added years on years my task could close,
The long *historian* of my country's woes. *Id.*

History, so far as it relates to the affairs of the Bible, is necessary to divines. *Watts.*

HISTORY may, in general, be defined an account of the most remarkable events which have occured in the world, arranged in the order in which they happened, together with the causes from which they originated, and the different effects they produced. The word ιστορια literally denotes a search for curious things, a desire of knowing, or even a rehearsal of things we have seen; being formed from the verb ιστορειν, which properly signifies to know a thing by having seen it. But the ideas attached to it became gradually more extensive, and it is now applied to the knowledge of things taken from the report of others: from the verb ἱστημι, I know; and hence, among the ancients, several of their great men were called polyhistores, i. e. persons of various and general knowledge.

The word history is, however, sometimes used to signify a description of things, as well as an account of facts. Thus Theophrastus calls his work on the nature and properties of plants, a history of plants; we have a treatise of Aristotle, entitled a history of animals; and to this day the description of plants, animals, and minerals, are called by the general name of natural history.

But what chiefly merits the name of history, and what is here considered as such, is an account of the principal transactions of mankind from the beginning of the world; generally divided into two parts, viz. civil and ecclesiastical. The first contains the history of mankind in their various relations to one another in common life; the second considers them as acting, or pretending to act, in obedience to what they believe to be the will of the Supreme Being. Civil history, therefore, includes an account of all the different states that have existed in the world, and likewise of those men who in different ages of the world have most eminently distinguished themselves, either for their good or evil actions. This last part of civil history, however, sometimes forms a distinct branch of study styled biography.

Few accomplishments are more valued than an accurate knowledge of the histories of different nations; and no literary production is more respectable than a well-written history of any nation: although the truth of Goldsmith's remark must be acknowledged, that history is generally little more than the register of human contention and calamity.

Geography and chronology have been called the eyes of history. The person who would

study history, therefore, ought first to make himself acquainted with the state of the world in general in different ages; the nations who inhabited the different parts of it; what their extent of territory was; at what particular time they arose, and when they declined. He should next inform himself of the various events which have happened to each particular nation; and thus he will discover many of the causes of those revolutions, which before he only knew as facts. For, a person may be familiar with the Roman history from the time of Romulus, without knowing why the city of Rome happened to be built at that time. This cannot be understood without a particular knowledge of the former state of Italy, and even of Greece and Asia; the origin of the Romans being commonly traced as high as Æneas, one of the heroes of Troy.

The outline of history may be easily obtained by the inspection of an historical chart, such as that subjoined to the present treatise. See plate HISTORY. The following short abridgment of general history may also serve to assist the student.

The plan extends back only to the Flood; the preceding period of 1656 years is therefore left blank in the chart. There being 2348 years from the Flood to the birth of Christ, the space between them is divided into twenty-three parts, each representing 100 years or a century, and a fraction representing the remaining forty-eight years. The space from the birth of Christ downwards is divided into eighteen parts or centuries: and all these parts, together with some centuries preceding the birth of Christ, are subdived into tens.

The vertical columns are geographical divisions; and events are marked in their proper centuries and proper columns. Thus the rise of any state, as that of Assyria, is marked in its proper geographical column, and in that place of the twenty-first century before Christ at which the beginning of its history is dated; thence we trace its continuance to the end of the seventh century before Christ, when it became extinct. The building of Rome is marked about the middle of the eighth century before Christ. Its territory extends by degrees to the conquest of all Italy; next to Spain, Macedonia, &c., until it comes to extend from Britain to Egypt. It continues of this magnitude until about the middle of the fifth century after Christ, when it begins to lose those provinces out of which the modern kingdoms of Europe have been formed in the order set down. As this appears on mere inspection, it will be more easily remembered than when it is conveyed in numbers only. The dates are taken chiefly from Blair's Chronological Tables. It would have been easy to have extended this chart by inserting remarkable events, the successions of kings and great men, &c., but clearness and simplicity appeared a preferable object. It was therefore thought proper to leave to every person the filling up of his own plan with such articles as are most in the line of his study. We have given a few specimens of the succession of the Roman emperors, and of the kings of England and France; and of the eras of one or two remarkable men, as those of Tacitus the historian, and Attila. One person may fill this plan with the names of statesmen and warriors, another with scholars and philosophers, &c. As space is here employed to represent time, it is material that equal periods should be represented by equal spaces; and, if possible, that the parts of the same empire should be placed together. We have seen both these circumstances neglected in charts of universal history.

PART I.

OF CIVIL HISTORY.

INTRODUCTION.

Civil History, though it might seem incapable of any natural division, except that of arranging it according to the different states whose transactions it describes, may yet be very properly divided into the following periods, at each of which a great revolution took place, either with regard to the whole world, or a very considerable part of it: viz.

1. The creation of man; 2. The flood; 3. The commencement of profane history, i. e. when leaving the fabulous relations of heroes, demigods, &c., to the poets, we arrive at some facts which demand our belief. 4. The conquest of Babylon by Cyrus, and the destruction of the Babylonian empire. 5. The reign of Alexander the Great, and the overthrow of the Persian empire. 6. The destruction of Carthage by the Romans, when the latter had no longer any rival capable of opposing their aim at universal empire. 7. The reign of Trajan, when the Roman empire was at its greatest extent. 8. The division of the empire under Constantine. 9. The destruction of the western empire by Odoacer, and the settlement of the different nations of Europe. 10. The rise of Mahomet and the conquests of the Saracens and Turks. 11. The Crusades, and the space intervening between that time and the American war. 12. The last but not the least important era, from the commencement of the American war to the period of the French revolution.

With regard to the number of years which have elapsed since the creation of the world, there have been many disputes. The compilers of the Universal History determine it to have taken place in the year 4305 B. C., so that, according to them, the world is now in the 6106th year of its age. Others think it was created only 4000 years B. C., so that it is not yet 5831 years old. But see our article CHRONOLOGY. Be this as it will, however, the whole account of the creation rests on the truth of the Mosaic history; which we must of necessity accept, because we can find no other, which does not either abound with the grossest absurdities, or lead us into absolute darkness. The Chinese and Egyptian pretensions to antiquity are so absurd and ridiculous, that the bare reading of them must be a sufficient confutation of those pretensions to every reasonable person.

SECT. I.—FROM THE CREATION TO THE DELUGE.

The transactions during this period are little known, nothing indeed being recorded of them

but what is to be found in the first six chapters of Genesis. In general, we know, that men were not at that time in a savage state, as poets and even historians have supposed; but that they had made some progress in the arts, had invented music, and found out the method of working metals. They seem also to have lived in one vast community, without any of those divisions into different nations which have since taken place, and which evidently proceeded from the confusion of languages.

The most material part of their history, however, is, that having once begun to trangress the divine commands, they proceeded to greater and greater lengths of wickedness, till at last the Deity thought proper to send a flood on the earth, which destroyed the whole human race, except eight persons, viz. Noah and his family.

This terrible catastrophe happened, according to the Hebrew copy of the Bible, 1656 years after the creation; according to the Samaritan copy, 1307. For the different conjectures concerning the natural causes of the flood, see the article DELUGE.

SECT. II.—FROM THE DELUGE TO THE COMMENCEMENT OF PROFANE HISTORY.

For the history of this period we must again have recourse to the Scriptures, almost as much as for that of the first. We now find the human race reduced to eight persons, possessed of nothing but what they had saved in the ark, and the whole world to be stored with animals from those which had been preserved along with them. In what country their original settlement was made, is uncertain. The ark rested on Mount Ararat in Armenia, but it is impossible to know whether Noah and his sons made any stay in the neighbourhood of this mountain or not. Certain it is, that some time after the whole or the greatest part of the human race were assembled in Babylonia, where they engaged in building a tower, with the foolish and impious intention, as it would seem, of ascending to heaven. The Deity punished them by confounding their language; whence the division of mankind into different nations.

By the most probable accounts Gomer, the son of Japheth the son of Noah, was the father of the Gomerians or Celtes, i. e. of all the barbarous nations who inhabited the northern parts of Europe, under the names of Gauls, Cimbrians, Goths, &c., and who also migrated into Spain, where they were called Celtiberians. From Magog, Meshech, and Tubal, three of Gomer's brethren, proceeded the Scythians, Sarmatians, Tartars, and Moguls. The other three sons of Japheth, Madai, Javan, and Tiras, are said to have been the fathers of the Medes, the Ionians, Greeks, and Thracians.

The children of Shem were Elam, Asshur, Arphaxad, Lud, and Aram. The first settled in Persia, where he became the father of that mighty nation: the descendants of Asshur peopled Assyria: Arphaxad settled in Chaldea. Lud is supposed by Josephus to have taken up his residence in Lydia; though this is controverted. Aram, with more certainty, is believed to have settled in Mesopotamia and Syria.

The children of Ham were Cush, Mizraim Phut, and Canaan. Cush is thought to have remained in Babylonia, and to have been king of the south-east parts of it, afterwards called Khuzestan. His descendants are supposed to have removed into the eastern parts of Arabia; from whence they by degrees migrated into the corresponding part of Africa. Mizraim peopled Egypt, Ethiopia, Cyrenaica, Libya, and the rest of the northern parts of the same continent. The place where Phut settled is not known; but Canaan is universally allowed to have settled in Phœnicia; and to have founded those nations who inhabited Judea, and were afterwards mostly exterminated by the Jews.

Monarchical government began early, Nimrod the son of Cush having procured himself to be made king of Babylon. Asshur soon after emigrated from the new kingdom; built Nineveh, afterwards capital of the Assyrian empire; and two other cities, called Resen and Rehoboth, of the situation of which we are now ignorant. Whether Asshur at this time set up as king for himself, or whether he held those cities as vassal to Nimrod, is uncertain. About the same time various other kingdoms sprang up in different parts of the world. Thus the Scripture mentions the kings of Egypt, Gerar, Sodom, Gomorrah, &c., in the time of Abraham; and we may reasonably suppose, that these kings reigned over nations which had existed for some time.

The first considerable national revolution on record is the migration of the Israelites out of Egypt, and their establishment in the land of Canaan. For the history of these transactions we must refer to the Old Testament, where the reader will see that it was attended with a terrible catastrophe to the Egyptians, and with the utter extermination of some of the descendants of Ham, who inhabited Judea. The settlement of the Jews in the land of Canaan is supposed to have happened about 1491 B. C.

For nearly 200 years after this period we find no authentic account of any other nations than those mentioned in Scripture. About 1260 B.C. the Greeks began to make other communities feel the effects of that enterprising and martial spirit for which they were so remarkable, and which they had undoubtedly exercised upon one another long before. Their first enterprise was an invasion of Colchis, for the sake of the golden fleece. Whatever was the nature of this expedition, it is probable they succeeded in it; and that this specimen of the produce and riches of Asia inclined them to Asiatic expeditions afterwards. All this time we are totally in the dark about the state of Asia and Africa, except in so far as can be conjectured from Scripture. The ancient empires of Babylon, Assyria, and Persia, probably still continued in the former continent, and Egypt and Ethiopia seem to have been considerable kingdoms in the latter.

About 1184 years B. C. the Greeks again distinguished themselves by their expedition against Troy, a city of Phrygia Minor; which they plundered and burnt, massacreing the inhabitants with the most unrelenting cruelty. Æneas, a Trojan prince, escaped with some followers into Italy, where he became the remote founder of the

Roman empire. At this time Greece was divided into a number of small principalities, several of which seem to have been in subjection to Agamemnon, king of Mycenæ. In the reign of Atreus, the father of Agamemnon, the Heraclidæ, who had been banished by Eurystheus, were again obliged to leave this country. Under their champion Hyllus they claimed the kingdom of Mycenæ as their right, pretending that it belonged to their ancestor Hercules, who was unjustly deprived of it by Eurystheus. See HERACLIDÆ and HERCULES. The controversy was decided by single combat; but, Hyllus being killed, they departed, under a promise of not returning for fifty years.

About the time of the Trojan war, also, we find the Lydians, Mysians, and some other nations of Asia Minor, first mentioned in history. The names of the Greek states mentioned during this uncertain period are: 1. Sicyon. 2. The Leleges. 3. Messenia. 4. Attica. 5. Crete. 6. Argos. 7. Sparta. 8. Pelasgia. 9. Thessaly. 10. Attica. 11. Phocis. 12. Locris. 13. Ozolea. 14. Corinth. 15. Eleusis. 16. Elis. 17. Pilus. 18. Arcadia. 19. Ægina. 20. Ithaca. 21. Cephalenia. 22. Phthia. 23. Phocidia. 24. Ephyra. 25. Æolia. 26. Thebes. 27. Callista. 28. Ætolia. 29. The Dolopes. 30. Oechalia. 31. Mycenæ. 32. Eubœa. 33. The Minyæ. 34. Doris. 35. Pheræ. 36. Ionia. 37. Trachin. 38. Thesprotia. 39. Myrmidonia. 40. Salamis. 41. Scyros. 42. Hyperia or Melite. 43. The Vulcanian Isles. 44. Megara. 45. Epirus. 46. Achaia. 47. The isles of the Ægean Sea. Concerning many of these we know little or nothing; the most remarkable particulars respecting the rest may be found under their names.

About 1048 B.C. the kingdom of Judea under king David approached its utmost extent of power. Leaving the reader to acquaint himself, from Scripture, with the details of its condition under Solomon, we may observe that the first shock given to the Jewish grandeur in the division of the kingdom into two, through the imprudence of Rehoboam, rendered it the more easily a prey to Shishak king of Egypt; who five years after came and pillaged Jerusalem, and all the fortified cities of Judah. The commerce to the East Indies, begun by Solomon, seems now to have been discontinued. Whether this Shishak was the Sesostris of profane writers or not, seems questionable; his expedition against Jerusalem, as recorded in Scripture, was very similar to the desultory conquests ascribed to Sesostris, and it seems impossible to fix on any other king of Egypt who can be supposed to have undertaken this expedition in the days of Rehoboam.

In 941 B.C. Zera, an Ethiopian, invaded Judea with an army of 1,000,000 infantry and 300 chariots; but was defeated with great slaughter by Asa, who engaged him with an army of 580,000 men. About this time also the Syrians had become a considerable people, and bitter enemies both to the kings of Israel and Judah; aiming in fact at the conquest of both nations, by pretending to assist the one against the other. In 740 B.C., however, the Syrian empire was totally destroyed by Tiglath-Pileser, king of Assyria; as was also the kingdom of Samaria by Shalmaneser his successor in 721. The people were either massacred, or carried captives into Media, Persia, and the countries about the Caspian Sea.

While the eastern nations were thus destroying each other, the foundations of very formidable empires were laid in the west, which, in process of time, were to swallow up almost all the eastern ones. In Africa, Carthage was founded by a Tyrian colony, about 869 B.C., according to those who ascribe the highest antiquity to that city; but, according to others, it was founded only in 769, or 770 B.C. In Europe a very considerable revolution took place about 900 B.C. The Heraclidæ, after several unsuccessful attempts, at last conquered the whole Peloponnesus. From this time the Grecian states became more civilised, and their history less obscure. The institution, or rather the revival and continuance, of the Olympic games, in 776 B.C., also greatly facilitated not only the writing of their history, but that of other nations; for, as each Olympiad consisted of four years, the chronology of every important event became indubitably fixed by referring it to such and such an Olympiad. In 748 B.C., or the last year of the seventh Olympiad, the foundation of Rome was laid by Romulus; and, forty-three years after, the Spartan state was new modelled, and received from Lycurgus those laws, by observing of which it afterwards arrived at such a pitch of prosperity.

SECT. III.—FROM THE COMMENCEMENT OF PROFANE HISTORY TO THE ERECTION OF THE BABYLONIAN EMPIRE BY NEBUCHADNEZZAR.

With the beginning of the twenty-eighth Olympiad, or 568 B.C., commences the third general period above mentioned, when profane history becomes somewhat clear, and the relations concerning the different nations may be depended upon with some degree of certainty. The general state of the world at this period was as follows:—

The northern parts of Europe were thinly inhabited, or filled with unknown and barbarous nations. France and Spain were inhabited by the Gomerians or Celtes. Italy was divided into a number of petty states, arising partly from Gaulish, and partly from Grecian colonies, among which the Romans had already become formidable. They were governed by their sixth king, Servius Tullius; had increased their city by the demolition of Alba Longa, and the removal of its inhabitants to Rome; and had enlarged their dominions by several cities taken from their neighbours.

Greece was divided into a number of small states, among which the Athenians and Spartans, being the most remarkable, were rivals to each other. The former had, about 599 B.C., received the excellent laws of Solon, and were enriching themselves by navigation and commerce; the latter were become formidable by the martial institutions of Lycurgus. The other states of most consideration were Corinth, Thebes, Argos, and Arcadia.

In Asia Nebuchadnezzar now sat on the throne of Babylon. By him the kingdom of Judea was

totally overthrown in 587 B. C. Three years before this he had taken and razed the city of Tyre, and over-run all Egypt. He is even said by Josephus to have conquered Spain, and reigned there nine years; but this seems improbable. His empire comprehended Phœnicia, Palestine, Syria, Babylonia, Media and Persia, and part of India. When we consider that the whole strength of this mighty empire was employed in beautifying the metropolis, we cannot regard the wonders of that city, as related by Herodotus, as at all incredible.

Sect. IV.—From the Erection of the Babylonian Empire to its Overthrow by Cyrus.

This fourth general period is very short, embracing only the revolution occasioned by the misconduct of Evil-merodach, Nebuchadnezzar's son, in his father's life time. Having, in a hunting match, entered the country of the Medes, and some of his troops coming up to relieve the garrisons in those places, he joined them to those already with him, and without the least provocation began to plunder and lay waste the country. This produced an immediate revolt, which quickly extended over all Media and Persia. The Medes, headed by Astyages, and his son Cyaxares, drove back Evil-merodach and his party with great slaughter; nor does it appear that they were afterwards reduced by Nebuchadnezzar. The new empire continued daily to gather strength; and at last Cyrus, Astyages's grandson, a prince of great prudence and valor, being made generalissimo of the Median and Persian forces, took Babylon itself, in the year 538, B. C. See Babylonia.

The Romans, during this period, increased in power under the wise government of Servius Tullius, a pacific prince, who rendered this people more formidable by a peace of twenty years, than his predecessors had done by all their victories. The Greeks now began to interfere with the Persians, on account of the Ionians, or Grecian colonies in Asia Minor. Whether the Lydians had been subdued by the Babylonish monarch or not, is not ascertained; though it is probable that they were either in subjection to him, or greatly awed by his power, as before his death nothing considerable was undertaken by them. It is also very probable that during the insanity of Nebuchadnezzar, spoken of by Daniel, the affairs of his kingdom would fall into confusion. Certain it is, that, if the Babylonians did not regard Crœsus as their subject, they considered him as a very faithful ally.

When Cyrus, therefore, was proceeding in his conquest of the Babylonish empire, before he proceeded to attack the capital, he offered advantageous terms to the Ionians, but they refused to submit to him. Soon after, however, Crœsus himself being defeated and taken prisoner, the Ionians sent ambassadors to Cyrus, offering to embrace his terms. These were now refused; and the Ionians applied to the Spartans for aid. Thus commenced the hatred between the Greeks and Persians. The transactions of Africa during this period are almost entirely unknown; though the Carthaginians were doubtless enriching themselves by means of their commerce.

Sect. V.—From the Erection of the Persian Empire to its Overthrow by Alexander: and to the Division of the Grecian Empire, upon his death.

Cyrus having now become master of all the east, the Asiatic affairs continued for some time in a state of tranquillity. The Jews obtained leave to return to their own country, and rebuild their temple. The successor of Cyrus, Cambyses, added Egypt to his empire. He intended also to have subdued the Carthaginians; but the Phœnicians refused to supply him with ships.

In 517, B. C., the Babylonians, finding themselves grievously oppressed by their Persian masters, resolved to shake off the yoke, and for this purpose stored their city with provisions. When Darius Hystaspis advanced against them, they collected all the women, old men, and children, into one place, and strangled them without distinction, whether wives, fathers, mothers, brothers, or sisters; every one being allowed to select only one wife and a maid-servant. This cruel policy did not avail them: their city was taken, and the king caused the walls to be beat down from 200 to fifty cubits height.

Darius then turned his arms against the Scythians; after which he directed his course eastward, and reduced the country as far as the Indus. In the mean time, the Ionians revolted; and the conquest of Greece was projected: but the expeditions for that purpose ended most unfortunately for the Persians. See Attica, Persia, and Sparta.

In 459, B. C., the Egyptians attempted to recover their liberty, but were reduced after a war of six years. In 413, B. C., they revolted a second time; and, being assisted by the Sidonians, drew upon the latter that terrible destruction foretold by the prophets; while they themselves were so thoroughly humbled, that they never after made any attempt to recover their liberty.

The revolt of Cyrus the younger against his brother Artaxerxes Mnemon, in which, through his own rashness, he miscarried, and lost his life at the battle of Cunaxa, in the province of Babylon, happened in the year B. C. 401 or 403. 10,000 Greek mercenaries, who served in his army, made their way back into their country, though surrounded on all sides by the enemy. In this retreat they were commanded by Xenophon, who has received the highest praise on account of his conduct and military skill. Two years after, the invasion of Agesilaus, king of Sparta, threatened the Persian empire with total destruction.

The various transactions between the Grecian states, though they make a considerable figure in their respective histories, make but a small one in a general sketch. We shall, therefore, only observe, that in 404, B. C., the Athenian power was totally broken by the taking of their city by the Spartans. See Attica. In 370 that of the Spartans received a severe check from the Thebans at the battle of Leuctra; and

eight years after was still further reduced by the battle of Mantinea. The Macedonians, a barbarous nation lying to the north of the states of Greece, now rose into power under Philip, who being no stranger to the weakened situation of Greece, began to meditate the conquest of it.

The particulars of this enterprise will be found under the article MACEDON. Here it is sufficient to mention, that by first attacking those he was sure he could overcome, and corrupting those whom he thought it dangerous to attack; by sometimes pretending to assist one state and sometimes another, and by imposing upon all as best suited his affairs, he finally gained his end. In 338 B.C. he procured himself to be elected general of the Amphictyons, and, having once obtained liberty to enter that country with an army, he quickly convinced the states that they must all submit to him.

Philip when master of all Greece, projected the conquest of Asia, when he was suddenly assassinated.

Alexander his son was possessed of every quality necessary for the execution of so great a plan; and his impetuosity of temper made him execute it with an unheard of rapidity. He met with only two checks in his Persian expedition. The one was from the city of Tyre, which for seven months resisted his utmost efforts; the other was from Memnon the Rhodian, who had undertaken to invade Macedonia. The first of these obstacles Alexander at last overcame, and treated the governor and inhabitants with the utmost cruelty. The other was scarcely felt; for Memnon died after reducing some of the Grecian islands, and Darius had no other general capable of conducting the undertaking. The power of the Persian empire was totally broken by the victory gained over Darius at Arbela, in the year 331 B.C., and next year a total end was put to it by the murder of the king by Bessus.

Alexander now invaded and reduced Hyrcania, Bactria, Sogdiana, and all the vast tract of country now called Bukharia. Having entered India, he reduced all the nations to the river Hyphasis, one of the branches of the Indus. But when he would have proceeded farther, and extended his conquests quite to the eastern extremities of Asia, his troops positively refused to follow him.

Rome and Carthage were now making considerable advances in the west. During the time of their kings, the Romans had made a very considerable figure among the Italian nations; but after their expulsion, and the commencement of the republic, their conquests became much more rapid and extensive. In 501 B.C. they subdued the Sabines; eight years after, the Latins; and in 399 the city of Veii, the strongest in Italy, excepting Rome itself, was taken after a siege of ten years. But in the midst of their successes a sudden irruption of the Gauls had almost put an end to their power. The city was burnt to the ground in 383 B.C., and the capitol on the point of being surprised, when the Gauls, who were climbing up the walls in the night, were accidently discovered and repulsed. Rome was soon rebuilt; but at the celebrated Camillus's death, which happened about 352 B.C., its territory scarcely extended six or seven leagues from the capital. The people had been divided by Romulus into two classes, namely patricians and plebeians, answering to our nobility and commonalty. Between these two bodies were perpetual jealousies and contentions; which retarded the progress of the Roman conquests, and revived the hopes of the nations they conquered. The tribunes of the people were perpetually opposing the consuls and military tribunes, and the senate had often recourse to a dictator endowed with absolute power. Thus had the Romans continued for nearly 400 years, running the same round of wars with the same enemies, and reaping little advantage from their conquests, till at last matters were compounded, by choosing one of the consuls from among the plebeians; and from this time chiefly we may date the prosperity of Rome.

The Carthaginians in the mean time continued to enrich themselves by commerce; but were by no means equal to the Romans in power. A new state, however, made its appearance during this period, which may be said to have taught the Carthaginians the art of war. This was Sicily. At what time it was first peopled cannot be ascertained. In the second year of the seventeenth Olympiad, or 710 B.C., some Greek colonies are said to have arrived on the island, and in a short time founded several cities, of which Syracuse was the chief.

The first considerable monarch of Syracuse was Gelon, who obtained the sovereignty about the year 483 B.C. The Carthaginians possessed some part of the island as early as 505 B.C.; but, in twenty-eight years after, they had been totally driven out by Gelon.

The island also proved the scene of much slaughter and bloodshed in the wars of the Grecian states. Before the year 323 B.C., however, the Carthaginians had made themselves masters of a very considerable part of Sicily; whence all the power of the Greeks could not dislodge them. After the destruction of Tyre almost all the commerce in the western part of the world fell to the share of the Carthaginians; but whether they had at this time made many settlements in Spain, is not known. It is certain, that they traded to that country for the sake of the silver, as they probably also did to Britain for tin. In the year 323 B.C. Alexander the Great died at Babylon, without settling the affairs of his vast empire, or even naming a successor; and four new empires immediately rose out of it.

SECT. VI.—FROM THE DIVISION OF THE GRECIAN EMPIRE, TO THE DESTRUCTION OF THE CARTHAGINIAN REPUBLIC BY THE ROMANS.

Alexander had left behind him a victorious, and, we may say, invincible army, commanded by most expert officers, all equally ambitious of authority. Cassander, the son of Antipater, had seized Macedonia and Greece; Antigonus, Asia Minor; Seleucus had Babylon and the eastern provinces; and Ptolemy, Egypt and the western ones. One of these empires, however, soon fell; Antigonus being defeated and killed by Seleucus and Lysimachus at the Battle of Ipsus, in 301 B.C. The greatest part of his

dominions then fell to Seleucus: but several provinces took the opportunity of these confusions to shake off the Macedonian yoke altogether; and thus were formed the kingdoms of Pontus, Bithynia, Pergamus, Armenia, and Cappadocia.

The two most powerful and permanent empires, however, were those of Syria, founded by Seleucus, and Egypt by Ptolemy Soter. The kings of Macedon, though they did not preserve the same authority over the Grecian states that Alexander, Antipater, and Cassander had done, yet effectually prevented them from those outrages upon one another for which they had formerly been so remarkable.

While the eastern parts of the world were thus deluged with blood, the Romans and Carthaginians also proceeded in their attempts to enslave the western nations. About the year 253 B. C. the former had made themselves masters of almost the whole of Italy; but Pyrrhus king of Epirus, in 271 B. C., entered that country, and maintained a war with them for six years. He was finally defeated, however, and the Romans being invited into Sicily, to assist the Marmertines against Hiero II. king of Syracuse and the Carthaginians, they immediately commenced a war with the latter, which continued for twenty-three years; and the consequence was the entire loss of Sicily to the Carthaginians; soon after the Romans seized on Sardinia.

Hamilcar now set about the subjugation of Spain; and his son Asdrubal continued the war with success; till at last the Romans engaged him to make the river Iberus the boundary of his conquests.

The transactions of the second Punic war are perhaps the most remarkable recorded in history. We now see the Romans, who for more than 500 years had been constantly victorious, unable to resist the efforts of a single man, until at last, Hannibal, the conqueror of Italy, was obliged to abandon his final designs for want of 20,000 or 30,000 men. Hannibal had concluded an alliance with Philip VI. of Macedonia. Had that prince sent an army to the assistance of the Carthaginians in Italy, immediately after the battle of Cannæ, there can be no doubt but the Romans would have been forced to accept of peace. Philip, however, could not be roused. The issue was that the Carthaginian armies, unsupported in Italy, were recalled into Africa, which the Romans had invaded. Here Hannibal was defeated at the battle of Zama, which finished the second Punic war, in the year 188 B. C.

All this time Egypt, Syria, and Greece, had been promoting their own ruin by mutual wars. The Syrian empire was now governed by Antiochus the Great, and to him Hannibal applied, when he was obliged to leave his country, and the Romans declared war against him. The event was, that Antiochus was every where defeated, and forced to conclude a peace upon very disadvantageous terms.

The states of Greece, weary of the tyranny of the Macedonians, now entered into the resolution of recovering their liberties. For this purpose was framed the Achæan League; but they at last came to the imprudent determination of calling in the Romans to defend them. This produced a war in which the latter were victorious; but Perseus, the successor of Philip, renewed the war, until Macedon submitted to the Romans, 167 B. C.

After this, war was declared a third time against the unfortunate Carthaginian state; there was now no Hannibal to command their armies, and Carthage was utterly destroyed in the year 146 B. C. The same year the Romans put an end to the liberties they had pretended to grant the cities of Greece, by the entire destruction of Corinth.

The only transaction of any considerable consequence in the Syrian empire, at this period, is the oppression of the Jews by Antiochus Epiphanes. After their return from the Babylonish captivity, they continued in subjection to the Persians, till the time of Alexander. From that time they were subject to the kings of Egypt or Syria, as the fortune of either happened to prevail. Egypt being reduced by Antiochus Epiphanes, the Jews fell under his dominion; and, being severely treated by him, imprudently showed some signs of joy on a report of his death. This brought him against them with a powerful army; and in 170 B. C. he took Jerusalem by storm, committing the most horrid cruelties on the inhabitants. Their religion was for a while totally abolished, their temple profaned, an image of Jupiter Olympius set up, and a sow sacrificed on the altar of burnt offerings. In 167 B. C., however, Mattathias restored the true worship in most of the cities of Judea; and in 165 the temple was purified by Judas Maccabæus. This was followed by a long series of wars between the Syrians and Jews, in which the latter were almost always victorious.

Sect. VII.—From the Destruction of Carthage to the Death of Trajan, when the Roman Empire had attained to its utmost Extent.

The empire of Syria at first comprehended all Asia to the river Indus, and beyond it; but in 312 B. C. most of the Indian provinces had been by Seleucus ceded to Sandrocottus, or Androcottus, a native, who in return gave him 500 elephants. Of the empire of Sandrocottus we know nothing farther than that he subdued all the countries between the Indus and the Ganges; so that from this time the greatest part of India became independent of the Syro-Macedonian princes. In 250 B. C., however, the empire sustained a much greater loss by the revolt of the Parthians and Bactrians from Antiochus Theos. The former could not be subdued; and, as they held in subjection to them the extensive country now called Persia, their defection was an irreparable loss. Whether any part of their country was afterwards recovered, by the kings of Egypt or Syria, is not certain. The general state of the world B. C. 146 was as follows:—

In Asia were the empires of India, Parthia, and Syria, with the smaller states of Armenia, Pontus, &c., to which we must add that of Arabia, which during the sixth period had become of some consequence, and had maintained its independence from the days of Ishmael. In

Africa were the kingdoms of Egypt and Ethiopia; the Carthaginian territories, now subject to the Romans; and the kingdoms of Numidia, Mauritania, and Getulia, ready to be swallowed up by the same ambitious and insatiable power, now that Carthage was destroyed, which had served as a barrier against it. To the south lay unknown and barbarous nations, secure by their situation and insignificance, rather than their strength, or distance from Rome. In Europe we find none to oppose the progress of the Roman arms, except the Gauls, and some nations of Spain.

The Spaniards had indeed been subdued by Scipio Africanus during the second Punic war; but in 155 B. C. they revolted; and under the conduct of one Viriathus, formerly a robber, held out for a long time against all the armies the Romans could send into Spain. Him the consul Cæpio caused to be murdered about 138 B. C., because he found it impossible to reduce him by force. Numantia defied the whole Roman power for six years longer.

About this time Attalus king of Pergamus left by will the Roman people heirs to all his goods; upon which they immediately seized on his kingdom and reduced it to a Roman province, under the name of Asia Proper. In 122 B. C. the Balearic Islands, now called Majorca, Minorca, and Ivica, were subdued. The event of it was the total reduction of Numidia, which took place about the year 105 B. C.; but Mauritania and Getulia preserved their liberty for some time longer.

In the east the empire of Syria continued to decline; by which means the Jews not only had an opportunity of recovering their liberty, but even of becoming almost as powerful, or at least of extending their dominions as far, as in the days of David and Solomon. The Syrian empire was farther reduced by the civil dissensions between the two brothers, Antiochus Gryphus and Antiochus Cyzicenus; during which the cities of Tyre, Sidon, Ptolemais, and Gaza, declared themselves independent. This happened about 100 B. C.; and, seventeen years after, the whole was reduced by Tigranes king of Armenia. On his defeat, by the Romans, the latter reduced Syria to a province of their empire. Pontus was subdued about 64 B. C. The kingdom of Judea also was reduced under the same power about this time. It owed the loss of its liberty to the same cause that had ruined various other states, namely, calling in the Romans to be arbitrators between contending parties. Hyrcanus and Aristobulus had contended for the kingdom, when the latter applied to the Romans, and Pompey the Great decided against him; but at the same time deprived Hyrcanus of all regal power, and did not allow him to extend his territory beyond the ancient borders of Judea.

In the west, however, the Gauls were still free, and the Spanish nations bore the Roman yoke with great impatience; while the kingdom of Egypt remained independent. The battle of Actium, however, determined the fate of Antony, Cleopatra, and Egypt itself; which was reduced to a Roman province, about the year 29 B. C.

This same event was the destruction of the Roman republic; and it proved advantageous to the few nations of the world who still retained their liberty. That outrageous desire of conquest, which had so long marked the Roman character, now in a measure ceased; and after the final reduction of Spain, and the conquest of Mæsia and Pannonia, the empire enjoyed for some time a profound peace.

The only remarkable transactions which took place during the remainder of this period, were the conquest of Britain by Claudius and Agricola, and the destruction of Jerusalem by Vespasian and Titus. The war with the Jews began A. D. 67; and was occasioned by their obstinately claiming the city of Cæsarea, which the Romans had added to Syria. It ended in 73, with the most terrible destruction of their city and nation; since which time they have never been able to exercise sovereign authority. The southern parts of Britain were totally subdued by Agricola about ten years after.

In the year 98, of the Christian æra, Trajan was emperor of Rome; and the empire reached its utmost extent. Having conquered the Dacians, a German nation beyond the Danube, he turned his arms eastward; reduced all Mesopotamia, Chaldæa, and Assyria; and having taken Ctesiphon, the capital of the Parthian empire, appointed them a king. After this he proposed to return to Italy, but died by the way.

Sect. VIII.—From the Commencement of the Decline of the Roman Empire, to its Division under Constantine.

No sooner, however, had the vast empire of the Romans attained its utmost degree of power, than, like its predecessors, it began to decline. The provinces of Babylonia, Mesopotamia, and Africa, almost instantly revolted, and were abandoned by Adrian, the successor of Trajan. The Parthians, having recovered their liberty, were very formidable enemies, and the barbarians of the northern parts of Europe continued to increase in strength. At different times, however, some warlike emperors arose, who put a stop to the incursions of these barbarians; and, about the year 225, the Parthian empire was totally overthrown by the Persians. But the latter became still more troublesome enemies to the empire than the Parthians; and, though often defeated, they long continued to infest it on the east. In 260 the defeat and captivity of Valerian, by the Persians, threatened the empire with utter destruction. Thirty tyrants now seized the government at once; and the barbarians, pouring in on all sides, ravaged almost all the provinces. By the vigorous conduct of Claudius II., Aurelian, Tacitus, Probus, and Carus, the empire was in part, indeed, restored to its former lustre; but the barbarians were never thoroughly subdued.

An end was put to these evils when the empire was united under Constantine the Great; but in 330 a mortal blow was given to it, by his removing the imperial seat to Constantinople. The establishment of Christianity, now corrupted with the grossest superstitions, proved also no small detriment to the empire.

Sect. IX.—From the Division of the Roman Empire to the Destruction of the Western Part of it, and the Rise of Mahomet and of the European States.

We now see that mighty empire, which formerly occupied almost the whole world, weakened by division, and surrounded by enemies. On the east, the Persians; on the north, the Scythians, Sarmatians, Goths, and a multitude of other barbarous nations, watched all occasions to break into it; and miscarried in their attempts rather through their own barbarity than the strength of their enemies.

Some of the Roman emperors indeed withstood this inundation of savages; but as the latter grew daily more numerous, and the Romans continued their intestine wars, they were at last obliged to take large bodies of barbarians into their pay, and teach them their military discipline. This at last proved their total destruction; for, in 476, the barbarians who served in the Roman armies, and were dignified with the title of allies, demanded the third part of the lands of Italy as a reward for their services; and, meeting with a refusal, revolted, and made themselves masters of Rome itself.

Spain was at this time held by the Goths and Suevians; Africa (that is, Barbary and Biledulgerid), by the Vandals; the Burgundians, Goths, Franks, and Alans, had erected several small states in Gaul; Italy was subjected to the Heruli under Odoacer, who had assumed the title of King of Italy; and Britain was abandoned.

The empire, indeed, continued to maintain its sway at Constantinople, and comprehended all Asia Minor and Syria, as far as Persia; in Africa, the kingdom of Egypt; and Greece in Europe. It was engaged, however, in continual wars with the Persians, Bulgarians, and other barbarous nations; and superstition and a general relaxation of military discipline hastened its downfal.

Among the western nations, revolutions succeeded one another with rapidity. The Heruli under Odoacer were driven out by the Goths under Theodoric. The Goths were expelled by the Romans; and, while the two parties were contending, both were attacked by the Franks. The Romans were in their turn expelled by the Goths: the Franks again invaded Italy, and made themselves masters of the province of Venetia; but at last the superior fortune of the emperor of Constantinople prevailed, and in 553 the Goths were finally subdued.

Narses, their conqueror, governed Italy as a province of the eastern empire till the year 568, when Longinus his successor made considerable alterations. Being invested with absolute power, by Justinian, he suppressed the consulares, correctores, and præsides; and placed in each city of note a governor, whom he distinguished with the title of duke. The city of Rome was not more honored than any other; for Longinus, having abolished the name of senate and consuls, appointed a duke of Rome as well as of other cities. To himself he assumed the title of exarch; and, residing at Ravenna, his government was styled the exarchate of Ravenna. While he was establishing this new empire, the greatest part of Italy was conquered by the Lombards.

In 487 Clovis, the founder of the French monarchy, possessed himself of all the countries lying between the Rhine and the Loire. See France.

In Spain the Visigoths erected a kingdom ten years before the conquest of Rome by the Heruli. This they extended eastward, about the same time that Clovis was extending his conquests to the west; so that the two kingdoms united at the river Loire. The consequence of this was an immediate war, and Clovis proved victorious.

Another kingdom had in the mean time been founded in the western parts of Spain by the Suevi. In 409 this kingdom was entirely subverted by Theodoric king of the Goths, who in 584 became masters of almost all Spain.

Africa, properly so called, had changed its masters three times during this period. The Vandals had expelled the Romans, and erected an independent kingdom, which was at last overturned by the emperors of Constantinople; and from them the greatest part of it was taken by the Goths in 620.

Sect. X.—From the Rise of the Mahommedan Superstition to the Commencement of the Crusades.

The tenth general period of history commences with the flight of Mahomet in the year 622 (whence his followers date their era called the Hegira). The Roman empire in the west was now annihilated; the Persian empire, and that of Constantinople, weakened by their mutual wars and intestine divisions; the Indians and other eastern nations unaccustomed to war, and ready to fall a prey to the first invader; the southern parts of Europe were also in a distracted and barbarous state; while the inhabitants of Arabia, from their earliest origin accustomed to war and plunder, were like a flood pent up, and ready to overwhelm the rest of the world.

With amazing celerity, therefore, they overran all Syria, Palestine, Persia, Bukharia, and India, extending their conquests farther to the eastward than ever Alexander had done. On the west their empire soon extended over Egypt, Barbary, Spain, Sicily, Sardinia, Majorca, Minorca, &c., and many of the isles in the Archipelago: nor were the coasts of Italy itself free from their incursions; they are even said to have reached the distant and barren country of Iceland. But at last this great empire began to decline, and its ruin was very sudden. Mahomet had not taken care to establish the apostleship in his family, or to give any particular directions about a successor. The consequence was, that the caliphat, or succession to the apostleship, was seized by many usurpers; and those who resided at Bagdad were regarded only as a kind of high priests. Of these divisions the Turks took advantage, to establish their authority in many provinces.

While the barbarians of the east were thus conquering, for the glory of God and his apostle Mahomet, the western nations professed an equal regard for the divine glory, and exemplified it in the respect they paid to the pope and the clergy.

Ever since the establishment of Christianity, by Constantine, the bishops of Rome had been gradually extending their power; and when in 726 Luitprand, king of the Lombards, had taken Ravenna, and expelled the exarch, the pope undertook to restore him. He applied, for this purpose, to the Venetians, who are now first mentioned in history, and by their means the exarch was restored. Some time before a quarrel had happened between pope Gregory II., and Leo III., emperor of the east, about the worship of images. Leo, who, in the midst of so much barbarism, had still preserved some share of common sense, reprobated this in the strongest terms, and commanded the objects of it to be destroyed throughout his dominions. At the instigation of the pope a revolt ensued; the exarch, who attempted to fulfil the emperor's commands, was excommunicated; and then torn in pieces by the multitude: the duke of Naples shared the same fate: and a vast number of the iconoclasts, or image-breakers, as they were called, were slaughtered without mercy.

Charles Martel, who then governed France as mayor of the palace, was in the end applied to; but, before a treaty could be concluded, all the parties concerned were cut off. Constantine Copronymus, who succeeded Leo at Constantinople, not only persisted in the opposition to image worship, begun by his predecessor, but prohibited also the invocation of saints.

Zachary, who succeeded Gregory III. in the pontificate, proved as zealous an adversary as his predecessor; and Pepin, who succeeded Charles Martel in the sovereignty of France, proved as powerful a friend to the pope as his father had been. The people of Rome had nothing to fear from Constantinople; and therefore drove out all the emperor's officers. Awed by the power of France, the Lombards for some time allowed the pope to govern the dominions of the exarchate in peace; but in 752 Astolphus, king of Lombardy, again threatened Rome itself. Upon this an application was made to Pepin, who obliged Astolphus to restore the places he had taken, and gave them to the pope, or, as he said, to St. Peter. The Greek emperor, to whom they of right belonged, remonstrated to no purpose. The pope from that time became possessed of considerable territories in Italy. It was not, however, before the year 774 that he was fully settled in this new dominion.

The world was now once more shared among three great powers. The empire of the Arabs or Saracens extended from the Ganges to Spain; comprehending almost all of Asia and Africa which has ever been known to Europeans, China and Japan excepted. The eastern Roman empire was reduced to Greece, Asia Minor, and the provinces adjoining to Italy. The empire of the west, under Charlemagne, comprehended France, Germany, and the greatest part of Italy.

Of all nations on the earth, the Scots and Picts, and the remote ones of China and Japan, seem to have enjoyed, from their situation, the greatest share of liberty; unless perhaps we except the Scandinavians, who, under the names of Danes and Normans, were soon to infest their southern neighbours.

The Saxon heptarchy was dissolved in 827, and the whole kingdom of England reduced under one head. The Danes and Normans began to make depredations, and infest the neighbouring states. The former conquered the Anglo-Saxons, and seized the government, but were in their turn expelled by the Normans in 1066. In Germany and Italy the greatest disturbances arose from the contests between the popes and emperors. To all this, if we add the internal contests which happened through the ambition of the powerful barons of every kingdom, we can scarcely form an idea of times more calamitous than those at which we now arrive. All Europe, nay, all the world, was one great field of battle, for the empire of the Turks was not in a more settled state than that of the Europeans. Caliphs, sultans, emirs, &c., waged continual war with each other in every quarter; new sovereignties every day sprung up, and were as quickly destroyed. At last the crusades, by directing the attention of Europeans to one particular object, made them in some measure suspend the slaughter of one another.

Sect. XI.—From the Commencement of the Crusades to that of the American Revolution.

The crusades originated in the superstition of the two grand religious parties into which the world was at that time divided, namely, the Christians and Mahommedans. See Crusades. Both looked upon the small territory of Palestine, which they called the Holy Land, to be an invaluable acquisition. The first crusades accordingly poured forth in multitudes, like those with which the kings of Persia formerly invaded Greece; and their fate was nearly similar. They at first, indeed, carried every thing before them; but their want of conduct soon lost what their valor had obtained, and very few of that vast multitude which had left Europe ever returned. A second, a third, and several other crusades, were preached, and were attended with like success and like reverses. Vast numbers took the cross, and repaired to the Holy Land; which they polluted by the most abominable massacres and treacheries, and from which very few of them returned.

Jenghiz Khan, the greatest as well as the most bloody conqueror that ever existed, now made his appearance in the east. The rapidity of his conquests seemed to emulate those of Alexander; but the cruelties he committed were altogether unparalleled.

The Moguls, over whom he assumed the sovereignty, were a people of Tartary, divided into a number of petty governments, who owned subjection to one sovereign, whom they called Vang-Khan, or the great khan. Temujin, afterwards Jenghiz Khan, was one of these petty princes, unjustly deprived of the greatest part of his inheritance at the age of thirteen. Twenty-seven years after, which corresponds with the year 1201, he totally reduced the rebels; and, as a specimen of his lenity, caused seventy of their chiefs to be thrown into as many caldrons of boiling water. In 1202 he defeated and killed Vang-khan himself, known to Europeans by the name of Prester John of Asia; and, pos-

sessing himself of his vast dominions, became thenceforward irresistible. In 1206 he was declared khan of the Moguls and Tartars; and took upon him the title of Jenghiz Khan, or the great khan of khans. This was followed by the reduction of the kingdoms of Hya in China, Tangut, Kitay, Turkestan, Karazim, or the kingdom of Gazna, Great Bukharia, Persia, and part of India; all which vast regions were reduced in twenty-six years, no fewer than 14,470,000 persons being computed to have been massacred by him. He died in the beginning of 1227. His successors completed the conquest of China and Korea; but were foiled in their attempts on Cochin China, Tong-King, and Japan.

His empire, however, was soon divided and weakened until we arrive at the times of Timur Bek, or Tamerlane. The Turks at this time, urged forward by the inundation of Tartars who poured in from the east, were forced upon the remains of the Greek empire; and at the time of Tamerlane they had almost confined this once mighty empire within the walls of Constantinople. In 1335 the family of Jenghiz Khan became extinct in Persia.

In 1362 Tamerlane invaded Bukharia, which he reduced in five years. He proceeded in his conquests, though not with the same celerity as Jenghiz Khan, till 1387, when he had subdued all Persia, Armenia, Georgia, Karazim, and great part of Tartary. After this he proceeded westward, subduing all the countries to the Euphrates, made himself master of Bagdad, and even pillaged Moscow. Thence he turned his arms to the east, and totally subdued India. In 1393 he invaded and reduced Syria; and, having turned his arms against the Turks, forced their sultan, Bajazet I., to raise the siege of Constantinople. At last this great conqueror died in 1405, while on his way to conquer China, and most of the nations he had conquered recovered their liberty. In 1453 the conquest of Constantinople by the Turks fixed that wandering people to one place; and though they now possess very large regions in Europe, Asia, and Africa, an effectual stop has long been put to their further progress.

About this time learning began to revive in Europe, where it had long been lost; and the invention of printing rendered it impossible for the ancient barbarism ever to return. This soon produced improvements in navigation; and the discovery of many unknown regions.

In the end of the fifteenth century the vast continent of America became known to Europe; and, about the same time, the passage to the East Indies by the Cape of Good Hope was accomplished. The Portuguese had the advantage of being the first modern discoverers of the eastern, and the Spaniards of the western world. Neither neglected so favorable an opportunity of enriching themselves by commerce; but their avarice, and perfidious behaviour towards the natives, proved at last its own punishment, and, in many cases, soon ended in their expulsion. See MEXICO, PERU, &c. These possessions of the Spaniards and Portuguese excited other European nations to make attempts to share with them in their treasures, by planting colonies and making settlements in the East and West Indies; and thus the rage of war was in some measure transferred from Europe to these distant regions; where, after various contests, the British at last obtained a great superiority.

In Europe the only considerable revolutions, of the fifteenth and sixteenth centuries, were the expulsion of the Moors and Saracens from Spain, by the taking of Grenada in 1491; the union of the kingdoms of Arragon and Castile, by the marriage of Ferdinand and Isabella; and the revolt of the states of Holland from the Spaniards. After much contention and bloodshed, these last obtained their liberty, and were declared a free people in 1609.

During the seventeenth century two very important revolutions took place in Great Britain, which, though they may seem to be of a local nature, merit particular notice in a general history of the world, on account of their important consequences to other nations. The bloody persecutions which had been carried on both in Scotland and England, on account of religion, about the commencement of the reformation, had awakened among mankind an attention to their civil as well as religious rights. The reformation was established in England: and the obstinate adherence to prerogative, on the part of the crown, produced so violent an opposition on that of the people, that the king was at last brought to the scaffold, and England for a short time became a commonwealth. See GREAT BRITAIN. When again the arbitrary measures of James II. would have restored both popery and a despotic monarchy, the glorious Revolution of 1688 was effected, by which those rights and privileges were established, which have ever been since the boast of Britons.

In the mean time most of those persons who had emigrated from Great Britain to America, on account of civil or religious persecution, being of republican principles, and jealous of the smallest encroachments upon their rights, naturally instilled those principles into the minds of their children; and thus laid the foundation for that jealousy of power, and spirit of resistance to oppression, which afterwards excited the American war, and resulted in the independence of the UNITED STATES, which see.

SECT. XII.—FROM THE COMMENCEMENT OF THE AMERICAN WAR, TO THE CONCLUSION OF THE FRENCH REVOLUTIONARY WAR, BY THE PEACE IN 1801.

The consequences of this contest were the general diffusion of those principles, upon which the resistance of the Americans to the mother country was founded, throughout the different states of Europe, particularly in France, Germany, Holland, and Italy. Out of it arose the French Revolution.

In Asia, the taking of Constantinople by the Turks, and the rise of the British empire in Hindostan, are the only modern events of great importance. The Turks possess the western part of the continent called Asia Minor, to the Euphrates. The Arabs are again confined within their own peninsula; which they possess, as they

have ever done, without owning subjection to any foreign power.

In Africa the Turks, partly in consequence of British prowess and perseverance, still nominally possess Egypt, which they conquered in 1517. They have also a jurisdiction over the states of Barbary. On the western coasts are many settlements of European nations, particularly of the British and Portuguese; and the south extremity is permanently held by the former. The eastern coasts are almost entirely unknown.

The modern state of EUROPE will be best seen by a reference to that article; and the history of all its principal states sketched in their alphabetical places.

PART II.

OF ECCLESIASTICAL HISTORY.

This has indeed been hitherto rather the history of corrupt churches than of religion. It is perhaps best divided into Jewish and Christian church history: but the latter may be variously subdivided, as into the history of Christianity until its political establishment by Constantine; the rise and progress of the papal power; the superstition that disgraced the dark ages, &c. We shall adopt a chronological sub-division of this kind.

SECT. I.—OF THE JEWISH RELIGION.

From the time of the flood to the coming of Christ idolatry prevailed among all the nations of the world, the Jews excepted; and even they were on all occasions extremely ready to run into it, as is evident from their history in the Old Testament. At the time of Christ's appearance the religion of the Romans, as well as their empire, extended over a great part of the world. Various individuals among the heathens perceived the absurdities of that system: but being destitute of means, as well as of all enlightened and steady desire to effect a reformation, it was never attempted.

Two modifications of the Jewish religion at this time flourished in Palestine, viz. the Jewish, properly so called, and Samaritan; between whose respective followers reigned the most violent hatred. The difference between them seems to have been chiefly about the supreme or superior place of worship; which the Jews insisted to be Jerusalem, and the Samaritans mount Gerizim.

But, though the Jews were certainly right as to this point, they had greatly corrupted their religion. They indeed expected a saviour, but mistook his character; imagining that he was to be a powerful and a warlike prince, who should set them free from the Roman yoke. They also imagined that the whole of religion consisted in observing the rites of Moses, and some others which they had added to them; as is evident from the many charges our Saviour brings against the pharisees, who had the greatest reputation for sanctity. To these corrupt and vicious principles they added several absurd and superstitious notions concerning the divine nature, invisible powers, magic, &c., which they had partly imbibed during the captivity in Babylon, and partly from their neighbours in Arabia, Syria, and Egypt. The principal sects among them were the ESSENES, PHARISEES, and SADDUCEES: see these articles. The Samaritans, according to the most general opinion, had corrupted their religion still more than the Jews.

SECT. II.—HISTORY OF CHRISTIANITY, FROM ITS ORIGIN TO ITS ESTABLISHMENT BY CONSTANTINE THE GREAT.

When the true religion was preached by the Saviour of mankind, and his apostles, its rapid progress alarmed the Jews, and raised various persecutions against its followers. See the Acts of the Apostles, and the New Testament epistles. The Jews, indeed, seem at first to have been every where the chief promoters of persecution: for the Heathen showed no very violent spirit of opposition against the Christians; though they were soon induced to hate them as much as the Jews themselves. Tacitus acquaints us with the causes of this. Nero, having set on fire the city of Rome, to avoid the imputation transferred it to the Christians. Our author informs us that they were already abhorred on account of their many and enormous crimes. 'The author of this name [Christians],' says he, 'was Christ, who, in the reign of Tiberius, was executed under Pontius Pilate, procurator of Judea. The pestilent superstition was for a while suppressed: but it revived again, and spread, not only over Judea, where this evil was first broached, but to Rome, whither from every quarter of the earth is constantly flowing whatever is hideous and abominable amongst men, and is there readily embraced and practised. First, therefore, were apprehended such as openly avowed themselves to be of that sect; then by them were discovered an immense multitude; and all were convicted, not of the crime of burning Rome, but of hatred and enmity to mankind. Their death and tortures were aggravated by cruel derision and sport; for they were either covered with the skins of wild beasts, and torn in pieces by devouring dogs, or fastened to crosses, or wrapped up in combustible garments, that, when the day-light failed, they might, like torches, serve to dispel the darkness of the night. Hence, towards the miserable sufferers, however guilty and deserving the most exemplary punishment, compassion arose; seeing they were doomed to perish, not with a view to the public good, but to gratify the cruelty of one man.'

That this account of Tacitus is downright misrepresentation, and calumny, must be evident to every one who reads it. It is impossible that any person can be convicted of hatred and enmity to mankind, without specifying the facts by which this hatred has shown itself. The burning of Rome would indeed have been a very plain indication of enmity to mankind, but of this Tacitus himself clears them, and mentions no other crime of which they were guilty.

The persecution under Nero was succeeded by another under Domitian; during which the apostle John was banished to Patmos, where he saw the visions, and wrote the book called Revelation, which completes the canon of Scripture. This

persecution commenced in the ninety-fifth year of the Christian era.

During the first century the Christian religion spread over a great number of different countries; but as we have now no authentic records of the travels of the apostles, or the success which attended them, it is impossible to determine how far the gospel was carried. We are however assured that, even during this early period, many corruptions were creeping in, the progress of which was with difficulty prevented even by the apostles themselves.

The second century commences with the third year of Trajan. The Christians were still persecuted; but, as the Roman emperors were for the most part of this century princes of a mild and moderate turn, they persecuted less violently than formerly. Yet Marcus Aurelius, notwithstanding the clemency and philosophy for which he is so much celebrated, treated the Christians worse than Trajan, Adrian, or even Severus himself, who was noted for his cruelty. This respite from rigorous persecution proved a very favorable circumstance for the spreading of the Christian religion; yet it is by no means easy to point out the particular countries through which it was diffused. We are, however, assured that, in the second century, Christ was worshipped as God almost through the whole east; as also among the Germans, Spaniards, Celtes, and many other nations. The writers of this century attribute the rapid progress of Christianity chiefly to the extraordinary gifts that were imparted to the first Christians, and the miracles which were wrought at their command. Many of the moderns, however, are so far from being of this opinion that they expressly deny the authenticity of all miracles said to have been wrought since the days of the apostles. To enter into the particulars of this controversy is foreign to our purpose, and we must refer to the writers who have treated of this point.

The corruptions which had been introduced in the first century, and which were almost coeval with Christianity itself, continued to gain ground in the second. Ceremonies, in themselves futile and useless, but which must be considered as highly pernicious when joined to a religion incapable of any other ornament than the upright and virtuous conduct of its professors, were multiplied for no other purpose than to please the multitude, or the immediate possessors of power. The immediate consequence of this was, that the attention of Christians was drawn aside from the important duties of piety and morality: and they were led to imagine that a careful observance of ceremonies might atone for the neglect of moral duties. This was the most pernicious opinion that could possibly be entertained; and was the foundation of that enormous system of ecclesiastical power which afterwards took place. Another corruption was the introduction of mysteries, as they were called, into the Christian religion; that is, insinuating that some parts of the worship in common use had a hidden efficacy and power, far superior to the plain and obvious meaning assigned to them by the vulgar: and, by paying peculiar respect to these mysteries, the pretended teachers of the religion of Jesus accommodated their doctrines to the taste of their heathen neighbours, and obtained unbounded influence over their minds. They persuaded the people that the ministers of the Christian church succeeded to the character, rights, and privileges of the Jewish priesthood; and accordingly the bishops considered themselves as invested with a rank and character similar to those of the high priest among the Jews, while the presbyters represented the priests, and the deacons the Levites. This notion, which was first introduced in the reign of Adrian, proved a source of very considerable honor and profit to the clergy.

The form of ecclesiastical government was in this century rendered permanent and uniform. One inspector or bishop presided over each assembly, to which office he was elected by the voices of the whole people. To assist him in his office, he formed a council of presbyters, which was not confined to any stated number. To the bishops and presbyters the ministers or deacons were subject; and the latter were divided into a variety of classes. During a great part of this century the churches were independent of each other; or were joined together by no association, or confederacy, but that of charity. Each assembly was a little state governed by its own laws. But in process of time all the churches of a province were formed into one large ecclesiastical body, which, like confederate states, assembled at certain times, in order to deliberate about the common interests: this institution had its origin among the Greeks; but in a short time it became universal. The general assemblies, which consisted of the deputies or commissioners from several churches, were called synods by the Greeks, and councils by the Latins; and the laws enacted in them were termed canons, i. e. rules.

These councils, of which we find not the smallest trace before the middle of this century, changed the whole face of the church, and gave it a new form; for by them the ancient privileges of the people were diminished, and the power and authority of the bishops greatly augmented. At length they openly asserted that Christ had empowered them to prescribe to his people authoritative rules of faith and manners. Another effect of these councils was the gradual abolition of that perfect equality which reigned among bishops of the primitive times: for the order and decency of these assemblies required, that some one of the provincial bishops met in council should be invested with a superior degree of power and authority; and hence arose the rights of metropolitans. In the mean time the bounds of the church were enlarged; the custom of holding councils was followed wherever the sound of the gospel had reached; and the universal church had now the appearance of one vast republic formed by a combination of a great number of little states. Ecclesiastics were now appointed in different parts of the world as heads of the church, whose office it was to preserve the consistence and union of that immense body, whose members were so widely dispersed. Such was the nature and office of the patriarchs; among whom, at length, the bishop of Rome

sumed the title and authority of prince of the patriarchs.

During the second century the most remarkable of the sects which sprung up was the Ascetics. These owed their rise to a notion of some doctors of the church, that Christ had established a double rule of sanctity and virtue for two different orders of Christians. Of these, one was ordinary, the other extraordinary; the one of a lower dignity, the other more sublime: the first for persons in the active scenes of life; the other for those who, in a sacred retreat, aspired after the glory of a celestial state. They now therefore divided into two parts all those moral doctrines and instructions which they had received either by writing or tradition: one of these divisions they called precepts, and the other counsels. The name of precepts they gave to those laws that were universally obligatory; and that of counsels to those which related to Christians who proposed to themselves greater and more intimate communion with the Supreme Being.

They were distinguished from other Christians, not only by their titles of Ascetics, Σπουδαιοι, Ελεκτοι, and philosophers, but also by their garb. In this century, indeed, those who embraced such an austere kind of life submitted themselves to all these mortifications in private, without breaking asunder their social bands, or withdrawing themselves from mankind; but in process of time they retired into deserts, and, after the example of the Essenes and Therapeutæ, formed themselves into select companies.

At length the Ascetic sect, which began first to show itself in Egypt, passed into Syria and the neighbouring countries, and reached the European nations; hence that train of austere and superstitious vows and rites which totally obscured, or almost annihilated, Christianity; the celibacy of the clergy, and many other absurdities. The errors of the Ascetics, however, did not stop here: in compliance with the doctrines of some Pagan philosophers, they affirmed, that it was not only lawful, but even praise-worthy, to deceive, and to use the expedient of a lie, in order to advance the cause of piety and truth: thus arose the pious frauds for which the church of Rome has been notorious, and which in modern times she has often attempted to revive.

As Christians thus deviated more and more from the true practice of their religion, they became more zealous in the external profession of it. Anniversary festivals were celebrated in commemoration of the death and resurrection of Christ, and of the effusion of the Holy Ghost on the apostles. Concerning the days on which these festivals were to be kept there arose violent contests. The Asiatic churches in general differed in this point from those of Europe: and, towards the conclusion of the second century, Victor, bishop of Rome, insisted upon the eastern churches following the rules laid down by the western ones. This they absolutely refused to do: upon which Victor cut them off from communion with Rome; but the difference was after a time adjusted.

During most of the third century the Christians were allowed to enjoy their religion, without molestation. The emperors Maximinus and Decius, indeed, made them feel the rigors of a severe persecution; but their reigns were short, and from the death of Decius to the time of Dioclesian the church enjoyed tranquillity.

Several alterations were now made in the manner of celebrating the Lord's supper. The prayers used on this occasion were lengthened, and the solemnity and pomp with which it was attended were considerably increased. Gold and silver vessels were used in the celebration; it was thought essential to salvation, and for that reason administered even to infants.—Baptism was celebrated twice a year to such as, after a long course of trial and preparation, offered themselves candidates. The remission of sins was thought to be its immediate consequence; while the bishop, by prayer and imposition of hands, was supposed to confer those sanctifying gifts of the Holy Ghost that are necessary to a life of righteousness and virtue. An evil demon was supposed naturally to reside in every person, who was the author and source of all the corrupt dispositions and unrighteous actions of that person. The driving out of this demon was therefore an essential property of baptism; and, in consequence of this opinion, the baptized persons returned home clothed in white garments, and adorned with crowns, as sacred emblems; the former of their inward purity and innocence, and the latter of their victory over sin and the world. Fasting also began now to be held in more esteem than formerly, and the sign of the cross also was supposed to administer a victorious power over all sorts of trials and calamities. The heresies which troubled the church, during this century, were those of the Gnostics, whose doctrines were new modelled and improved by Manes, from whom they were afterwards chiefly called Manicheans, the Hieracites, Noetians, Sabellians, and Novatians; for an account of which, see these articles.

The fourth century is remarkable for the establishment of Christianity by law in the Roman empire; which, however, did not take place till the year 324.

Sect. III.—History of the Church of Rome from its Establishment to the Erection of the Pope's Supremacy by Phocas.

The civil establishment of the Christian religion, however favorable to the outward peace of the church, was far from promoting either its internal harmony, or the reformation of its leaders. The clergy, who had all this time been augmenting their power at the expense of the liberty of the people, now set no bounds to their ambition. The bishop of Rome was the first in rank, and distinguished by a sort of pre-eminence above the rest of the prelates. Hence it happened, that when a new pontiff was to be chosen by the presbyters, the city of Rome was generally agitated with dissentions, tumults, and cabals. The intrigues and disturbances which prevailed in that city in the year 366, when, upon the death of Liberius, another pontiff was to be chosen in his place, are a sufficient proof of this. Upon that occasion, one faction elected

Damasus to that high dignity; while the opposite party chose Ursicinus, a deacon of the vacant church, to succeed Liberius. This double election gave rise to a dangerous schism, and to a sort of civil war within the city; which was carried on with the utmost barbarity and fury, and produced the most cruel massacres and desolations. The inhuman contest ended in the victory of Damasus.

But the bishops of Rome had not yet acquired that pre-eminence of power and jurisdiction which they afterwards enjoyed. They were citizens as well as their brethren, and subject, like them, to the laws and edicts of the emperors. Even the ecclesiastical laws were enacted either by the emperor or councils, and none of the bishops acknowledged that they derived their authority from the permission or appointment of the bishop of Rome. About A.D. 372, however, Valentinian enacted a law, empowering that bishop to examine and judge other bishops, that religious disputes might not be decided by any profane or secular judges, and certain prelates, assembled in council at Rome in 378, recommended the execution of it in their address to the emperor Gratian.

The removal of the seat of empire to Constantinople, however, raised up, in the bishop of this new metropolis, a formidable opponent to the bishop of Rome. For as the emperor, to render Constantinople a second Rome, enriched it with all the rights and privileges of the ancient capital of the world; so its bishop, measuring his own dignity and rank by the magnificence of the new city, and its eminence as the residence of the emperor, assumed an equal degree of dignity with the bishop of Rome, and claimed a superiority over the rest of the episcopal order. Accordingly, in a council held at Constantinople in 381, by the authority of Theodosius the Great, the bishop of that city was, during the absence of the bishop of Alexandria, and against the consent of the Roman prelate, placed, by the third canon of that council, in the first rank after the bishop of Rome.

Nectarius was the first bishop who enjoyed these new honors of the see of Constantinople. His successor, the celebrated John Chrysostom, extended still farther the privileges of that see, and included within its jurisdiction all Thrace, Asia, and Pontus; nor were the succeeding bishops of that imperial city deficient in zeal to augment their privileges and extend their dominion. Thus the bishops of Alexandria were not only filled with the most inveterate hatred against those of Constantinople, but a contention was excited between the bishops of Rome and the latter; which, after being carried on for many ages, terminated in the separation of the Greek and Latin churches.

By the arrangements of Constantine the four bishops of Rome, Constantinople, Antioch, and Alexandria, were distinguished by a certain degree of pre-eminence over the rest. These four prelates answered to the four prætorian prefects, and it is probable, that even in this century they were distinguished by the Jewish title of patriarchs. After these followed the exarchs, who had the inspection of several provinces, and answered to the appointment of certain civil officers who bore the same title. In a lower class were the metropolitans, who had only the government of one province; under whom were the archbishops, whose inspection was confined to certain districts. In this gradation the bishops brought up the rear; but the sphere of their authority was not in all places equally extensive; being in some considerably ample, and in others confined within narrow limits. To these various ecclesiastical orders we might add that of the chorepiscopi, or superintendants of the country churches; but this last order was in most places suppressed by the bishops, with a design to extend their own authority, and enlarge the sphere of their power and jurisdiction.

The administration of the church was divided by Constantine into an external and internal inspection. The latter, which was committed to bishops and councils, related to religious controversies, the forms of divine worship, the offices of priests, the vices of the ecclesiastical orders, &c. The external administration of the church the emperor assumed to himself. This comprehended all those things which related to the outward state and discipline of the church; it likewise extended to all contests that should arise between the ministers of the church, superior as well as inferior, concerning their possession, their reputation, their rights and privileges, their offences against the laws, &c., but no controversies that related to matters purely spiritual were cognizable by this external inspection. In consequence of this division of the ecclesiastical government, Constantine and his successors called councils, presided in them, appointed the judges of religious controversies, terminated the differences which arose between the bishops and the people, fixed the limits of the ecclesiastical provinces, took cognizance of the civil causes that subsisted between the ministers of the church, and punished the crimes committed against the laws by the ordinary judges appointed for that purpose. But this famous division of the administration of the church was never explained with sufficient accuracy; so that, both in the fourth and fifth centuries, there are frequent instances of the emperors determining matters purely ecclesiastical, and likewise of bishops and councils determining matters which related merely to the external form and government of the church.

Many additions were now made by the emperors and others to the wealth and honors of the clergy; and the bishops contended with each other in the most scandalous manner concerning the extent of their respective jurisdictions: while they trampled on the rights of the people, and the privileges of the inferior ministers. In many places, however, the presbyters assumed an equality with the bishops in point of rank, and many complaints are made by authors in this century of the vanity and effeminacy of the deacons.

In the fifth century the bishops of Constantinople, having already reduced under their jurisdiction all the Asiatic provinces, began to grasp at further accessions of power. By the twenty-eighth canon of the council of Chalcedon, it was

resolved, that the same rights and honors which had been conferred on the bishop of Rome were due to the bishop of Constantinople, on account of the equal dignity and lustre of the two cities. The same council confirmed also, by a solemn act, the bishop of Constantinople in the spiritual government of those provinces over which he had usurped the jurisdiction. Leo the Great, bishop of Rome, opposed with vehemence the passing of these laws; and his opposition was seconded by that of several prelates. But their efforts were vain, as the emperors threw their weight into the balance, and thus supported the decisions of the Grecian bishops. In consequence of the decisions of this council, the bishop of Constantinople began to domineer over the bishops of Antioch and Alexandria.

About this time Juvenal, bishop of Jerusalem, also attempted to withdraw himself and his church from the jurisdiction of the bishop of Cæsarea, and aspired after a place among the first prelates of the Christian world. Encouraged by the protection of Theodosius the younger, this aspiring prelate assumed the dignity of patriarch of all Palestine, and usurped a jurisdiction over the provinces of Phœnicia and Arabia. Hence arose a warm contest between Juvenal and Maximus bishop of Antioch; which the council of Chalcedon decided, by restoring to the latter the provinces just mentioned.

In 588 John bishop of Constantinople, surnamed the Faster, either by his own authority or that of the emperor Mauritius, summoned a council at Constantinople to enquire into an accusation brought against Gregory bishop of Antioch; and upon this occasion assumed the title of œcumenical or universal bishop. This title had been enjoyed by the bishops of Constantinople without any offence; but now Gregory the Great, then bishop of Rome, suspecting that John was aiming at a supremacy over all the churches, opposed his claim with great vigor. For this purpose he wrote to the emperor, and others whom he thought capable of assisting him in his opposition; but all his efforts were without effect; and the bishops of Constantinople were allowed to enjoy the disputed title, though not in the sense which had alarmed the Roman pontiff.

In the beginning of the seventh century Boniface III. engaged Phocas, emperor of Constantinople, to take from the bishop of that metropolis the title of œcumenical or universal bishop, and to confer it upon the Roman pontiff; and thus was first introduced the supremacy of the pope.

Sect. V.—History of the Church of Rome from the Erection of the Pope's Supremacy to his Assumption of Universal Power.

In the eighth century the power of the bishop of Rome, and of the clergy in general, prodigiously increased. A chief cause of this, besides the superstition of the people, was the peculiar difficulties of European princes in securing themselves on their thrones. The whole continent being in the most unsettled and barbarous condition, they endeavoured to attach warmly to their interests those whom they considered as their friends and clients. For this purpose they distributed among them extensive territories, cities, and fortresses, with the various rights and privileges belonging to them; reserving only to themselves the supreme dominion and military service. For this reason it was, by the European princes, reckoned a high instance of political prudence to distribute among the bishops and other Christian doctors the same sort of donations which had formerly been given to their generals and clients. By means of the clergy they hoped to check the seditious and turbulent spirits of their vassals; and to maintain them in their obedience by the influence and authority of their bishops.

This prodigious accession to the opulence and authority of the clergy in the west began at their head, viz. the Roman pontiff; whence it spread gradually among the inferior sacerdotal orders. The barbarous nations, who had received the gospel, looked upon the bishop of Rome as the successor of their chief druid or high priest: and the see of Rome arrived at despotic authority in civil and political matters. Hence arose the monstrous opinion, that such persons as were excluded from the communion of the church by the pontiff, or any of his bishops, forfeited thereby not only their civil rights and advantages as citizens, but even the common claims and privileges of humanity. This was the fatal source of wars, massacres, and rebellions, without number.

We have seen, in the annals of France, the important influence of the Roman pontiff in confirming the usurpation of Pepin. He dissolved the obligation of the oath of fidelity and allegiance which Pepin had sworn to Childeric, and anointed and crowned him king. This complaisance of the pope was rewarded with the exarchate of Ravenna and its dependencies.

In the succeeding centuries the Roman pontiffs continued to increase their power by every kind of artifice; and by continually taking advantage of the civil dissensions which prevailed throughout Italy, France, and Germany. The wisest and most impartial among the Roman Catholic writers acknowledge, that, from the time of Louis the Meek, the ancient rules of ecclesiastical government were gradually changed in the courts of Europe by the counsels and instigation of the church, and new laws substituted in their places. The European princes suffered themselves to be divested of the supreme authority in religious matters, which they had derived from Charlemagne; the power of the bishops was greatly diminished; and even the authority of both provincial and general councils began to decline.

The popes were now eagerly bent upon establishing the maxim, That the bishop of Rome was constituted and appointed by Jesus Christ supreme legislator and judge of the church; and did not scruple to employ some of their most ingenious and zealous partizans in forging conventions, acts of councils, epistles, and other records, by which it might appear, that, in the first ages of the church, the Roman pontiffs were clothed with the same supreme authority which they now assumed.

In the eleventh century their power seems to have risen to its utmost height. They now received the pompous titles of Masters of the World, and Universal Fathers. Tney presided over every council by their legates, assumed the authority of supreme arbiters in all controversies that arose concerning religion or discipline, and maintained the pretended rights of the church against the encroachments and usurpations of kings and princes. Their authority was confined, however, within certain limits; both by sovereign princes, that it might not attain universal civil dominion; and by the bishops who were galled by its spiritual despotism.

From the time of Leo IX. the popes employed every method which the most artful ambition could suggest to pass these limits. We find instances of their giving away kingdoms, and loosing subjects from their allegiance to their sovereigns; among which the history of John, king of England, is very remarkable. At last they plainly affirmed the whole earth to be within their jurisdiction; and, on the discovery of America and the East Indies, granted we know to the Portuguese a right to all the countries lying eastward, and to the Spaniards all those lying to the west of Cape Non in Africa.

Sect. VI.—Of various Superstitions which Prevailed, from the fifth Century to the Reformation.

All this time superstition reigned triumphant over those remains of Christianity which had escaped the corruptions of the first four centuries. In the fifth commenced the invocation of the souls of departed saints. Their assistance was entreated by many fervent prayers, and the images of those who, during their lives had acquired the reputation of sanctity, were honored with worship in several places. A singular and irresistible efficacy was also attributed to the bones of martyrs, and to the figure of the cross, in defeating the attempts of Satan, and removing all sorts of sickness and calamities. The famous Pagan doctrine concerning the purification of departed souls by means of a certain kind of fire, i. e. purgatory, was also fully received and explained.

In the sixth century Gregory the Great advanced an opinion, that all the words of the sacred writings were images of invisible and spiritual things; for which reason he loaded the churches with a multitude of ceremonies the most insignificant and futile that can be imagined: hence arose a new and most difficult science, namely, the explication of these ceremonies, and the investigation of the causes and circumstances whence they derived their origin. A new method was contrived of administering the Lord's Supper, with a magnificent assemblage of pompous rites. This was called the canon of the mass. Baptism, except in cases of necessity, was administered only on the great festivals. An incredible number of temples were erected in honor of the saints. The places set apart for public worship were also very numerous, and almost equalled in number by the festivals invented to bring the Christian religion as near the model of paganism as possible. In the seventh century religion seemed to be altogether buried under a heap of superstitious ceremonies; the worship of the true God and Saviour of the world was exchanged for the worship of bones, bits of wood (said to be of the cross), and the images of saints. The piety of this and some succeeding ages consisted in building and embellishing churches and chapels; in endowing monasteries and basilics; hunting after the relics of saints and martyrs, and treating them with an absurd and excessive veneration; in pilgrimages to those places which were esteemed holy, particularly to Palestine, &c. The genuine religion of Jesus was now utterly unknown both to clergy and people, if we except a few of its doctrines contained in the creed. In this century, also, the superstitious custom of solitary masses had its origin. These were celebrated by the priest alone in behalf of souls detained in purgatory, as well as upon some other occasions. They proved a source of immense wealth to the clergy, though under Charlemagne they were condemned by a synod assembled at Mentz.

A new superstition, however, sprung up in the tenth century. It was imagined, from Rev. xx. 1, that Antichrist was about to make his appearance on the earth, and that soon after the world would be destroyed. A universal panic ensued; vast numbers of people, abandoning all their connexions in society, and giving over to the churches and monasteries all their worldly effects, repaired to Palestine, where they imagined that Christ would descend from heaven to judge the world. Others devoted themselves by a solemn and voluntary oath to the service of the churches, convents, and priesthood, whose slaves they became, in the most rigorous sense of that word, performing daily their heavy tasks; and all this from a notion that the supreme judge would diminish the severity of their sentence, and look upon them with a favorable and propitious eye, on account of their having made themselves the slaves of their minister. When an eclipse of the sun or moon happened to be visible, the cities were deserted, and their miserable inhabitants fled for refuge to hollow caverns, and hid themselves among the craggy rocks, and under the bending summits of steep mountains. The opulent attempted to bribe the saints and the Deity himself by rich donations conferred upon the sacerdotal tribe, who were looked upon as the immediate vicegerents of heaven. In many places temples, palaces, and noble edifices, both public and private were suffered to decay, nay, were deliberately pulled down, from a notion that they were no longer of any use, as the final dissolution of all things was at hand. No language, in a word, is sufficient to express the confusion and despair that tormented the minds of miserable mortals upon this occasion. This terror became one of the accidental causes of the crusades.

That nothing might now be wanting to complete the reign of antichrist in Europe, it was in the eleventh century determined that divine worship should be celebrated in the Latin tongue, though now unknown throughout the continent: and, during a great part of this century, Christians were employed in rebuilding and ornamenting

their churches, which they had destroyed through the superstitious apprehensions of the previous period.

The ecclesiastical affairs of Europe thus proceeded till the time of the Reformation. The clergy were immersed in crimes and barbarism; and the laity, imagining themselves able to purchase pardon of their sins for money, followed the example of their pastors without remorse; while the absurd principle, that religion consists in acts of austerity, and an unknown mental correspondence with God, produced the most extravagant and ridiculous behaviour in devotees and reputed saints. They not only lived among the wild beasts, but also after the manner of those savage animals; they ran naked through the deserts, and aped the agitations of madness and frenzy; avoided the sight and conversation of men; remained almost motionless in certain places for years, exposed to the rigor and inclemency of the seasons, and, towards the conclusion of their lives, shut themselves up in narrow and miserable huts: all this being considered as true piety, and the only acceptable method of worshipping the Deity.

About the beginning of the sixteenth century, the Roman pontiffs enjoyed the utmost tranquillity; nor had they, according to the appearance of things at that time, any reason to fear opposition to their authority. The commotions which had been raised by the Waldenses, Albigenses, &c., were now entirely suppressed, and the world bowed to their power. We must not however conclude, from this apparent security of the pontiffs and their adherents, that their measures were universally applauded. Not only private persons, but also the most powerful princes and sovereign states, exclaimed loudly against the tyranny of the popes, and the unbridled licentiousness of the clergy. They demanded, therefore, a reformation of the church in its head and members, and a general council to accomplish it. But these complaints and demands produced little effect; they came from persons who never entertained the least doubt about the supreme authority of the pope; and who of consequence, instead of attempting themselves to bring about that reformation which was so ardently desired, remained entirely inactive, or looked only for redress to those who were interested in perpetuating abuses.

While the so much desired reformation seemed to be at the greatest distance, it suddenly rose, however, from a quarter whence it was not at all expected. Martin Luther, a monk of the order of St. Augustine, ventured to oppose himself to the whole torrent of papal power and despotism. This bold attempt was first made public on the 30th of September 1517; and, notwithstanding all the efforts of the pope and his adherents, the doctrines of Luther continued daily to gain ground. Others, encouraged by his success, lent their assistance in the work of reformation; which at last produced new churches, founded upon principles quite different from that of Rome, and which still continue. But for an account of the transactions of the reformers, and the more modern history of the church, see LUTHER and REFORMATION.

PART III.

OF THE COMPOSITION OF HISTORY.

Having thus furnished the reader with a sketch of the two great practical views of our subject, we may advert to the art of composing history, as it has been treated by Cicero and others.

The requisites mentioned by that great writer may be arranged under four heads, Truth, Subject, Order, and Style.

SECT. I.—OF HISTORICAL TRUTH.

Truth is the basis and foundation of history. It is the life and soul of it, and that by which it is distinguished from fable or romance. An historian therefore ought not only to be a man of probity, but void of all passion or bias. He must have the steadiness of a philosopher, joined with the vivacity of the poet and orator. Without the former, he will be insensibly swayed by some passion to give a false coloring to the actions or characters he describes, as favor or dislike to parties or persons affects his mind. And, without the latter, his descriptions will be flat and cold.

But historical truth consists of two parts, one is, Not to state any thing we know to be false. Nor is it sufficient to excuse an historian, in relating a falsehood, that he did not know it to be so when he wrote, unless he first used all the means in his power to inform himself of the truth. We are informed of Thucydides, that when he wrote his history of the Peloponnesian war, he did not satisfy himself with the best accounts he could obtain from his countrymen the Athenians, fearing they might be partial in their own cause; but spared no expense to inform himself how the same facts were related by their enemies the Lacedæmonians. And Polybius travelled into Africa, Spain, Gaul, and other parts of the world, to write his history of the Roman affairs.

The other branch of historical truth is, Not to omit any thing that is true, and necessary to set the matter treated of in a clear and full light. In the actions of past ages or distant countries, wherein the writer has no personal concern, he can have no great inducement to break in upon this rule. But, where interest or party is engaged, it requires no small candor, as well as firmness of mind, constantly to adhere to it. Affection to some, aversion to others, fear of disobliging the friends of those in power, &c., will often interpose and try his integrity. Besides, an omission is less obnoxious to censure than a false assertion; for the one may be easily ascribed to ignorance or forgetfulness; whereas the other will, if discovered, be commonly looked upon as design. He, therefore, who in such circumstances, from a generous love to truth, is superior to all motives to betray or stifle it, justly deserves the character of an honest historian.

Polybius says on this head, 'A good man ought to love his friends and his country, and to have a like disposition with them, both towards their friends and enemies. But when he takes upon him the character of an historian they must all be forgot.' Integrity is undoubtedly the principal qualification of an historian; when we

can depend upon this, other imperfections are more easily passed over. Suetonius is said to have written the lives of the twelve Cæsars as free from external influence as they themselves lived. What better character can be given of a writer?

Sometimes, indeed, a judgment may be formed of the veracity of an author, from his manner of expressing himself, and a certain candor and frankness, always uniform and consistent, that runs through his writings.

Thus, where things are uncertain because of their being reported various ways, it is partiality in an historian to give the most unfavorable account, where others are as well known and equally credible. Again, it is a proof of the same bad spirit when the facts themselves are certain and evident, but the design and motives of those concerned in them are unknown and obscure, to assign some ill principle, such as avarice, ambition, malice, interest, or some other vicious habit, as the cause of them.

Sect. II.—Of the Subject of History.

By the subject of history we mean facts themselves, together with such matters as are either connected with them, or may at least is requisite to set them in a just and proper light. But, although the principal design of history is to record facts, yet all facts do not merit the regard of an historian; but such only as may be thought of use in regulating human conduct. Nor is it allowable for him, like the poet, to form the plan and scheme of his work as he pleases. His business is to report things as he finds them, without coloring or disguise.

Some histories afford more entertainment than others, from the nature of the events which they record; and it may be esteemed the happiness of an historian to meet with such a subject, but it is not his fault if it be otherwise. Thus Herodotus begins his history with showing, that the barbarians gave the first occasion to the wars between them and the Greeks, and ends it with an account of the punishment which, after some ages, they suffered from the Greeks on that account. Such a relation must not only have been agreeable to his countrymen the Grecians, for whose sakes it was written; but likewise very instructive, by informing them of the justice of Providence in punishing public injuries in this world, wherein societies, as such, are only capable of punishment. On the other hand, Thucydides begins his history with the unhappy state of his countrymen the Athenians; and in the course of it plainly intimates, that they were the cause of the calamitous war between them and the Lacedæmonians: Whereas, had he been more inclined to please and gratify his countrymen than to convey the truth, he would have endeavoured to make their enemies appear the aggressors.

Cicero observes, justly, that history 'is conversant in great and memorable actions.' For this reason an historian should always keep posterity in view; and relate nothing which does not seem worth the notice of after ages. To descend to trivial and minute matters, such as frequently occur in the common affairs of life, is below the dignity of historical composition. Pliny the younger has some fine reflections upon this subject: 'You advise me,' says he, 'to write a history; and not you only, for many others have done the same, and I am myself inclined to it. Not that I believe myself qualified for it, which would be rash to think till I have tried it; but because I esteem it a generous action not to suffer those to be forgotten whose memory ought to be eternised; and to perpetuate the names of others, together with one's own. For there is nothing I am so desirous or ambitious of, as to be remembered hereafter; which is a thing worthy of a man, especially of one who, conscious of no guilt, has nothing to fear from posterity.' And when Dion Cassius has mentioned some things of less moment in the life of Commodus, chiefly indeed filled up with cruelty and folly, he thus apologises for himself:—'I would not have it thought that I descend below the gravity of history in writing these things: for, as they were the actions of an emperor, and I was present and saw them all, and both heard and conversed with him, I did not think it proper to omit them.' He seems to think those actions, when performed by an emperor, might be worth recording, which, if done by a person of inferior rank, would not have deserved notice.

But, although facts in general are the proper subject of history, they may be differently considered with regard to the extent of them, as they relate either to particular persons or communities of men. And from this consideration history has been distinguished into three sorts, biography, and particular and general history. Writing the lives of single persons is called biography. By particular history is meant that of particular states, whether for a shorter or longer space of time. And general history contains an account of several states existing together in the same period of time.

The general subject, or argument of history, in its several branches, may be reduced to narration, reflection, speeches, and digressions.

1. By *narration* is meant a description of facts or actions, with such things as are necessarily connected with them; namely, persons, time, place, design, and event.

But an accurate historian goes still further, and considers the causes of actions, and what were the designs and views of those who were principally concerned in them. Some, as Polybius has well observed, are apt to confound the beginnings of actions with their springs and causes, which ought to be carefully separated. For the causes are often very remote, and to be looked for at a considerable distance from the actions themselves. Thus, as he tells us, some have represented Hannibal's besieging Saguntum in Spain, and passing the Ebro, contrary to a former agreement between the Romans and Carthaginians, as causes of the second Punic war. But these were only the beginnings of it. The true causes were the jealousies and fears of the Carthaginians from the growing power of the Romans; and Hannibal's inveterate hatred to them, with which he had been impressed from his infancy.

Again, the true springs and causes of actions

are to be distinguished from such as are only feigned and pretended. For, generally, the worse designs men have in view, the more solicitous they are to cover them with specious pretences. It is the historian's business, therefore, to lay open and expose to view these arts of politicians. So, as the same judicious historian remarks, we are not to imagine Alexander's carrying over his army into Asia to have been the cause of the war between him and the Persians. Philip, his father, made preparations for it, but did not live to execute it. That was left for his son. But, as Philip could not have done this without first bringing the other states of Greece into his design, his pretence to them was only to avenge the injuries they had suffered from the Persians.

Lastly, an historian should relate the issue and event of the actions he describes. This is undoubtedly the most useful part of history; since the greatest advantage arising from it is to teach us experience from what has happened. When we learn from the examples of others the happy effects of wisdom, prudence, integrity, and other virtues, it naturally excites us to imitate them, and to pursue the same measures in our own conduct. Polybius therefore observes, that 'he who takes from history the causes, manner, and end of actions, and omits to take notice whether the event was answerable to the means made use of, leaves nothing in it but a bare amusement, without any benefit or instruction.'

2. *Reflections* made by the writer have been both extravagantly applauded and unreasonably condemned. If the philosopher is allowed to draw inferences from his precepts, and their effects on society, why should not the historian have an equal right to make reflections upon the facts he relates? The reader is equally at liberty to judge for himself in both cases: we therefore find, that the best historians have taken this liberty. Thus Livy makes a very beautiful observation upon the ill conduct of Hannibal in quartering his army in Capua after the battle of Cannæ. 'Those,' says he, 'who are skilled in military affairs reckon this a greater fault in the general, than his not marching his army immediately to Rome after his victory at Cannæ; for such a delay might have seemed only to defer the victory, but this ill step deprived him of the power to gain it.'—Lib. xxiii. c. 18.

Lord Gardenstone, on the other hand, remarks of Mr. Hume, that 'his account of the house of Stuart is not the statement of an historian, but the memorial of a pleader in a court of justice.' —*Gard. Miscell.* p. 305.

3. *Speeches* inserted by historians are of two sorts, namely, oblique and direct. The former are such as the historian recites in his own person, and not in that of the speaker. Of this kind is that of Hannibal in Justin, by which he endeavours to persuade king Antiochus to carry the seat of the war against the Romans into Italy. It is rather a narrative of the operations of Hannibal's mind.

In direct speeches, the person himself is introduced as addressing his audience; and therefore the words as well as the sense are suited to his character. Such is the speech of Eumenes, one of Alexander's captains and successors, made to his soldiers when they had traitorously bound him in chains, to deliver him up to his enemy Antigonus, in the same author.

After all, this is a matter on which critics are divided; whether any, or what kind of speeches, ought to be allowed in history. Some think all should be excluded, as breaking the thread of the discourse. Others only object to what have been called direct speeches, as generally any thing but real ones. Thus when Livy, for example, gives us the speeches of Romulus, the Sabine women, Brutus, and others, in the first ages of the Roman state, both the things themselves are imaginary, and the language wholly incongruous with the times in which the parties lived. However, there is scarcely an ancient historian now extant, either Greek or Latin, who has not inserted several speeches in his works, both oblique and direct.

4. *Digressions*, if properly managed, afford the reader both pleasure and advantage. Like speeches, they should neither be too long nor frequent; lest they interrupt the course of the history, and divert the reader from the main design. But now and then to introduce a beautiful description, or some remarkable incident, which may throw light on the subject, is so far from an interruption, that it is rather a relief to the reader, and excites him to go on with greater pleasure and attention. See Oratory.

Sect. III.—Of Order.

As most histories consist of an introduction, and the body of the work, in each of which some order is requisite, we shall treat of them separately.

1. The design of the introduction is the same here as in orations. For the historian proposes three things by his introduction, which may be called its parts: 1. To give his reader some general view of the subject; 2. To engage his attention, and to possess him with a favorable opinion of himself and his performance. Livy's introduction has been very much applauded by the learned, as a master-piece. It gives the following account of his design:—'Whether,' says he, 'it may answer any valuable end for me to write the history of the Roman affairs from the beginning of the city, I neither am certain, nor, if I was, should I venture to declare it.' He then endeavours to prepare the reader's attention, by representing the grandeur and usefulness of the subject. 'Either I am prejudiced in favor of my subject, or there never was any state greater, more virtuous, or more fruitful of good examples, or in which avarice and luxury had a later admittance, or poverty and thriftiness were either more highly or longer esteemed.' And then he proceeds to ingratiate himself with his readers. 'Although my name is obscure, in so great a number of writers, yet it is a comfort that they cloud it by their fame and character. For I shall gain this advantage by my labor, that I shall be diverted for a time from the prospect of those evils which the present age has seen; while my mind is wholly intent upon former times, and free from all that care which gives the writer uneasiness, though it cannot bias him against the truth.' Sallust is greatly blamed by Quintilian

on account of his introductions, which are so general, that they might suit other histories as well as those to which they are prefixed. Introductions should likewise be proportioned to the length of the work. We meet with some few histories, in which the writers immediately enter upon their subject, without any introduction; as Xenophon in his Expedition of the younger Cyrus, and Cæsar in his Commentaries of the Gallic and Civil Wars. But the latter does not profess to write a history; and therefore left himself more at liberty, as well in this respect as in some others.

2. But order is principally to be regarded in the body of an historical work. And this may be managed two ways; either by attending to the time in a chronological series, or the different nature and circumstances of the things contained in the history.

In a general history the order of time cannot always be preserved; though, where the actions of different communities have respect to one as the principal, they should all, as far as possible, be referred to the transactions of that state. But even here the several affairs of those different states ought to be related separately, which will necessarily occasion the anticipating some things, and postponing others, so that they cannot all stand in the exact order of time in which they were performed. However, Velleius Paterculus says very justly, 'Every entire action, placed together in one view, is much better apprehended than if divided by different times.' In this case, therefore, for better preserving the chronology, it is usual with historians, when they have finished any particular narrative, in passing to the next, to express the time by some short and plain transition.

The division of histories into books was designed for the better distinction of the subject, and ease of the reader. The dividing these books into chapters is rather a practice of modern editors, founded on similar reasons, than countenanced by the example of ancient authors.

Sect. IV.—Of Style.

An historical style is said to be of a middle nature, between that of a poet and orator, differing from both, not only in the ornamental parts, but also in the idioms and forms of expression. Cicero observes (De Clar. Orat. c. 75) 'that nothing is more agreeable in history than brevity of expression, joined with purity and perspicuity.' Purity indeed is not peculiar to history, but yet is absolutely necessary; for nobody will think him fit to write a history, who is not master of the language in which he writes: when Albinus, therefore, had written a history of the Roman affairs in Greek, and apologised for any improprieties that might be found in the language upon the account of his being a Roman, Cato called him a trifler, for choosing to do that which, after he had done it, he was obliged to ask pardon for doing. Nor is perspicuity less requisite in an historical style. The nature of the subject plainly directs to this; for, as history consists principally in narration, clearness and perspicuity is no where more necessary.

Cicero again, treating of an historical style (De Orat. lib. ii. c. 15, 20), says, 'It ought to be fluent, smooth, and even; free from that harshness and poignancy which is usual at the bar.' The historian has no necessity for the variations of the declaimer. It is his province to espouse no party, to have neither friend nor foe, but to appear disinterested and indifferent to all; his language, therefore, should be smooth and equal.

Dionysius (Epist. ad. Cn. Pompeium) makes 'decency a principal virtue in an historian;' which he explains by saying, that 'he ought to preserve the characters of the persons and dignity of the actions of which he treats.' To do this it is necessary, that an historical style should be animated with a degree of life and vigor; without which neither the characters of eminent persons, nor their remarkable actions, can be duly represented: for even things in themselves great and excellent, if related in a cold and lifeless way, will not affect us in a degree suitable to their importance. Whence it appears, that painting and imagery make up no small part of the historian's province, though his colors must not be so strong and glittering as those of either the poet or the orator.

As to dignity in the use of tropes and figures, the same author says, 'History should be embellished with such figures as are neither vehement, nor carry in them the appearance of art.' This is agreeable to what Cicero observes, in comparing Xenophon and Callisthenes: 'Xenophon the Socratic,' he says, 'was the first philosopher, and after him Callisthenes, the scholar of Aristotle, who wrote a history: the latter is almost a rhetorician; but the style of the former is more moderate, and has not the force of an orator; it is less vehement, perhaps, but in my opinion, more sweet and agreeable.' The difference between these two writers, with regard to their style, consisted chiefly in the choice of their figures. An historical style admits indeed of endless varieties, according to the nature and dignity of the subject. The lives of particular persons do not require such strength and majesty of expression, nor such ornaments of language, as a history of the Roman empire. And accordingly we find the style of Nepos and Suetonius very different from that of Livy. The former is smooth and easy; but the latter often approaches near to the sublime; other historians again have kept a medium between these. Upon the whole, therefore, we may conclude, that the middle style is generally the proper one for history: but a variety and flexibility of style is not only requisite in different subjects, but likewise in different parts of the same work

HISTRION'ICAL, *adj.* } Lat. *histrio*; Fr.
HISTRION'IC, } *histrion*. Befitting
HISTRION'ICALLY, *adv.* } the stage; suitable to a player; becoming a buffoon; theatrical.

HIT, *v. a.*, *v. n.*, & *n. s.* Goth. and Swed. *hetta*; Dan. *hitti*: Minsheu says from Lat *ictus*. To strike; to touch with a blow; to touch the mark; to attain or reach; to be conformable or adapted; to catch by the right bait: to hit off is to determine luckily: to hit out to perform by good luck: also, to clash; to chance; to succeed; to light on: a stroke; a fortuitous event; a lucky chance.

And king Emetrius, for all his strengthe
Is borne out of his sadel a swerdes lengthe:
So *hitte* him Palamon, or he were take:—
But all for naught: he was brought to the stake.
Chaucer. The Knightes Tale.

Having the sound of ancient poets ringing in his ears, he mought needs in singing *hit out* some of their tunes. *Spenser.*

Oft expectation fails, and most oft there
Where most it promises; and oft it *hits*
Where hope is coldest and despair most sits. *Shaksp.*

Were I but twenty-one,
Your father's image is so *hit* in you,
His very air, that I should call you brother,
As I did him. *Id.*

Have all his ventures failed? What, not one *hit*? *Id.*

The king hath laid, that in a dozen passes between you and him, he shall not exceed you three *hits*. *Id.*

There is a kind of conveying of effectual and imprinting passages amongst compliments, which is of singular use, if a man can *hit* upon it. *Bacon.*

The experiment of binding of thoughts would be diversified, and you are to note whether it *hits* for the most part. *Id. Natural History.*

Hail, divinest melancholy!
Whose saintly visage is too bright
To *hit* the sense of human sight. *Milton.*

But thou bringest valour too and wit,
Two things that seldom fail to *hit*. *Hudibras.*

But with more lucky *hit* than those
That use to make the stars depose. *Id.*

When I first saw her I was presently stricken; and I, like a foolish child, that when any thing *hits* him will strike himself again upon it, would needs look again, as though I would persuade mine eyes that they were deceived. *Sidney.*

Is he a god that ever flies the light?
Or naked he? disguised in all untruth?
If he be blind, how *hitteth* he so right? *Id.*

Search every comment that your care can find,
Some here, some there, may *hit* the poet's mind.
Roscommon.

It is much, if men were from eternity, that they should not find out the way of writing sooner: sure he was a fortunate man, who, after men had been eternally so dull as not to find it out, had the luck at last to *hit* upon it. *Tillotson.*

What prince soever can *hit off* this great secret, need know no more either for his own safety, or that of the people he governs. *Temple.*

You've *hit* upon the very string, which touched,
Echoes the sound, and jars within my soul:
There lies my grief. *Dryden's Spanish Fryar.*

So he the famed Cilician fencer praised,
And at each *hit* with wonder seemed amazed.
Dryden.

These *hits* of words a true poet often finds, without seeking. *Id.*

This may *hit* 'tis more than barely possible. *Id.*

There's a just medium betwixt eating two much and too little; and this dame had *hit* upon't, when the matter was so ordered that the hen brought her every day an egg. *L'Estrange.*

The fisherman's waiting, and the lucky *hit* it had in the conclusion, tell us, that honest endeavours will not fail. *Id.*

If bodies be extension alone, how can they move and *hit* one against another; or what can make distinct surfaces in an uniform extension? *Locke.*

Birds learning tunes, and their endeavours to *hit* the notes right, put it past doubt that they have perception, and retain ideas, and use them for patterns. *Id.*

His conscience shall *hit* him in the teeth, and tell him his sin and folly. *South.*

So hard it is to tremble, and not to err, and to *hit* the mark with a shaking hand. *Id.*

If the rule we judge by be uncertain, it is odds but we shall judge wrong; and, if we should judge right, yet it is not properly skill, but chance; not a true judgment but a lucky *hit*. *Id.*

None of them *hit* upon the art. *Addison.*

If at first he minds his *hits*,
And drinks champaigne among the wits,
Five deep he toasts the towering lasses. *Prior.*

Bones, teeth, and shells, being sustained in the water with metallic corpuscles, and the said corpuscles meeting with and *hitting* upon those bodies, become conjoined with them. *Woodward.*

If casual concourse did the world compose,
And things and *hits* fortuitous arose,
Then any thing might come from any thing;
For how from chance can constant order spring?
Blackmore.

Here's an opportunity to shew how great a bungler my author is in *hitting* features. *Atterbury.*

To suppose a watch, by the blind *hits* of chance, to perform diversity of orderly motions; without the regulation of art, this were the more pardonable absurdity. *Granville.*

There's but a true and a false prediction in any telling of fortune; and a man that never *hits* on the right side, cannot be called a bad guesser, but must miss out of design. *Bentley.*

All human race would fain be wits,
And millions miss for one that *hits*. *Swift.*

HITCH, *v. n.* Sax. hiczan, or Fr. *hocher*.—Skinner. To catch; to move by jerks. I know not where it is used but in the following passage. —Johnson.

Whoe'er offends at some unlucky time
Slides in a verse, or *hitches* in a rhyme;
Sacred to ridicule his whole life long,
And the sad burthen of some merry song. *Pope.*

HITHE, *n. s.* Sax. hyðe. A small haven to land wares out of vessels or boats: as Queenhithe, and Lambhithe, now Lambeth.

HITH'ER, *adv.* & *adj.* } Saxon, hiðep, hy-
HITH'ERMOST, *adj.* } ðepmeapð. The pri-
HITH'ERTO, *adv.* } mary idea is approxi-
HITH'ERWARD, } mation, whether of
HITH'ERWARDS, *adv.* } time, place, or design; used in opposition to thither: hithermost, nearest on this side: hitherto, yet; at every time till the present: hitherwards, this way; this road; towards the place nearest to the speaker.

Frende! what is thy name?
Art thou come *hider* to have fame?
Have fame! nay, forsothe, Frende! quod I,
I come not *hither*, grant mercy,
For no soche cause by my hed. *Chaucer.*

Pandare answered: Be we comen *hither*
To fetchen fire and rennen home again. *Id.*

More ample spirit than *hitherto* was wont,
Here needs me, while the famous ancestries
Of my most dreadful sovereign I recount.
Faerie Queene.

Cæsar, tempted with the fame
Of this sweet island never conquered,
And envying the Britons blazed name,
O hideous hunger of dominion! *hither* came.
Spenser.

Hereupon dependeth whatsoever difference there is between the states of saints in glory; *hither* we refer whatsoever belongeth unto the highest perfection of man, by way of service towards God. *Hooker.*

In this we are not their adversaries, though they in the other *hitherto* have been ours. *Id.*

Some parcels of their power are forth already,
And only *hitherward*. *Shakspeare. Coriolanus.*

The king himself in person hath set forth,
Or *hitherwards* intended speedily. *Shakspeare.*

A puissant and mighty power
Is marching *hitherward* in proud array. *Id.*

Men must endure
Their going hence, even as their coming *hither*. *Id.*

Look now for no enchanting voice, nor fear
The bait of honied words; a rougher tongue
Draws *hitherward*. *Milton.*

Hitherto, lords, what your commands imposed
I have performed, as reason was, obeying. *Id.*

Who brought me *hither*
Will bring me hence, no other guide I seek. *Id.*

After these,
But on the *hither* side, a different sort,
From the high neighb'ring hills descended. *Id.*

That which is external can be extended to a greater extent at the *hithermost* extreme. *Hale.*

An eternal duration may be shorter or longer upon the *hither* end, namely that extreme wherein it is finite. *Id.*

Hither belong all those texts, which require of us that we should not walk after the flesh, but after the spirit. *Tillotson.*

Hitherto I have only told the reader what ought not to be the subject of a picture or of a poem. *Dryden.*

Hitherto she kept her love concealed,
And with those graces every day beheld
The graceful youth. *Id.*

He could not have failed to add the opposition of ill spirits to the good alone: this has *hitherto* been the practice of the moderns. *Id. Juvenal.*

To correct them, is a work that has *hitherto* been assumed by the least qualified hands. *Swift.*

Come *hither*, ye that press your beds of down
And sleep not: see him sweating o'er his bread
Before he eats it. *Cowper's Task.*

HIVE, *n. s.*, *v. a.*, & *v. n.* } Sax. hyꝛe, from
Hi'ver, *n. s.* } Goth. *hiu*. The habitation and receptacle for bees; the bees themselves; a company of persons: hive, to put in hives; to harbour; to contain; to take shelter or reside in companies. Hiver one who puts bees into hives.

But while that I beheld this sight,
I herde a noise approchen blive,
That fareth as bees doen in an *hive*
Agenst hir time of out flying.
Chaucer. The House of Fame.

So bees with smoke, and doves with noisome stench,
Are from their *hives* and houses driven away.
Shakspeare.

He sleeps by day
More than the wild cat: drones *hive* not with me,
Therefore I part with him. *Id.*

The commons, like an angry *hive* of bees
That want their leader, scatter up and down. *Id.*

What is a ship but a prison? And so many cities are but as so many *hives* of bees.
Burton's Anatomy of Melancholy.

Ambitious now to take excise
Of a more fragrant paradise,
He at Fuscara's sleeve arrived,
Where all delicious sweets are *hived*.
Cleaveland.

So wandering bees would perish in the air,
Did not a sound, proportioned to their ear,
Appease their rage, invite them to the *hive*.
Waller.

Mr. Addison of Oxford has been troublesome to me: after his bees, my latter swarm is scarcely worth *hiving*. *Dryden.*

Let the *hiver* drink a cup of good beer, and wash his hands and face therewith. *Mortimer.*

When bees are fully settled, and the cluster at the biggest, *hive* them. *Id. Husbandry.*

Bees have each of them a hole in their *hives*; their honey is their own, and every bee minds her own concerns. *Addison.*

In summer we wander in a paradisaical scene, among groves and gardens; but at this season we get into warmer houses, and *hive* together in cities.
Pope's Letters.

What modern masons call a lodge, was by antiquity called a *hive* of free masons; and therefore, when a dissention happens, the going off is to this day called swarming. *Swift.*

HIVITES, an ancient people descended from Canaan, who dwelt at first in the country afterwards possessed by the Caphtorims, or Philistines, of Scripture. There were also Hivites in the centre of the promised land; for the Shechemites and the Gibeonites were Hivites. Gen. xxxiv. 2. Josh. xi. 19. There were also some beyond Jordan, at the foot of Mount Hermon. Bochart says, that Cadmus, who carried a colony of Phœnicians into Greece, was a Hivite. He derives Cadmus from the Hebrew Kedem, i. e. the east, because he was of the eastern part of Canaan; and Hermione, from Hermon. See Hevæi.

HO, *interj.* } Lat. *eho*. A call; a sudden
Hoa. } exclamation to give notice of approach, or any thing else.

What noise there, *ho?* *Shakspeare.*

Here dwells my father Jew: *hoa*, who's within?
Id.

Stand, *ho!* speak the word along *Id.*

When I cried *hoa!*
Like boys, kings would start forth, and cry,
Your will. *Id.*

Ho, swain, what shepherd owns that ragged sheep?
Dryden.

HOADLEY (Benjamin), successively bishop of Bangor, Hereford, Salisbury, and Winchester, was born in 1676. His first preferment was the rectory of St. Peter le Poor, and the lectureship of St. Mildred's in the Poultry. In 1706 he published some Remarks on bishop Atterbury's Sermon at the funeral of Mr. Bennet. Two years after, Mr. Hoadley again entered the lists against this formidable antagonist; and in his Exceptions against a sermon published by Dr. Atterbury, entitled The Power of Charity to cover Sin, he attacked the doctor with his usual strength of reasoning. In 1709 another dispute arose be-

tween these two learned combatants, concerning the doctrine of non-resistance, occasioned by a performance of Mr. Hoadley's, entitled The Measures of Obedience; some positions in which Dr. Atterbury endeavoured to confute, in his elegant Latin sermon, preached that year before the London clergy. In this debate Mr. Hoadley signalised himself in so eminent a degree, that the house of commons addressed the queen, to grant him some preferment as a reward for the signal services he had rendered to the cause of civil and religious liberty. But the principles which he espoused were repugnant to the temper of those times; and the queen, though she promised to attend to their requests, never did so. A Mrs. Howland, however, presented him, unasked, to the rectory of Streatham in Surrey. Soon after the accession of king George I. he was consecrated bishop of Bangor: but in 1717, having broached some opinions concerning the nature of Christ's kingdom, &c., he again became the object of popular clamor; when he was distinguished by another mark of royal regard, by the convocation being successively prorogued, till that resentment had subsided. In 1721 he was translated to Hereford; in 1723 to Salisbury; and in 1734 to Winchester: when he published his Plain Account of the Sacrament; which also occasioned much controversy. As a writer, he possessed uncommon abilities. His Sermons (published in 1754 and 1755) are esteemed inferior to few writings in the English language, for plainness and perspicuity, energy, strength of reasoning, and a free and masterly style. In private life he was facetious, easy, and complying; fond of company, yet would frequently leave it for study or devotion. He died in 1761, aged eighty-three. Besides the above, he wrote, 1. Terms of Acceptance, 8vo. 2. Reasonableness of Conformity. 3. On the Sacrament. His tracts and pamphlets are extremely numerous; and the reader may see a catalogue of them in the Supplement to the *Biog. Brit.*

HOADLEY (Benjamin), M. D. and F.R.S., son of the bishop, was born in 1706; and studied at Benet College, Cambridge, under the tuition of Dr. afterwards Archbishop Herring. Applying himself to mathematics and philosophy, he was, when very young, admitted a member of the Royal Society. He was made register of Hereford, and was appointed physician to his majesty's household, but died at his house in Chelsea in 1757. He wrote, 1. Three Letters on the Organs of Respiration, 4to. 2. The Suspicious Husband, a comedy. 3. Observations on a Series of Electrical Experiments; and 4. Oratio Anniversaria, in Theatro Col. Med. Londin. ex Harvei Instituto, habita die 18° Octob. 1742.

HOAIN-GAN-FOO, or HWOOEE-GAN-FOO, a considerable city of China, in the province of Kiangnan, situated on the bank of the great canal. Its population crowded round the late British embassy under lord Amherst. There is a large dock yard in the vicinity; and the canal is above the level of the town. Long. 118° 47′ E., lat. 53° 30′ N.

HOANG-HO, or Yellow River, a remarkable river of China, and one of the most prominent features in its geography. See CHINA. It derives its name from the yellow color given it by the clay and sand washed down in the time of rain. After a course of nearly 600 leagues, it discharges itself into the Eastern Sea not far from the mouth of the Kiang. Though broad and rapid, it is in many places too shallow for any important navigation: it is also liable to overflow its banks, so that it has been necessary in many places to raise dikes on the side of it for the defence of the country.

HOANG-TCHEOU, a city of China of the first rank, in the province of Hou-Quang, on the Yang-Tse, 585 miles south of Pekin.

HOAR, *adj.* } Sax. han; Isl. *har*; Goth. *hara*. White; gray with age; white with frost: hoar-frost is the congelations of dew on frosty mornings: hoary, mouldy; mossy or rusty.
HOAR'FROST, *n. s.* }
HOAR'INESS, *n. s.* }
HOAR'Y, *adj.* }

When the dew was gone up, behold upon the face of the wilderness there lay a small round thing, as small as the *hoar-frost* on the ground.
Exod. xvi. 14.

Though I be *hoor*, I fare as doth a tre
That blosmeth er the fruit ywoxen be;
The blosmy tre is neither n'is neither drie ne ded
I fele me no wher *hoor* but on my hed.
Chaucer. The Merchantes Tale.

It governed was and guided evermore
Through wisdom of a matron grave and *hoar*.
Spenser.

A comely palmer clad in black attire
Of ripest years and hairs all *hoary* grey. *Id.*

There was brought out of the city into the camp very coarse, *hoary*, moulded bread.
Knolles's History.

Solyman, marvelling at the courage and majesty o the *hoary* old prince in his so great extremity, dismissed him and sent him again into the city. *Id.*

The seasons alter; *hoary* headed frosts
Fall in the fresh lap of the crimson rose.
Shakspeare.

A people,
Whom Ireland sent from loughs and forests *hoar*.
Fairfax

Oft listening how the hounds and horn
Cheerly rouse the slumbering morn,
From the side of some *hoar* hill
Through the high wood echoing shrill.
Milton. L'Allegro.

He grows a wolf, his *hoariness* remains,
And the same rage in other members range.
Dryden.

Has then my *hoary* head deserved no better?
Rowe.

Thus she rested on her arm reclined,
The *hoary* willows waving with the wind.
Addison.

Then in full age and *hoary* holiness,
Retire, great preacher, to thy promised bliss. *Prior.*

Cool breathes the morning air, and
Spreads wide her *hoary* mantle o'er.
Gay's Rural Sports.

In Fahrenheit's thermometer, at thirty-two degrees, the water in the air begins to freeze, which is known by *hoar-frosts*. *Arbuthnot.*

Now swarms the populace, a countless throng:
Youth and *hoar* age, and man drives man along.
Pope.

Island of bliss, all assaults
Baffling, like thy *hoar* cliffs, the loud sea wave.
Thomson.

——————— and the wood,
The covert of old trees, with trunks all *hoar*,
But light leaves, young as joy, stands where it stood,
Offering to him and his a populous solitude.
Byron. Childe Harold.

HOAR-FROST, according to many Cartesians, is formed of a cloud, and either congealed in the cloud, and so let fall, or ready to be congealed as soon as it arrives at the earth. Hoar-frost, M. Regis observes, consists of an assemblage of little parcels of ice crystals, which are of various figures, according to the different dispositions of the vapors when condensed by the cold.

HOARD, *n. s.*, *v. a.* & *v. n.* } Saxon hopd;
HOARD'ER, *n. s.* } Teutonic *hord*, a treasure. A store laid up in secret; a hidden stock; a treasure: to lay up in store; to store or preserve secretly: sometimes it is enforced by the particle *up*.

Ful riche was his tresour and his *hord*,
For which ful fast his counter dore he shet.
Chaucer. The Shipmannes Tale.

He feared not once himself to be in need,
Nor cared to *hoard* for those whom he did breed.
Spenser.

Happy always was it for that son,
Whose father for his *hoarding* went to hell.
Shakspeare.

I have a venturous fairy, that shall seek
The squirrel's *hoard*, and fetch thee thence new nuts.
Id.

The *hoarded* plague of the gods requite your love!
Id.

Beauty is nature's coin, must not be *hoarded*,
But must be current, and the good thereof
Consists in mutual and partaken bliss
Unsavoury in the enjoyment of itself.
Milton. Comus.

The base wretch who *hoards* up all he can,
Is praised, and called a careful thrifty man.
Dryden.

You *hoard* not health for your own private use,
But on the publick spend the rich produce. *Id.*

I have just occasion to complain of them, who, because they understand Chaucer, would *hoard* him up as misers do their grandam gold, only to look on it themselves, and hinder others from making use of it. *Id.*

Since commodities will be raised, this alteration will be an advantage to nobody but *hoarders* of money.
Locke.

They might have even starved, had it not been for this providential reserve, this *hoard*, that was stowed in the strata underneath, and now seasonably disclosed. *Woodward.*

A superfluous abundance tempts us to forget God, when it is *hoarded* in our treasures, or considered as a safe, independent provision laid up for many years.
Rogers.

You will be unsuccessful, if you give out of a great man, who is remarkable for his frugality for the publick, that he squanders away the nation's money; but you may safely relate that he *hoards* it.
Arbuthnot's Art of Political Lying.

HOARE (William), was born in the year 1707, of respectable parents, at Eye in Suffolk, and received the advantages of education in a school at that time of high repute for classical instruction. He discovered an early disposition for painting; and, after he left school, his father carried him to London, and placed him under the tuition of Grisoni, an Italian painter. From the skill of Grisoni the scholar could derive little profit; but it is probable that from his conversation he imbibed that ardent desire of visiting the works of the Italian masters, which prompted him to set the example of a system afterwards pursued with so much avidity and success by most of our young students in painting. The name of William Hoare stands first on the list of those English painters who have resorted to Italy, with a view to professional improvement. Arriving at Rome, he placed himself in the school of Francisco Imperiali, and was the fellow pupil of Pompeio Battoni. During a residence of nine years in Italy he made numerous copies of the historical works of the great masters, and he returned to England filled with visionary hopes, and an ardent love of his profession, which did not desert him even at the latest period of an extended life. Finding himself a stranger in London, and without the means of rendering his talents known, he accepted an invitation from some of his friends who resided at Bath, in Somersetshire, and there found such constant employment in painting portraits, that he was induced to settle in that city. From the study of Rosalba's pictures, he added the practice of crayons to that of oil-painting, and carried it to a degree of excellence second only to the powers of that celebrated paintress. He maintained at Bath a very high character as a portrait painter. He gave to the altar of St. Michael's church, at Bath, a figure of our Saviour, as large as life; and afterwards painted for the octagon chapel, in that city, an historical composition, representing 'The Miracle at the Pool of Bethesda.' These exertions procured him commissions for a few historical pictures, the principal merit of which consists in the display of an elegant taste, and faithful study of nature. Residing at a distance from the metropolis, where the competition of younger artists was continually accelerating the advance of English art, he retained to the last the style which he had adopted in the Italian school. His most celebrated portrait in oil is a half-length of William Pitt, the first earl of Chatham. On the formation of the Royal Academy he was elected one of the original members, and was a constant exhibitor for many years. He died at Bath in 1792.

HOARHOUND, Lat. *marrubium*. A plant.

Hoarhound has its leaves and flower-cup covered very thick with a white hoariness: it is famous for the relief it gives in moist asthmas, of which a thick and viscous matter is the cause; but it is now little used. *Hill.*

HOARHOUND. See MARRUBIUM.

HOARHOUND, WHITE. See BALLOTA.

HOARSE, *adj.* } Sax. haꝛ; Swed. *hes*;
HOARSE'LY, *adv.* } Belg. *haarsch*. Having
HOARSE'NESS, *n. s.* } the voice rough, as with a cold; having a rough sound.

Me thought, I herde an hunter blowe
T' assay his gret horne, and to knowe
Whethre it were clere or *horse* of sowne.
Chaucer. Boke of the Duchesse.

Come, sit, sit, and a song.
—Clap into't roundly, without hawking or spitting, or saying we are *hoarse*. *Shakspeare.*

The raven himself is *hoarse*,
That croaks the fatal entrance of Duncan
Under my battlements. *Id. Macbeth.*

I oft have heard him say, how he admired
Men of your large profession that could speak
To every cause, and things mere contraries
Till they were *hoarse* again, yet all be law.
Ben Jonson.

The voice is sometimes intercluded by an *hoarseness*, or viscous phlegm. *Holder.*

I had a voice in heaven, ere sulph'rous steams
Had damped it to a *hoarseness*.
Dryden. King Arthur.

The hounds at nearer distance *hoarsely* bayed;
The hunter close pursued the visionary maid.
Dryden.

The want of it in the wind-pipe occasions *hoarseness* in the gullet, and difficulty of swallowing.
Arbuthnot on Aliments.

Hoarseness is a diminution or temporary loss of the voice, sometimes attended with a preternatural asperity or roughness of utterance. The parts affected are the trachea and larynx. It is occasioned by a slight inflammation of the mucous membrane covering those parts; and is relieved by mucilaginous linctuses; warm diluting drinks, such as bran-tea, linseed-tea, &c.; assisted by opiates and sudorific medicines taken at bed-time.

HOBBES (Thomas), born at Malmsbury in 1588, was the son of a clergyman. He completed his studies at Oxford, and being afterwards patronized by the Devonshire family, attended one of the sons in his travels through France and Italy, during which he translated Thucydides. In 1626 his patron the earl of Devonshire died; and in 1628 his son died also. In 1631 the countess dowager of Devonshire desired to put the young earl under his care, who was then about the age of thirteen. In 1634 he re-published his translation of Thucydides, which he had previously given to the world in 1628. The same year he accompanied his noble pupil to Paris, where he applied his vacant hours to the study of natural philosophy. From Paris he attended his pupil into Italy, where at Pisa he became known to Galileo, soon after which he returned with the earl of Devonshire into England. Afterwards, foreseeing the civil wars, he went to seek a retreat at Paris; where he became intimate with the famous Des Cartes, with whom he afterwards kept up a correspondence upon several mathematical subjects, as appears from his letters published in Des Cartes's works. In 1642 Mr. Hobbes first printed a few copies of his book De Cive, which, in proportion as it became known, raised him many adversaries, who charged him with instilling principles of a dangerous tendency. While in France Sir Charles Cavendish, brother to the duke of Newcastle, proved a constant friend and patron to Mr. Hobbes; who, by engaging, in 1645, in a controversy about squaring the circle, became so famous, that in 1647 he was recommended to instruct Charles II. in mathematics. In 1647 was printed in Holland, by M. Sorbiere, a more complete edition of his De Cive; to which are prefixed two Latin letters to the editors by Gassendi, and F. Mersenne, in commendation of it: and in 1650 was published at London a small treatise of Mr. Hobbes's, entitled Human Nature; and another, De Corpore Politico. All this time he had been digesting his religious, political, and moral principles, into a complete system, called the Leviathan, which was printed at London in 1650 and 1651. In 1660, upon the Restoration, he came up to London, where he obtained from the king an annual pension of £100. But in 1666 his Leviathan, and his treatise De Cive, were censured by Parliament; which alarmed him very much, as did also a bill brought into the house of commons to punish atheism and profaneness. In 1669 he was visited by Cosmo de Medicis, afterwards duke of Tuscany, who gave him ample marks of his esteem; and having received his picture, and a complete collection of his writings, caused them to be deposited among his curiosities, in the library at Florence. He was also visited by foreign ambassadors and other strangers, who were curious to see a person whose opinions had been so widely celebrated. In 1672 he wrote his own Life in Latin verse, when he had completed his eighty-fourth year; and in 1674 he published a poetical English version of the four books of Homer's Odyssey; which were so well received, that he translated the whole Iliad and Odyssey, which he likewise published in 1675. About this time he went to spend the remainder of his days in Derbyshire: where, notwithstanding his advanced age, he published several pieces, to be found in his works. He died in 1679, aged ninety-two. In his last sickness his frequent questions were, whether his disease was curable? and when intimations were given that he might have ease, but no remedy, he said, 'I shall be glad to find a hole to creep out of the world at;' which are reported to have been his last sensible words. Hobbes's style is incomparably better than that of any other writer in the reign of Charles I. 'He has in translation,' says Granger, 'done Thucydides as much justice as he has done injury to Homer. But he was for striking out new paths in science, government, and religion; and for removing the land-marks of former ages. His ethics have a strong tendency to corrupt our morals, and his politics to destroy that liberty which is the birth-right of every human creature. He is commonly represented as a sceptic in religion, and dogmatist in philosophy; but he was a dogmatist in both. The main principles of his Leviathan are as little founded on moral or evangelical truths, as the rules he has laid down for squaring the circle are in mathematical demonstration. His book on human nature is esteemed the best of his works.'

HOBBIMA (Minderhout), an eminent landscape painter, born about 1611 at Antwerp. He studied entirely after nature, and his choice was exceedingly picturesque. He was particularly fond of describing slopes diversified with shrubs, plants, or trees, which conduct the eye to some building, ruin, grove, or piece of water, and frequently to a delicate remote distance. The figures which he designed are but indifferent. Conscious of his inability in that respect, he admitted but few figures into his

designs, and usually placed them somewhat removed from the immediate view at a prudent distance from the front line. However, most of his pictures were supplied with figures by Ostade, Teniers, and other famous masters, which gave them a great additional value. They are very scarce.

HOB'BLE, *v. n.* & *n. s.* } Gothic *hoppe*, a
HOB'BLER, *n. s.* } horse; Fr. *hobin*, a
HOB'BLINGLY, *adv.* } pacing horse. An
HOB'BY, *n. s.* } Irish or Scottish horse; a pacing horse; a garran: to walk lamely or awkwardly upon one leg more than the other; to hitch; to walk with unequal and encumbered steps; to move roughly or unevenly: hence an uneven awkward gait. Feet being ascribed to verses, whatever is done with feet is likewise ascribed to them. Hobblingly in its literal and figurative acceptation is clumsily, awkwardly, with halting gait: hobby the name of a small pony; a stick on which boys get astride to ride; a stupid fellow.

I have studied eight or nine wise words to speak to you, which these *hobby* horses must not hear. *Shakspeare.*

For twenty *hobblers* armed, Irishmen so called, because they served on *hobbies*, he paid sixpence a-piece per diem. *Davies.*

Those grave contenders about opinionative trifles look like aged Socrates upon his boy's *hobby* horse. *Glanville.*

The friar was *hobbling* the same way too. *Dryden.*

Those ancient Romans had a sort of extempore poetry, or untuneable *hobbling* verse. *Id.*

As young children who are tryed in
Go-carts, to keep their steps from sliding,
When members knit, and legs grow stronger,
Make use of such machine no longer;
But leap pro libitu, and scout
On horse called *hobby*, or without. *Prior.*

While you Pindarick truths rehearse,
She *hobbles* in alternate verse. *Id.*

Some persons continued a kind of *hobbling* march on the broken arches, but fell through. *Addison.*

No *hobby* horse with gorgeous top,
Could with this Rod of Sid compare. *Swift.*

Was he ever able to walk without leading-strings, without being discovered by his *hobbling?* *Id.*

HO'BBY, *n. s.* Fr. *hobereau.* A species of hawk.

They have such a hovering possession of the Valtoline, as an *hobby* hath over a lark. *Bacon.*

The people will chop like trouts at an artificial fly, and dare like larks under the awe of a painted *hobby*. *L'Estrange.*

Larks lie dared to shun the *hobby's* flight. *Dryden.*

HOBGOB'LIN, *n. s.* According to Skinner, for robgoblins from Robin Goodfellow, Hob being the nickname of Robin: but more probably according to Wallis and Junius, hopgoblins empusæ, because they do not move their feet: whence, says Wallis, came the boys' play of fox in the hole, the fox always hopping on one leg. A frightful fairy.

Fairies, black, grey, green, and white,
Attend your office and your quality:
Crier *hobgoblin*, make the fairy o-yes. *Shakspeare.*

HOBLERS, or HOBILERS, hobelarii, in ancient English customs, were men who, by their tenure, were obliged to maintain a light horse or hobby, for the certifying any invasion towards the sea-side. The name was also used for certain Irish knights, who used to serve as light-horsemen upon hobbies.

HOB'NAIL, *n. s.* } From hobby and nail.
HOB'NAILED, *adj.* } A nail used in shoeing a hobby or little horse; a nail with a thick strong head.

Steel, if thou turn thine edge, I beseech Jove on my knees thou mayest be turned into *hobnails*. *Shakspeare.*

We shall buy maidens as they buy *hobnails*, by the hundred. *Id.*

Wouldest thou, friend, who hast two legs alone,
Wouldest thou, to run the gauntlet, these expose
To a whole company of *hobnailed* shoes? *Dryden.*

HOB'NOB. This is probably corrupted from hab nab by a coarse pronunciation. See HAB NAB.

His incensement at this moment is so implacable, that satisfaction can be none, but pangs of death and sepulchre: *hobnob* is his word; give't or take't. *Shakspeare.*

HOCHE (Lazarus), a celebrated general in the service of the French republic, was born on the 24th of June, 1768, in the suburbs of Versailles. His father was the keeper to Louis XV's dog-kennel. Such an origin precluded him from the advantages of a liberal education. By the kindness of his aunt, who was a green grocer at Versailles, he was taught to read and write, and finally engaged as a stable-boy at Versailles. But an accidental glance at a work of Rousseau's determined him to travel. For this purpose he enlisted for the East Indies, but was removed into the French guards. He was only sixteen when he was ordered to join his regiment at Paris. Anxious to make up for the deficiency of his education, he employed all his leisure hours, and even part of those usually spent in sleep, in embroidering caps, the profits of which labor he devoted chiefly to the purchase of books. These he read with avidity, and soon made himself master of the theory of military tactics. His merit now attracted notice, and he was raised to the rank of corporal in 1788. The French guards were the chief cause of turning the scale against the court in favor of the people, on the 14th of July, 1789, at the attack on the Bastile; and Hoche was one of the first in leading on the assault. When La Fayette new-modelled the corps, Hoche was promoted; and soon after, Servan, then minister of war, sent him a lieutenant's commission in the regiment of Rouergue; which he joined, June 24th, 1792, in the garrison at Thionville, where he first distinguished himself in action. After this, being drafted into the army of the Ardennes, he performed the most essential services under general Leveneur; particularly at that critical period when the treachery of Dumourier and Miranda had endangered the destruction of the army of the North. But it would swell this article beyond all due bounds were we to follow our hero through all the scenes in which he was engaged, from the time that he was ap-

pointed general in chief; or attempt to delineate his brilliant actions at Wert, Weissembourg, Freischweiller, Germersheim, Worms, Spire, Fort Vauban, &c. It was in the midst of this career of victory that the envy of his enemies procured him to be apprehended and lodged in the conciergerie at Paris, from which he was not liberated till the memorable 9th of Thermidor, 1795. Upon his liberation he was sent to subdue the insurgents of La Vendée; and his well arranged plans were the chief cause of the failure of our unfortunate expedition to Quiberon. Hoche's zeal for his country led him to think, that an invasion of England or Ireland was not only practicable, but that it would be crowned with success. The latter measure was at last attempted, and its failure is well known. Our hero's feelings may be easier conceived than described. His narrow escape in the Fraternité, through the midst of the British fleet, hardly lessened the disappointment. Being, however, afterwards appointed to the command of the army of the Sambre and Meuse, he led his troops to new victories; and Montabour, Dierdorff, Altenkirchen, &c., witnessed their valor.—But the career of this great general was now drawing near a close. The excessive fatigues he had undergone had impaired his constitution, and brought on a gradual decay, attended with an incessant cough and difficulty of breathing; while the unsettled state of affairs at Paris added to his distress of body, by increasing his anxiety of mind. He died September 17th, at Wetzlar, in the thirtieth year of his age, not without suspicion of poison. His last words were, 'Farewel my friends! Desire the Directory to take care of Belgium.' He was interred with great pomp at Coblentz.

HOCHSTETTER (Andrew Adam), a protestant divine, born at Tubingen in 1698. He was professor of divinity in that university, and afterwards rector. His chief works are, 1. Collegium Puffendorsianum; 2. De Festo Expiationis et hirco Azahel; 3. De Conradino, ultimo ex Suevis duce; 4. De Rebus Albigensibus. He died in 1717.

HOCHHEIM, a small town in the duchy of Nassau, four miles from the Rhine, celebrated for the wine termed Hock. It stands on a small eminence occupied by vineyards finely exposed to the sun, and the best wine of the place is produced on a little elevation of eight acres, sheltered from the north; the average produce is twelve large casks of wine, which are said to fetch, as soon as made, from £120 to £150 sterling. The town is twenty miles west of Frankfort, and four north-east of Mentz.

HOCHSTADT, a town of Bavaria, at the influx of the river Egwied into the Danube. It is remarkable as the scene of many bloody conflicts. 1. The imperialists were defeated near it by the elector of Bavaria in 1703. 2. In 1704 (13th of August) the French and Bavarians sustained a most signal defeat in this neighboorhood from the duke of Marlborough and prince Eugene. 3. In 1800 the French, under Moreau, obtained a considerable victory here over the Austrians. Population 2300. Nineteen miles north-west of Augsburg, and twenty-nine west of Neuburg.

HOCK, *n. s.* & *v. a.* } The same with hough,
HOCK'LE, *v. a.* } Saxon ϸoh. The joint between the knee and the fetlock. Hock and hockle to disable in the hock.

HOCK, *n. s.* }
HOCKAMORE. } From Hockheim on the Maine. Old strong Rhenish.

Restored the fainting high and mighty,
With brandy, wine, and aqua vitæ;
And made 'em stoutly overcome
With hachrach, *hockamore* and mum. *Hudibras.*

Wine becomes sharp, as *hock*, like vitriolick acidity. *Floyer.*

If cyder-royal should become unpleasant, and as unfit to bottle as old *hockamore*, mix one hogshead of that and one of tart new cyder together. *Mortimer.*

Ring for your valet, bid him quickly bring
Some *hock* and soda-water; then you'll know
A pleasure worthy Xerxes the great king;
For not the blest sherbet, sublimed with snow,
Not the first sparkle of the desert spring,
Nor Burgundy in all its sunset glow,
After long travel, ennui, love, or slaughter,
Vie with draughts of *hock* and soda water. *Don Juan.*

HOCK'HERB, *n. s.* Hock and herb. A plant; the same with mallows.

HOCKHOCKING, a river in the state of Ohio, United States; it has its rise near a branch of the Scioto, and, running south-west, falls into the Ohio at Tray, in N. lat. 38° 57′, after a course of about eighty miles. It is navigable to Athens, forty miles from its mouth, for large keel boats; about six miles above this are rapids, which prevent any further ascent.

HOCUS POCUS. Swed. *hokus pokus.* The original of this word is referred by Tillotson to a formula of transubstantiation in the Romish church, in which they say hoc est corpus, this is the body (of the Lord). Junius derives it from Welsh *hocced*, a cheat, and poke and pocus a bag, jugglers using a bag for conveyance. It is corrupted from some words that had once a meaning, and which, perhaps, cannot be discovered. A juggle; a cheat.

This gift of *hocus pocussing* and of disguising matters is surprising. *L'Estrange.*

HOD, *n. s.* }
HOD'MAN, *n. s.* } Corrupted perhaps in con-
HOD'MANDOD. } tempt from hood, a hod being carried on the head; perhaps from Teut. *herrd*, or *hotte*, a wicker basket; a kind of trough in which a laborer carries mortar to the masons: hodman a laborer that carries mortar: hodmandod a fish.

Those that cast their shell are the lobster, the crab, the crawfish, and the *hodmandod* or dodman. *Bacon.*

A fork and a hook to be tampering in clay,
A lath, hammer, trowel, a *hod* or a tray. *Tusser.*

HODGE-PODGE, *n. s.* French *hache poche*, *hochepot* quasi *hachis en pot.* A medley of ingredients boiled together.

Ye han not knowe the wille of your true frendes olde and wise, but ye han caste alle hir wordes in an *hoche-pot*, and enclined your herte to the more part and to the greter nombre, and ther be ye condescended. *Chaucer. The Tale of Melibeus.*

They have made our English tongue a gallimaufrey, or *hodge-podge* of all other speeches. *Spenser.*

It produces excellent corn, whereof the Turks make their trachana and bouhourt, a certain *hodge-podge* of sundry ingredients. *Sandy's Travels.*

HODGES (Nathaniel), M.D., a learned English physician, son of the Rev. Dr. Thomas Hodges, dean of Hereford. He was educated in Westminster, and graduated at Oxford in 1659. He settled in London; practised with great success during the plague in 1665, and was made fellow of the college of physicians in 1672; but was afterwards confined in Ludgate jail for debt, where he died in 1684. He wrote, 1. Vindiciæ Medicinæ et Medicorum, 1660, 8vo. 2. Λοιμολογια, 1672, 8vo. This work was translated into English by Dr. Quincy, and printed at London in 8vo., 1720. It gives an historical account of the rise, progress, symptoms, and cure of the plague.

HODIER'NAL, *adj.* Lat. *hodiernus*. Of today.

HODY (Humphry), a learned English divine, born in 1659. At twenty-one years of age he published his celebrated Dissertation against Aristeas's history of the seventy interpreters; which was received with great applause. He treated the subject more fully twenty years after, in his De Bibliorum Textibus Originalibus, Versionibus Græcis, et Latina vulgata, libri IV. In 1689 he wrote the Prolegomena to John Melala's Chronicle, printed at Oxford; and in 1690 was made chaplain to bishop Stillingfleet. The deprivation of the nonjuring bishops engaged him in a controversy with Mr. Dodwell; which recommended him to archbishop Tillotson, to whom, as well as his successor, Dr. Tennison, he was for some time chaplain. In 1698 he was made regius professor of Greek at Oxford, and archdeacon in 1704. On the controversy about the convocation, he, in 1701, published a history of English Councils and Convocations, and of the clergy's sitting in parliament, &c. He died in 1706, leaving in MS. an account of those learned Greeks who retired to Italy on the taking of Constantinople, &c., which was published in 1742 by Dr. Jebb.

HOE, *n. s.* & *v. a.* Goth. *hog;* Teut. *howe;* Fr. *houe;* Dut. *houwe*. An instrument to cut up the earth, of which the blade is at right angles with the handle: to cut or dig with a hoe.

> They must be continually kept with weeding and *hoeing*. *Mortimer.*
>
> They should be thinned with a *hoe*. *Id.*

A HOE is somewhat like a cooper's adze, to cut up weeds in gardens, fields, &c. This instrument is of great use in hacking and clearing the corners and patches of land.

HOEING, in the new husbandry, is the breaking or dividing the soil by tillage while the corn or other plants are growing thereon. It differs from common tillage (which is always performed before the corn or plants are sown or planted) in the time of performing it; and it is much more beneficial to the crops than any other tillage.

HOESCHELIUS (David), a learned German, born at Augsburg, in 1556. He was made principal of the college of St. Anne; and, being also librarian, he enriched the library with a great number of Greek books and MSS. He published editions of Origen, Basil, Philo Judæus, Gregory of Nyssa, Gregory of Nazianzen, Chrysostom, Appian, Photius, Procopius, Anna Comnena, Hori Apollinis Hieroglyphica, &c., some with Latin translations, others in Greek only with notes. In 1595 he published a catalogue of the Greek MSS. in the Augsburg library, which, for order and judicious arrangement, is esteemed a masterpiece. He died at Augsburg in 1617, much regretted.

HOF, HOFF, or STADT ZUM HOF, an old town of Franconia, on the river Saale, belonging to Bavaria. It was founded in the eleventh century, and admitted to the privileges of a free imperial town. The manufactures are woollens, cotton, and leather: here are also extensive breweries; and in the neighbourhood fine quarries of marble. In 1759 prince Henry of Prussia defeated in this place a party of Austrians, under count Palfi. Population 5000. Twenty-two miles N.N.E. of Bayreuth, and forty-six north-east of Bamberg.

HOFER (Andrew), a Tyrolese chieftain, born at Passeyer in 1765, and who kept an inn in that town. The Tyrol being transferred to Bavaria by the treaty of Presburg, when the war with Austria was in 1809 renewed, the inhabitants rose in a mass to drive out the Bavarians, and place themselves under the Austrian dominion. Hofer was now elected their chief, and obtained some advantages over the enemy; but, the peace of Vienna having confirmed the cession of his country to Bavaria, he laid down his arms. He was however accused of having endeavoured to excite disaffection to the new government, and a price was set on his head. After a long search he was found hidden in a cabin on the summit of a lofty peak, surrounded by snow and glaciers. January 27th, 1810, his hut being surrounded by a body of grenadiers, he surrendered; and was conducted to Botzen, and afterwards to Mantua, where he was condemned by a council of war to be shot. The sentence was almost immediately executed. After his death he was revered by his countrymen as a martyr; and the emperor of Austria has ennobled his son.

HOFFMAN (Daniel), a German divine, born in 1539. He was professor of the university of Helmstadt from 1598, and maintained that philosophy was a mortal enemy to religion; and that what was true in philosophy was false in theology. These absurd tenets occasioned a warm and extensive controversy. At length Hoffman was compelled by Julius, duke of Brunswick, to retract his invectives against philosophy, and to acknowledge, in the most open manner, the harmony and union of sound philosophy with true and genuine theology. He died in 1611, aged seventy-two.

HOFFMAN (Frederic), M. D., an eminent physician, born at Hall near Magdeburg in 1660. He took his degree in 1681; was made professor of physic at Hall in 1693; and filled the chair till his death, in 1742. His works were collected at Geneva in six large volumes, folio, 1748 and 1754. When travelling through Holland he became acquainted with Paul Hermann, and not long after with the celebrated Boyle, whom he cured of a dangerous disease. He also attended the emperor Charles VI., and his em-

press, as well as Frederic of Prussia. He was the first who composed Seidlitz powders. He died in his eighty-second year.

Hoffman (John James), professor of Greek at Basle, was born at Basle in 1635. He published at Geneva, in 1677, a learned work entitled Lexicon Universale Historico-Geographico-Poetico-Philosophico-Politico-Philologicum; in 2 vols. folio. He afterwards enlarged it with a supplement; and died at Basle, in 1706, aged seventy-one.

Hoffman (Maurice), M. D., was born of a good family, at Furstenwalde, in Brandenbourg, September 20th, 1621; and was driven early from his native country by war and pestilence. In 1637 he was sent to study in the college of Colun. Famine and the plague drove him thence to Kopnik, where he buried his father; and in 1638 he went to Altorf, to his maternal uncle, who was a professor of physic. Here he finished his studies in classical learning and philosophy, and then applied with the utmost ardor to physic. In 1641 he went to the university of Padua; where anatomy and botany were the great objects of his pursuit; and he became deeply skilled in both. After three years he returned to Altorf, to assist his uncle, now growing infirm, in his business; and, taking the degree of M. D., applied himself to practice, in which he had great success. In 1648 he was made professor extraordinary in anatomy and surgery; in 1649 professor of physic, and soon after member of the college of physicians; in 1633 professor of botany, and director of the physic-garden. He acquitted himself excellently in these various employments; and, in his profession, his reputation was so high and extensive, that many princes of Germany appointed him their physician. He died of an apoplexy in 1698, aged seventy-six, after having published a great number of works.

Hoffman (John Maurice), son of the preceding, by his first wife, was born at Altorf in 1653; and sent to a school at Herszprugk, where, having acquired a competent knowledge of the Greek and Latin, he returned to his father at Altorf at sixteen, and studied philosophy and physic. He went afterwards to Frankfort on the Oder, and next to Padua, where he studied two years. Then, making a tour of part of Italy, he returned to Altorf in 1674, and was admitted M. D. In 1677 he was made professor extraordinary in physic, and in 1681 professor in ordinary. George Frederic, marquis of Anspach, chose him for his physician; and Hoffman attended him into Italy, and renewed his acquaintance with the literati of that country. Upon the death of his father, in 1698, he succeeded him in his places of botanic professor and director of the physic-garden. He was elected also rector of the university of Altorf; a post which he had occupied in 1686. He lost his great friend and patron, the marquis of Anspach, in 1703: but found the same kindness from his successor William Frederic, who pressed him so earnestly to reside near him, and made him such advantageous offers, that, in 1713, he removed from Altorf to Anspach, where he died in 1727. He had married a wife in 1681, by whom he had five children. He published a great number of works, which are highly esteemed.

HOG, *n. s.*
Hog'cote, *n. s.*
Hog'gerel, *n. s.*
Hog'herd, *n. s.*
Hog'gish, *adj.*
Hog'gishly, *adv.*
Hogs'head, *n. s.*
Hog'sty, *n. s.*
Hog'wash, *n. s.*

Welsh *hwch*, from Goth. *hoggwa*; Swed. *hugga*, to cut, says Mr. Thomson; the general name of swine; a castrated boar: 'to bring hogs to a fine market,' to fail of one's design: hogcote, hogsty a house for hogs; hoggerel a two year old ewe: hogherd a keeper of hogs: hoggish and hoggishly, brutish; greedy; selfish: hogshead, a measure of liquids containing sixty-three gallons; any large barrel: hogwash the draff which is given to swine.

Ran cow and calf; and eke the veray *hogges*
So fered were, for berking of the dogges,
And shouting of the men and women eke,
They ronnen so, hem thought hir hertes breke.
Chaucer. The Nonnes Preestes Tale.

This will raise the price of *hogs*, if we grow all to be pork eaters. *Shakspeare.*

Blow strongly with a pair of bellows into a *hogshead*, putting into it before that which you would have preserved; and in the instant that you withdraw the bellows, stop the hole. *Bacon.*

Only a target light, upon his arm
He careless bore, on which old Gryll was drawn,
Transformed into a *hog* with cunning charm.
Fletcher's Purple Island.

Suspicion Miso had, for the *hoggish* shrewdness of her brain, and Mopsa, for a very unlikely envy. *Sidney.*

Out of a small *hogcote* sixty or eighty load of dung hath been raised. *Mortimer.*

You have brought your *hogs* to a fine market. *Spectator.*

Varro tells, that every jugerum of vines yielded six hundred urns of wine: according to this proportion, our acre should yield fifty-five *hogsheads* and a little more. *Arbuthnot.*

Your butler purloins your liquor, and the brewer sells you *hogwash*. *Id. History of John Bull.*

The *hog* that plows not, nor obeys thy call,
Lives on the labours of this Lord of all. *Pope.*

The families of farmers live in filth and nastiness, without a shoe or stocking to their feet, or a house so convenient as an English *hogsty*. *Swift.*

They slung up one of their largest *hogsheads*; I drank it off; for it did not hold half a pint. *Id. Gulliver's Travels.*

The terms *hogherd* and cow-keeper are not to be used in our poetry; but there are no finer words in the Greek. *Broome.*

Hog, in zoology. See Sus.

Hog, on board of a ship, is a sort of flat scrubbing broom, formed by enclosing a number of short twigs of birch, or such wood, between two pieces of plank fastened together, on cutting off the ends of the twigs. It is used to scrape the filth from the ship's bottom under water, particularly in the act of boot-topping. For this purpose they fit to this broom a long staff with two ropes; one of which is used to thrust the hog under the ship's bottom, and the other to guide and pull it up again close to the planks. This business is commonly performed in the ship's boat, which is confined as close as possible to the vessel's side during the operation, and is shifted from one part of the side to another till

the whole is completed. Since vessels however have been more universally copper-bottomed this has been laid aside.

HOGARTH (William), the celebrated painter, was born in 1697, or 1698, in the parish of St. Martin, Ludgate. 'He was bound,' says Mr. Walpole, 'to a mean engraver of arms on plate; but, before his time was expired, he felt the impulse of genius, and that it directed him to painting.' During his apprenticeship he set out one Sunday, with two or three companions, on an excursion to Highgate. The weather being hot they went into a public-house, where they had not been long before a quarrel arose between some persons in the same room. One of the disputants struck the other on the head with a quart pot and cut him very much. The blood running down the man's face, together with his agony from the wound, which had distorted his features into a most hideous grin, presented Hogarth with too laughable a subject to be overlooked. He drew out his pencil, and produced on the spot one of his most ludicrous figures. What made this piece the more valuable was, that it exhibited an exact likeness of the man, with a portrait of his antagonist, and the figures in caricature of the principal persons gathered round. The first piece in which he distinguished himself as a painter is supposed to have been a representation of Wanstead Assembly. The figures in it were drawn from the life, and without burlesque. The faces were said to be extremely like, and the coloring rather better than in some of his more highly finished performances. From the date of the earliest plate that can be ascertained to be his work it is supposed that he began business for himself about 1720. Engraving of arms and shop bills was his first employment. The next was to design and furnish plates for booksellers. There are many family pictures by Hogarth, in the style of serious conversation pieces, still existing. In the early part of his life a nobleman (lord O——) came to sit for his picture. It was executed with a skill that did honor to the artist's abilities; but the likeness was rigidly observed, without even the necessary attention to compliment. The peer, disgusted at this counterpart of himself, was not fond of paying for a reflector that would only exhibit his deformities. Some time was suffered to elapse before the artist applied for his money; but, after many applications made without success, he sent him the following card:—Mr. Hogarth's dutiful respects to lord O——: finding that he does not mean to have the picture which was drawn for him, is informed again of Mr. H's necessity for the money: if, therefore, his lordship does not send for it in three days, it will be disposed of, with the addition of a tail and some other little appendages, to Mr. Hare, the famous wild beast man; Mr. H. having given that gentleman a conditional promise of it, for an exhibition picture, on his lordship's refusal.' This intimation had the desired effect. The picture was paid for and committed to the flames. Mr. Nichols assures us, from unquestionable authority, that almost all the personages who attend the levee of the Rake were undoubted portraits; and that in Southwark Fair, and Modern Midnight Conversation, as many more were discoverable. The duke of Leeds has an original scene in The Beggar's Opera, painted by Hogarth. It is that in which Lucy and Polly are on their knees, before their respective fathers, to intercede for the life of Macheath. All the figures are either known or supposed to be portraits. Mr. Walpole has a picture of a scene in the same piece, where Macheath is going to execution. In this also the likenesses of Walker and Miss Fenton, afterwards duchess of Bolton (the first Macheath and Polly), are preserved. In 1726, when the affair of Mary Tofts, the rabbit-breeder of Godalming, engaged the public attention, a few of our principal surgeons subscribed their guinea a-piece to Hogarth, for an engraving from a ludicrous sketch he had made on that subject. This plate contains, amongst other portraits, that of M. St. André, then anatomist to the royal household, and in high credit as a surgeon.

In 1730 Mr. Hogarth married the only daughter of Sir James Thornhill. The union was a stolen one, and consequently without the approbation of Sir James, who, considering the youth of his daughter, then barely eighteen, and the slender finances of her husband, as yet an obscure artist, was not easily reconciled to the match. Soon after this period, however, he began his Harlot's Progress (the coffin in the last plate is inscribed Sept. 2d, 1731); and was advised by lady Thornhill to have some of the scenes in it placed in the way of his father-in-law. Accordingly, one morning, Mrs. Hogarth conveyed several of them into his dining-room. When he arose he enquired whence they came; and, being told, he said, 'Very well; the man who can furnish representations like these can also maintain a wife without a portion.' He soon after, however, became reconciled and generous to the young couple. In 1732 Hogarth ventured to attack Mr. Pope, in a plate called The Man of Taste; containing a view of the gate of Burlington House, with Pope whitewashing it and bespattering the duke of Chandos's coach. This plate was intended as a satire on Pope, Mr. Kent the architect, and the earl of Burlington. In 1733 the third scene of his Harlot's Progress introduced him to the notice of the great. One of his excellencies consisted in what may be termed the furniture of his pieces. 'The Rake's levee room,' says Mr. Walpole, 'the nobleman's dining-room, the apartments of the husband and wife in Marriage à la Mode, the alderman's parlour, the bed-chamber, and many others, are the history of the manners of the age.' In 1745 Hogarth sold about twenty of his capital pictures by auction; and in the same year acquired additional reputation by the six prints of Marriage à la Mode, which may be regarded as the groundwork of a novel called the Marriage Act, by Dr. Shebbeare, and of the Clandestine Marriage. Soon after the peace of Aix-la-Chapelle he went over to France, and was taken into custody at Calais, while he was drawing the gate of that town; a circumstance which he has recorded in his picture entitled O the Roast Beef of Old England! published March 26th 1749. He was actually carried before the governor as a spy, and after a very strict examination committed a pa-

soner to Granfire, his landlord on his promising that Hogarth should not go out of this house till he was to embark for England. In 1753 he appeared in the character of an author, and published a 4to. volume entitled the Analysis of Beauty, written with a view of fixing the fluctuating ideas of taste. This work was translated into German by Mr. Mylius when in England, under the author's inspection; and the translation was printed in London, price five dollars. A new and correct edition was in 1754 proposed for publication at Berlin, by Ch. Fr. Vok; with an explanation of Hogarth's satirical prints, translated from the French; and an Italian translation was published at Leghorn in 1761. Hogarth had one failing in common with most people who attain wealth and eminence without a liberal education: he affected to despise every kind of knowledge which he did not possess. Previously to his commencing author one of our artist's common topics of declamation was the uselessness of books to a man of his profession. But Garrick himself was not more open to flattery. A word in praise of Sigismundi, his favorite work, might have commanded a proof print, or an original sketch from Hogarth. A specimen of his propensity to merriment, on the most trivial occasions, is observable in one of his cards requesting the company of Dr. Arnold King to dine with him at the Mitre. Within a circle, to which a knife and fork are the supporters, the written part is contained. In the centre is drawn a pye, with a mitre on the top of it: and the invitation concludes with the following words in three Greek letters, H B Π,—Eta, Beta, Pi. In the Miller's Feast Mr. Hogarth thought proper to pillory Sir Isaac Shard, a gentleman proverbially avaricious. Hearing this, the son of Sir Isaac, a young man of spirit, just returned from his travels, called at the painter's to see the picture; and, among the rest, asking the Cicerone 'Whether that odd figure was intended for any particular person?' on his replying that 'it was thought to be very like one Sir Isaac Shard' he immediately drew his sword and slashed the canvas. Hogarth appeared instantly in great wrath: to whom Mr. Shard calmly justified what he had done, saying 'that this was a very unwarrantable license; that he was the injured party's son, and that he was ready to defend any suit at law;' which, however, was never instituted. About 1757 his brother-in-law, Mr. Thornhill, resigned the place of king's serjeant-painter in favor of Mr. Hogarth.

Of his lesser plates many were destroyed. When he wanted a piece of copper he would take any plate from which he had already worked off such a number of impressions as he supposed he should sell. He then sent it to be effaced, and altered to his purpose. The plates which remained in his possession were secured to Mrs. Hogarth by will, dated August the 12th 1764, chargeable with an annuity of £80 to his sister Anne, who survived him.

HOGH, *n. s.* Dut. *hoogh*. A hill or rising ground.

> That well can witness yet unto this day,
> The western *hogh*, besprinkled with the gore
> Of mighty Gœmot. *Faerie Queene.*

HOGS'BEANS, *n. s.*
HOGS'BREAD,
HOGS'MUSHROOMS,
HOGS'FENNEL.
} Plants.

HOG'S DUNG is by Mortimer reckoned one of the richest manures we are acquainted with; and the next in value to sheep's dung; and is found to be equal in virtue to twice the quantity of any other. It is an excellent manure for pasture grounds, and excels all other kinds of dung for trees. The farmers, who use it for their lands, generally take care to save it, by well paving the styes; and increase the quantity by throwing in bean-stalks, stubble, and many other things of a similar nature. By this management, many farmers have procured fifty or sixty loads a-year of excellent manure out of a small stye. The best way of using this dung is by mixing it with horse dung: and for this reason the stye should be near the stable, that the two cleansings may be mixed in one heap, and used together. They have, in many parts of Staffordshire, a poor light, shallow land, on which they sow a kind of white pea: the land is neither able to bear this nor any thing else to advantage for their reaping; but, when the peas are ripe, they turn in as many hogs as the quantity of peas will fatten, suffering them to live at large, and to remain there day and night: and thus the land produces a good crop of hay for several years afterwards; or, at worst, it raises grass enough to make good pasture.

HOGSTIES, THE, a dangerous rocky reef among the Bahamas, situated between the Great Heneagua and Crooked Island. Ships sailing to Europe from Jamaica through the Crooked Island passage, clear them safely by steering from Ocean Bight, in the Great Heneagua, twelve leagues north-west, then north by west, half west about eleven leagues to Castle Island, the south point of South Crooked Island. Long. 73° 50′ W., lat. 21° 40′ N.

HOGUE, a fishing town and cape of France, on the north-west point of the department of the Channel, and late province of Normandy; near which admiral Rook burnt the French admiral's ship, called the Rising Sun, with twelve more large men of war, the day after the victory obtained by admiral Russel near Cherburg, in May 1692. Long. 1° 35′ W., lat. 49° 50′ N. The town contains about 2000 inhabitants and has a small fort.

HOHENBERG, a county of Suabia, in the Black Forest, now belonging to Wirtemberg. It consists of two parts, the Upper and the Lower; in the former is the source of the Neckar, and at no great distance that of the Danube. Both divisions are woody and hilly; the Lower, however, admits of tillage, and produces some wine. Iron abounds in both. The chief town is Rothenburg.

HOHENLINDEN, a village of Germany, in Bavaria, on the Danube: near which the French under general Moreau defeated the Austrians, on the 3rd of December, 1800, killed and wounded 12,000, and took 10,000 prisoners, among whom were three generals, together with eighty pieces of cannon and 200 loaded waggons, &c. At this place, too, the emperor Francis II signed

the convention in 1800, by which he gave up the forts of Ulm, Ingoldstadt, and Philipsburg, to the French.

HOHENLOHE, a district in the circle of Franconia, forming part of an extensive tract of country which has the Danube on the south, and the Maine on the north. The rivers of this country are the Jaxt, the Tauber, and the Kocher: the produce is corn, flax, and vines. Here are also extensive woods, and some few iron mines. The princes of Hohenlohe have now only their titles: the territory has belonged to Wirtemberg since 1806.

HOHENZOLLERN, a small principality of Germany, in the circle of Suabia, divided into two parts, Hohenzollern Hechingen, and Hohenzollern Sigmaringen. It is surrounded by Baden and Wirtemberg. The surface of the country is hilly and woody: but there is some good pasturage in various parts. The chief town is Hechingen, a small place, situated on the Starzel, containing about 2600 inhabitants, with an unimportant manufacture of woollen cloth. It is the residence of the prince, and the seat of the courts and public offices of the principality. Population about 50,000.

HOIDEN, *n. s.* & *v. n.* Welsh *hoeden;* Lat. *fœmina levioris famæ.* An ill-taught awkward country girl: to romp indecently.

Some of them would get a scratch; but we always discovered, upon examining, that they had been *hoidening* with the young apprentices. *Swift.*

HOISE, *v. a.* } Fr. *hausser;* Low German
HOIST. } *hissen,* from Goth. *ha;* Saxon heah, high. A variation from the same word as heave: the idea here is to raise on high, with effort; it is a transitive verb requiring an agent and an object; thus sailors hoist the long boat; whales when killed are hoisted into the vessel.

They loosed the rudder-bands and *hoisted* up the mainsail to the wind, and made toward the shore. *Acts* xxvii. 40.

Auria had *hoised* sail, and was on his way toward the bay of Naupactus. *Knolles's History.*

'Tis the sport to have the engineer *hoist* up with his own petar. *Shakspeare. Hamlet.*

Join you with me;
We'll quickly *hoist* duke Humphrey from his seat. *Shakspeare.*

That man which prizeth virtue for itself, and cannot endure to *hoise* and strike his sails, as the divers natures of calms and storms require, must cut his sails of mean length and breadth, and content himself with a slow and sure navigation. *Raleigh.*

Hoise sail, and fly;
And in thy flight aloud on Cratis cry. *Chapman.*

We thought for Greece
The sails were *hoisted,* and our fears release. *Dryden.*

They *hoist* him on the bier, and deal the dole,
And there's an end. *Id. Persius.*

What haste she made to *hoist* her purple sails!
And to appear magnificent in flight,
Drew half our strength away. *Id. All for Love.*

Their navy swarms upon the coasts: they cry
To *hoist* their anchors, but the gods deny. *Dryden.*

What made Absalom kick at all the kindnesses of his father, but because his ambition would needs be fingering the sceptre, and *hoisting* him into his father's throne? *South.*

If 'twas an island where they found the shells, they straightways concluded that the whole island lay originally at the bottom of the sea, and that it was *hoisted* up by some vapour from beneath. *Woodward's Natural History.*

Seize him, take, *hoist* him up, break off his hold,
And toss him headlong from the temple's wall. *Southern.*

Some *hoisted* out the boats. *Byron. Don Juan.*

HOISTING, the operation of drawing up any body by the assistance of one or more tackles. Hoisting is never applied to the act of pulling up any body by the help of a single block, except in extending the sails by drawing them upwards along the masts or stays, to which it is invariably applied.

HOKE-DAY, HOCK-DAY, or HOCK-TUESDAY, in ancient English customs (dies Martis quem quindenam paschæ vocant), the second Tuesday after Easter week; a solemn festival celebrated for many ages in England, in memory of the great slaughter of the Danes, in 1002. This is still kept up in some counties; and the women bear the principal sway in it, stopping all passengers with ropes and chains, and exacting some small matter from them to make merry with. This day was used on the same footing with Michaelmas for a general term or time of account. We find leases without date reserving so much rent payable ad duos anni terminos, scil. ad. le hoke-day, & ad festum sancti Michaelis. In the accounts of Magdalen College, Oxford, there is yearly an allowance pro mulieribus hockantibus of some manors of theirs in Hampshire; where the men hock the women on Mondays, and the women hock them on Tuesdays. The meaning of it is, that on that day the women in merriment stopped the way with ropes, and pulled passengers to them, desiring something to be laid out for pious uses.

HO-KIEN, or HO-KIEN-FOU, a city of China, in the province of Pe-tcheli, between two rivers, eighty-seven miles south of Pekin. It has two cities of the second, and fifteen of the third class, in its district. Long. 133° 29′ E. of Ferro, lat. 38° 28′ N.

HOLAIVA, or HOOLAIVA, one of the Hapaee Islands, in the South Pacific Ocean, thirty miles from Annanooka. It was uncultivated and uninhabited when visited by captain Cook, except by one man employed in catching turtle. The trees and plants are similar to those of Lefooga, to which it is joined by a reef.

HOLBEACH, a market town of Lincolnshire, eight miles east of Spalding, and 109 north from London. The town is of great antiquity, but indifferently built, and is seated in the fens. The church is a Gothic building, with a lofty tower and spire, which may be seen at a great distance. Market on Thursday.

HOLBEIN (Hans or John), a celebrated painter born at Basil in Switzerland, in 1498. He learned the rudiments of his art from his father, who was also a painter; but soon showed his superior genius. In the town-house of Basil he painted our Saviour's Passion; and in the fish market of the same city Death's Dance, and a Dance of Peasants, which were very much ad-

mired. Erasmus was so pleased with them, that he desired him to draw his picture, and was ever after his friend. He staid some years longer at Basil, till his necessities, occasioned by extravagance and an increasing family, made him comply with Erasmus's persuasions to go to England. In his journey he staid some days at Strasburg, where it is said he applied to an eminent painter for work, who ordered him to give a specimen of his skill. On which Holbein finished a piece with great care, and painted a fly on the most conspicuous part of it; after which he privately withdrew, and pursued his journey. When the painter returned home, he was astonished at the beauty and elegance of the drawing, and especially at the fly, which he at first took for a real one, and endeavoured to remove it with his hand. He now sent all over the city for his journeyman; but, after many enquiries, discovered that he had been thus deceived by the famous Holbein. Holbein, having in a manner begged his way to England, presented a letter of recommendation from Erasmus to Sir Thomas More, and showed him Erasmus's picture. Sir Thomas, being then lord chancellor, received him kindly, and kept him in his house between two and three years: in which time he drew Sir Thomas's picture, and those of many of his friends. The chancellor, having now adorned his apartments with the productions of this great painter, resolved to introduce him to Henry VIII. For this purpose he invited that prince to an entertainment; having, before he came, hung up all Holbein's pieces in the great hall. The king, on his first entrance into this room, was so charmed with the sight, that he asked whether the artist was living, and to be employed for money. Upon this, Sir Thomas presented Holbein to the king, who immediately took him into his service. While he was here an affair happened which might have proved fatal to him, had he not been protected by the king. His fame attracted a nobleman to see him when he was drawing a figure after the life. Holbein sent to desire his lordship to defer the honor of his visit to another day; which the nobleman taking for an affront, broke open the door, and very rudely went up stairs. Holbein hearing a noise, came out of his chamber; and meeting his lordship at his door, fell into a violent passion; and pushed him down stairs. Immediately, however, reflecting on what he had done, he made the best of his way to the king, and the nobleman following him, the king ordered Holbein to ask his pardon; when the courtier would not be satisfied with less than his life. Upon this the king sternly replied, 'my lord, you have not now to do with Holbein, but with me—I can whenever I please make seven lords of seven ploughmen, but I cannot make one Holbein of even seven lords.' Holbein died of the plague at his lodgings at Whitehall, in 1554. He painted with equal excellence in every manner; in fresco, in water-colors, in oil, and in miniature. His genius was sufficiently shown in the historical style, by two celebrated compositions which he painted in the hall of the Stillyard company. It is worthy of remark that Holbein always painted with his left hand.

HOLBERG (Lewis), a Danish author, born at Bergen in Norway, in 1685. He rose from a menial state to be assessor of the Consistory court at Copenhagen. He wrote a History of Denmark, some comedies and miscellanies; for which he was created a baron. He died in 1754.

HOLCROFT (Mr.), was born in Orange-court, Leicester-fields, December 22d, 1744. His father was a shoemaker, and, when Holcroft was in his teens, he was a servant to the honorable Mr. Vernon, his chief employment being to ride his master's race-horses, which were in training to run for the plate at Newmarket. He persevered to the age of twenty-five years, with some little interruption, in his father's trade. About that period of life, however, he conceived a passion for the stage, and offered his services at the same time to Mr. Charles Macklin, and Mr. Samuel Foote. Foote encouraged him, but Macklin talked to him in so specious a style, and held out to him so many temptations and prospects which were never realised, that he was induced to decide for Macklin and Ireland, a decision which he continued long to repent. In the profession of a player, Mr. Holcroft continued, not with the most flattering success, till after the production of the play of Duplicity, in 1781. Immediately on the exhibition of this comedy he withdrew from the stage as an actor, and for several years devoted his attention principally to dramatic composition. His writings of this kind were:—The Noble Peasant, an opera. The Choleric Fathers, an opera. The Follies of a Day, a comedy, translated from the French of Beaumarchais. Seduction, a comedy, 1786. The German Hotel, a drama, translation, 1790. The School for Arrogance, a comedy, partly from the French of Destouches, 1791. The Road to Ruin, a comedy, and the best of his dramatic writings, 1792. Love's Frailties, a comedy, 1794. The Deserted Daughter, a comedy, 1795. The Man of Ten Thousand, a comedy, 1796. The Force of Ridicule, a comedy, 1796. He is much to Blame, a comedy, very successful, 1798. Knave or Not, a comedy, 1798. Deaf and Dumb, a comedy, from the French, very successful, 1801. The Tale of Mystery, an after-piece, from the French, 1802. Hear Both Sides, a comedy, 1803. The Vindictive Man, a comedy, 1806. Mr. Holcroft also exercised his talent, with advantage to his reputation, in the Novels of Anna St. Ives, published 1792, and Hugh Trevor, published 1794. He also produced a third novel, entitled Brian Perdue, in the year 1807. The public is further indebted to the pen of Mr. Holcroft for many translations. The Private Life of Voltaire, 12mo. The Memoirs of Baron Trenck, in 3 vols. 12mo. The Secret History of the Court of Berlin, by the Count de Mirabeau, 2 vols. 8vo. Tales of the Castle by Madame de Genlis, 5 vols. 12mo. The Posthumous Works of Frederic II. King of Prussia, 13 vols. 8vo. An Abridged Display of the Physiognomy of Lavater, 3 large vols. 8vo. Holcroft at the beginning of the French revolution displayed much zeal in the cause of liberty; and, his conduct having excited the alarm of government,

he was included in the prosecution for treason instituted against Hardy, Horne Tooke, and Thelwall, in 1794. But, these persons having been acquitted, Holcroft and the rest were discharged. He died in 1809. Holcroft is stated to have been the first who introduced on the English stage those popular entertainments termed melo-dramas.

HOLCUS, Indian millet or corn, a genus of the monœcia order, and polygamia class of plants, natural order fourth, gramina. Hermaphrodite CAL. an uniflorous or biflorous glume: COR. a glume with an awn; there are three stamina, two styles, and one seed. Male CAL. a bivalved glume: COR. none; but three stamina. There are thirteen species, two of which are natives of Britain. The most remarkable of these is

H. lanatus, or the creeping soft grass of Hudson. Anderson, in his Essays on Agriculture, says, this is one of the most valuable kinds of meadow grasses, its pile being exceedingly soft, close, and succulent. It delights in moisture, and is seldom found in dry ground, unless the soil be exceedingly rich. It is often found on those patches near springs, over which water often flows; and may be known by the uncommon softness and succulence of the blade, the lively light green color of the leaves, and the matted intertexture of its roots. But, notwithstanding the softness of its first leaves, when the seed-stalks advance they are rough to the touch, and the plants assume a very different appearance. The ear is branched out into a great number of fine ramifications like the oat, but much smaller. The seeds adhere to the stalk, and to each other after being separated from it, as if mixed with cobweb, so that they do not spread readily in sowing. But the running roots spread so fast, that a small quantity, sowed very thin, would soon stock a large field.

H. sorghum, or Guinea corn, is the most remarkable of the foreign species. The stalks are large, compact, and full eight feet high. In Senegal the fields are entirely covered with it. The negroes, who call it guiarnot, cover the ears when ripe with its own leaves to shelter it from the sparrows. The grain made into bread is esteemed very wholesome. With this the slaves in the West Indies are generally fed, each being allowed from a pint to a quart every day. The negroes on the coast of Guinea make of two kinds of this corn a thick-grained pap called couscous, which is their common food.

HOLD, in the old glossaries, is mentioned in the same sense with wold, i. e. a governor or chief officer; but in some other places for love, as holdlic lovely.

HOLD, *v. a.* Sax. *healdan;* low Germ. *holden;* Dan. *holde;* Germ. *halten*, and *haben*, to have. To hold is a physical act, and signifies to have in a particular mode, as by the application of bodily strength in a greater or less degree: hence to keep; detain; retain; contain as within boundaries: the different uses and applications of this word are very numerous; it is used both in a literal and figurative sense.

To grasp in the hand; to gripe; to clutch.

Lift up the lad, *hold* him in thy hand. *Genesis.*

France, thou mayest *hold* a serpent by the tongue,
A fasting tyger safer by the tooth,
Than keep in peace that hand which thou dost *hold.*
Shakspeare.

To connect; to keep from separation.

The loops *held* one curtain to another.
Exod. xxxvi. 12.

To keep; to retain; to gripe fast: not to let go.

Prove all things; *hold* fast that which is good.
2 *Thes.* v.

Too late it was for satyr to be told,
Or ever hope recover her again;
In vain he seeks, that having cannot *hold.*
Faerie Queene.

His rugged shield was like a rocky mould,
On which an anchor bit with surest *hold:*
I *hold* by being *held,'* was written round in gold.
Fletcher's Purple Island.

To maintain as an opinion.

Thou hast there them that *hold* the doctrine of Balaam. *Rev.*

To consider; to regard.

I as a stranger to my heart and me
Hold thee from this for ever. *Shakspeare.*

To think of; to judge with regard to praise or blame.

What saw we, eke, of hem that deliten hem in swering, and *hold* it a gentrie or manly dede to swere gret othes? *Chaucer. The Persones Tale.*

I *hold* him but a fool, that will endanger
His body for a girl that loves him not.
Shakspeare.

One amongst the fairest of Greece,
That *holds* his honour higher than his ease. *Id.*

He would make us amends, and spend some time with us, if we *held* his company and conference agreeable. *Bacon.*

This makes thee, blessed Peace! so light to *hold,*
Like summer's flies that fear not winter's cold.
Fairfax.

As Chaucer is the father of English poetry, so I *hold* him in the same degree of veneration as the Grecians *held* Homer, or the Romans Virgil.
Dryden.

Ye Latian dames, if any here,
Hold your unhappy queen Amata dear! *Id.*
Hold such in reputation. *Philip.*

Minds
By nature great, are conscious of their greatness,
And *hold* it mean to borrow ought from flattery.
Rowe's Royal Convert

To receive, and keep in a vessel.

She tempers dulcet creams, nor these to *hold*
Wants her fit vessels pure. *Milton.*

To contain; to receive into its capacity: as a hogshead holds sixty-three gallons; the sack is too little to hold the grain.

To keep; not to spill.

Broken cisterns that can *hold* no water.
Jeremiah.

To keep; to hinder from escape.

For this infernal pit shall never *hold*
Celestial spirits in bondage. *Milton.*

To keep from spoil; to defend.

With what arms
We mean to *hold* what anciently we claim
Of empire. *Milton.*

To keep from loss.

Man should better *hold* his place
By wisdom. *Milton.*

To have any station.

The star that bids the shepherd fold,
Now the top of heaven doth *hold*. *Milton.*

And now the strand, and now the plain they *held*; Their ardent eyes with bloody streaks were filled. *Dryden.*

Observe the youth who first appears in sight,
And *holds* the nearest station to the light. *Id.*

To possess; to have.

The castle, *holden* by a garrison of Germans, he commanded to be besieged. *Knolles's History.*

Holding Corioli in the name of Rome,
Even like a fawning greyhound in the leash,
To let him slip at will. *Shakspeare.*

Assuredly it is more shame for a man to lose that which he *holdeth*, than to fail in getting that which he never had. *Hayward.*

To possess in subordination.

He was willing to yield himself unto Solyman as his vassal, and of him to *hold* his seigniory for a yearly tribute. *Knolles.*

The terms too hard by which I was to *hold*
The good. *Milton.*

To suspend; to refrain.

Men in the midst of their own blood, and so furiously assailed, *held* their hands, contrary to the laws of nature and necessity. *Bacon.*

Death! what do'st? O *hold* thy blow!
What thou do'st, thou do'st not know. *Crashaw.*

To stop; to restrain.

We cannot *hold* mortality's strong hand. *Shakspeare.*

Fell, banning hag! inchantress, *hold* thy tongue. *Id.*

Unless thou find occasion, *hold* thy tongue;
Thyself or others, careless talk may wrong. *Denham.*

When straight the people by no force compelled,
Nor longer from their inclination *held*,
Break forth at once. *Waller.*

Hold your laughter, then divert your fellow-servants. *Swift.*

To fix to any condition.

His gracious promise you might,
As cause had called you up, have *held* him to. *Shakspeare.*

To keep; to save.

Stay but a little; for my cloud of dignity
Is *held* from falling with so weak a wind,
That it will quickly drop: my day is dim. *Shakspeare.*

To confine to a certain state.

The Most High then shewed signs for them, and *held* still the flood, 'till they were passed over. 2 *Esdr.* xiii. 14.

To detain; to keep in confinement or subjection.

Him God hath raised up, having loosed the pains of death, because it was not possible that he should be *holden* of it. *Acts.*

To retain; to continue.

These reasons moved her star-like husband's heart; But still he *held* his purpose to depart. *Dryden.*

To practise with continuance.

Night
And chaos, ancestors of nature, *hold*
Eternal anarchy. *Milton.*

Not to intermit.

Seed-time and harvest, heat and hoary frost,
Shall *hold* their course. *Milton.*

To solemnise; to celebrate.

He *held* a feast in his house, like the feast of a king. 1 *Sam.*

The king, the quene, and every lord,
With all the ladies, by one accord,
Helde a generall assembly. *Chaucer's Dreame.*

The queen this day here *holds* her parliament
But little thinks we shall be of her council. *Shakspeare.*

To conserve; not to infringe.

Her husband heard it, and *held* his peace, *Numb.* xxx. 7.

She said, and *held* her peace; Æneas went,
Unknowing whom the sacred sibyl meant. *Dryden.*

To manage; to handle intellectually.

Some in their discourse desire rather commendation of wit, in being able to *hold* all arguments, than of judgment in discerning what is true. *Bacon.*

Great souls
By nature half divine, soar to the stars
And *hold* a near acquaintance with the gods. *Rowe.*

And there they stand, as stands a lofty mind
Worn, but unstooping to the baser crowd,
All tenantless, save to the crannying wind,
Or *holding* dark communion with the cloud. *Byron. Childe Harold.*

To maintain.

Whereupon they also made engines against their engines, and *held* them battle a long season. 1 *Mac.* vi. 52.

To carry on conjunctively.

The Pharisees *held* a council against them. *Matt.*

To prosecute or continue.

To hold forth; to offer; exhibit or propose.

Christianity came into the world with the greatest simplicity of thought and language, as well as life and manners, *holding forth* nothing but piety, charity, and humility, with the belief of the Messiah and of his kingdom. *Temple.*

Observe the connection of ideas in the propositions, which books *hold forth* and pretend to teach as truths. *Locke.*

My account is so far from interfering with Moses, that it *holds forth* a natural interpretation of his sense. *Woodward.*

To hold forth. To protend; to put forward to view.

How joyful and pleasant a thing it is to have a light *held* us *forth* from heaven to direct our steps! *Cheyne.*

To hold in. To restrain; to govern by the bridle.

I have lately sold my nag, and honestly told his greatest fault, which is, that he became such a lover of liberty, that I could scarce *hold* him *in*. *Swift.*

To hold in. To restrain in general.

These men's hastiness the warier sort of you doth not commend; ye wish they had *held* themselves longer *in*, and not so dangerously flown abroad. *Hooker.*

To hold off. To keep at a distance.

Although 'tis fit that Cassio have his place
Yet, if you please to *hold* him *off* a while,
You shall by that perceive him. *Shakspeare. Othello.*

The object of sight doth strike upon the pupil of the eye directly, without any interception; whereas the cave of the ear doth *hold off* the sound a little from the organ. *Bacon.*

I am the better acquainted with you for absence, as men are with themselves for affliction: absence does but *hold off* a friend, to make one see him truly.
Pope to Swift.

To hold on. To continue; to protract: to push forward.

I went forth, myself, alone boldily
And *helde* the way downe by a broke side.
Chaucer. The Cuckowe and the Nightingale.

They took Barbarossa, *holding on* his course of Africk, who brought great fear upon the country.
Knolles's History.

If the obedience challenged were indeed due, then did our brethren both begin the quarrel and *hold* it *on.*
Saunders.

To hold out. To extend; to stretch forth.

The king *held out* to Esther the golden sceptre that was in his hand. *Esth.* v. 2.

To hold out. To offer; to propose.

Fortune *holds out* these to you, as rewards.
Ben Jonson.

To hold out. To continue to do or suffer.

He cannot long *hold out* these pangs,
The incessant care and labour of his mind.
Shakspeare.

To hold up. To raise aloft.

I should remember him: does he not *hold up* his head, as it were, and strut in his gait?
Shakspeare.

The hand of the Almighty visibly *held up*, and prepared to take vengeance. *Locke.*

To hold up. To sustain; to support by influence or contrivance.

It followeth, that all which they do in this sort proceedeth originally from some such agent as knoweth, appointeth, *holdeth up*, and actually frameth the same.
Hooker.

The time misordered doth in common sense
Crowd us, and crush us to this monstrous form,
To *hold* our safety *up.* *Shakspeare.*

And so success of mischief shall be borne,
And heir from heir shall *hold* his quarrel *up.* *Id.*

Those princes have *held up* their sovereignty best, which have been sparing in those grants. *Davies.*

There is no man at once either excellently good or extremely evil, but grows either as he *holds* himself *up* in virtue, or lets himself slide to viciousness.
Sidney.

Then do not strike him dead with a denial,
But *hold* him *up* in life, and cheer his soul
With the faint glimmering of a doubtful hope.
Addison's Cato.

To keep from falling.

We have often made one considerably thick piece of marble take and *hold up* another, having purposely caused their flat surfaces to be carefully ground and polished. *Boyle.*

To Hold, *v. n.*

To stand; to be right; to be without exception.

To say that simply an argument, taken from man's authority, doth *hold* no way, neither affirmatively nor negatively, is hard. *Hooker.*

This *holdeth* not in the sea-coasts. *Bacon.*

The lasting of plants is most in those that are largest of body; as oak, elm, and chesnut, and this *holdeth* in trees; but in herbs it is often contrary.
Id.

When the religion formerly received is rent by discords, and when the holiness of the professors of religion is decayed, and full of scandal, and withal the times be stupid, ignorant, and barbarous, you may doubt the springing up of a new sect; if then also there should arise any extravagant and strange spirit, to make himself author thereof; all which points *held* when Mahomet published his law. *Id.*

Nothing can be of greater use and defence to the mind than the discovering of the colours of good and evil, shewing in what cases they *hold*, and in what they deceive. *Id.*

Where outward force constrains, the sentence *holds*;
But who constrains me? *Milton.*

None of his solutions will *hold* by mere mechanicks.
More.

This unseen agitation of the minute parts will *hold* in light and spirituous liquors. *Boyle.*

The reasons given by them against the worship of images, will equally *hold* against the worship of images among Christians. *Stillingfleet.*

The proverb *holds*, that to be wise and love,
Is hardly granted to the gods above.
Dryden's Fables.

As if the experiment were made to *hold*
For base production, and reject the gold.
Dryden.

This remark, I must acknowledge, is not so proper for the colouring as the design, but it will *hold* for both.
Id.

The drift of this figure *holds* good in all the parts of the creation. *L'Estrange.*

Our author offers no reason; and, when any body does, we shall see whether it will *hold* or no. *Locke.*

The rule *holds* in land as well as all other commodities. *Id.*

It *holds* in all operative principles whatsoever, but especially in such as relate to morality; in which not to proceed, is certainly to go backward. *South.*

This seems to *hold* in most cases. *Addison.*

Sanctorius's experiment of perspiration, being to the other secretion as five to three, does not *hold* in this country, except in the hottest time of Summer.
Arbuthnot on Aliments.

The analogy *holds* good, and precisely keeps to the same properties in the planets and comets.
Cheyne.

In words, as fashions, the same rule will *hold*;
Alike fantastick, if too new or old. *Pope.*

To continue unbroken or unsubdued.

Our force by land hath nobly *held.*
Shakspeare.

To last; to endure.

We see by the peeling of onions, what a *holding* substance the skin is. *Bacon.*

Never any man was yet so old,
But hoped his life one Winter more might *hold.*
Denham.

To continue without variation.

We our state
Hold, as you yours, while our obedience *holds.*
Milton.

He did not *hold* in this mind long.
L'Estrange.

To refrain.

His dauntless heart would fain have *held*
From weeping, but his eyes rebelled. *Dryden.*

To stand up for; to adhere.

Through envy of the devil came death into the world, and they that do *hold* of his side do find it.
Wisd. ii. 24.

They must, if they *hold* to their principles, agree that things had their production always as now they have. *Hale.*

When Granada for your uncle *held*,
You was by us restored, and he expelled.
Dryden.

Numbers *hold*
With the fair freckled king and beard of gold:

So vig'rous are his eyes, such rays they cast,
So prominent his eagle's beak is placed. *Id.*

To be dependent on.

The mother, if the house *holds* of the lady, had rather, yea and will, have her son cunning and bold. *Ascham.*

The other two were great princes, though *holding* of him; men both of giant-like hugeness and force. *Sidney.*

The great barons had not only great numbers of knights, but even petty barons *holding* under them. *Temple.*

My crown is absolute, and *holds* of none. *Dryden.*

To derive right.

'Tis true, from force the noblest title springs;
I therefore *hold* from that which first made kings. *Dryden.*

To maintain an opinion.

Men *hold* and profess without ever having examined. *Locke.*

To hold forth. To harangue; to speak in public; to set forth publicly.

A petty conjurer, telling fortunes, *held forth* in the market-place. *L'Estrange.*

To hold in. To restrain one's self.

I am full of the fury of the Lord: I am weary with *holding in.* *Jer.* vi. 11.

To hold in. To continue in luck.

A duke, playing at hazard, *held in* a great many hands together. *Swift.*

To hold off. To keep at a distance without closing with offers.

These are interests important enough, and yet we must be wooed to consider them; nay, that does not prevail neither, but with a perverse coyness we *hold off.* *Decay of Piety.*

To hold on. To continue; not to be interrupted.

The trade *held on* for many years after the bishops became Protestants; and some of their names are still remembered with infamy, on account of enriching their families by such sacrilegious alienations. *Swift.*

To hold on. To proceed.

He *held on*, however, 'till he was upon the very point of breaking. *L'Estrange.*

To hold out. To last; to endure.

Before those dews that form manna come upon trees in the valleys, they dissipate, and cannot *hold out.* *Bacon.*

As there are mountebanks for the natural body, so are there mountebanks for the politick body; men that perhaps have been lucky in two or three experiments, but want the grounds of science, and therefore cannot *hold out.* *Id.*

Truth, fidelity, and justice, are a sure way of thriving, and will *hold out*, when all fraudulent arts and devices will fail. *Tillotson.*

By an extremely exact regimen a consumptive person may *hold out* for years, if the symptoms are not violent. *Arbuthnot.*

To hold out. Not to yield; not to be subdued.

The great master went with his company to a place where the Spaniards, sore charged by Achimetes, had much ado to *hold out.* *Knolles's History.*

You think it strange a person, obsequious to those he loves, should *hold out* so long against importunity. *Boyle.*

Nor could the hardest ir'n *hold out*
Against his blows. *Hudibras.*

I would cry now, my eyes grow womanish;
But yet my heart *holds out.* *Dryden's Spanish Friar.*

The citadel of Milan has *held out* formerly, after the conquest of the rest of the duchy. *Addison.*

Pronounce your thoughts: are they still fixt
To *hold* it *out*, and fight it to the last?
Or are your hearts subdued at length, and wrought,
By time and ill success, to a submission? *Id.*

As to the *holding out* against so many alterations of state, it sometimes proceeds from principles. *Collier on Pride.*

To hold together. To be joined.

Those old Gothick castles made at several times, *hold together* only, as it were, by rags and patches. *Dryden.*

To hold together. To remain in union.

Even outlaws and robbers, who break with all the world besides, must keep faith amongst themselves, or else they cannot *hold together.* *Locke.*

To hold up. To support himself.

All the wise sayings which philosophers could muster up, have helped only to support some few stout and obstinate minds, which, without the assistance of philosophy, could have *held up* pretty well of themselves. *Tillotson.*

To hold up. Not to be foul weather.

Though nice and dark the point appear,
Quoth Ralph, it may *hold up* and clear. *Hudibras.*

To hold up. To continue the same speed.

When two start into the world together, the success of the first seems to press upon the reputation of the latter; for why could not he *hold up?* *Collier of Envy.*

To hold with. To adhere to; to co-operate with.

There is none that *holdeth with* me in these things but Michael. *Daniel.*

Hold has the appearance of an interjection; but is the imperative mood. Forbear; stop; be still.

Hold, ho! lieutenant—sir—Montano! Gentlemen,
Have you forgot all sense of place and duty?
The general speaks to you—*hold, hold*, for shame! *Shakspeare.*

Hold, hold! are all thy empty wishes such!
A good old woman would have said as much. *Dryden.*

Hold, *n. s.* From the verb. The act of seizing; gripe; grasp; seizure. It is used with great frequency, both literally and figuratively, both for manual and intellectual agency. The verbs with which it is oftenest united are *take, lay,* and *have.*

Uzzah put forth his hand to the ark of God, and *took hold* of it; for the oxen shook it. 2 *Sam.* vi. 6.

Those bards delivered no certain truth of any thing; neither is there any certain *hold* to be *taken* of any antiquity which is received by tradition. *Spenser on Ireland.*

The wits of the multitude are such, that many things they cannot *lay hold* on at once. *Hooker*

This is to give him liberty and power:
Rather thou should'st *lay hold* upon him, send him
To deserved death, and a just punishment. *Ben Jonson.*

Let but them
Find courage to *lay hold* on this occasion. *Milton*

He seized the shining bough with griping *hold*,
And rent away with ease the lingering gold.
Dryden.

The devil himself, when let loose upon Job, could not transport that patient good man beyond his temper, or make him quit his *hold*. *L'Estrange.*

The hand is divided into four fingers bending forwards, and one opposite to them bending backwards, and of greater strength than any of them singly, which we call the thumb, to join with them severally or united, whereby it is fitted to *lay hold* of objects of any size or quantity. *Ray on the Creation.*

Yet then, from all my grief, O Lord.
Thy mercy set me free,
Whilst in the confidence of prayer,
My soul *took hold* on thee. *Addison.*

We are strangely backward to *lay hold* of this safe, this only method of cure. *Atterbury.*

He kept his *hold*,
Nor lost 'till beauty was decayed and old,
And love was by possession palled and cold.
Granville.

Something to be held; support.

If a man be upon an high place, without rails or good *hold*, he is ready to fall. *Bacon.*

Power of keeping.

On your vigor now
My *hold* of this new kingdom all depends.
Milton.

Catch; power of seizing.

The law hath yet another *hold* on you.
Shakspeare.

Prison; place of custody.

They *lay* him in *hold*, because it was not declared what was to be done with him. *Hooker.*

They *laid* hands on them, and put them in *hold* unto the next day. *Acts.*

The prisoner to his *hold* retired. *Dryden.*

Custody.

King Richard, he is in the mighty *hold*
Of Bolingbroke. *Shakspeare.*

Power; influence operating on the mind.

Fear is that passion which hath the greatest power over us, and by which God and his laws take the surest *hold* of us. *Tillotson.*

Rural recreations abroad, and books at home, are the innocent pleasures of a man who is early wise; and give fortune no more *hold* of him than of necessity he must. *Dryden.*

Let it consist with an unbeliever's interest and safety to wrong you, and then it will be impossible you can *have* any *hold* upon him, because there is nothing left to give him a check, or to put in the balance against his profit. *Swift.*

Hold of a ship. All that part which lies between the keelson and the lower deck.

Now a sea into the *hold* was got,
Wave upon wave another sea had wrought.
Dryden.

Again the weather threatened,—again blew
A gale, and in the fore and after *hold*
Water appeared. *Byron. Don Juan.*

A lurking place: as the hold of a wild beast or deer.

A fortified place; a fort; a safe residence.

These separated themselves unto David, into the *hold* to the wilderness, men of might. *Chronicles.*

He shall destroy the strong *holds*.
Jeremiah.

She driveth forth into our ocean
Thurghout our wide see, til at the last
Under an *hold*, that nempnen I ne can,
For in Northumberland, the wave hire cast,
And in the sand hire ship stiked so fast,
That thennes wolde it not, in all a tide:
The wille of Christ was, ther she shulde abide.
Chaucer. The Man of Lawes Tale.

It was his policy to leave no *hold* behind him; but make all plain and waste. *Spenser.*

HOLD, is the whole interior cavity or belly of a ship, or all that part of her inside which is comprehended between the floor and the lower deck throughout her whole length. This capacious apartment usually contains the ballast, provisions, and stores of a ship of war, and the principal part of the cargo in a merchantman. The disposition of these articles with regard to each other, naturally falls under consideration in the article STOWAGE; it suffices in this place to say, that the places where the ballast, water, provisions, and liquors are stowed, are known by the general name of the hold. The several storerooms are separated from each other by bulkheads, and are denominated according to the articles which they contain, the sail-room, the bread-room, the fish-room, the spirit-room, &c.

HOLD'ER, *n. s.*
HOLD'ER-FORTH, *n. s.*
HOLD'-FAST, *n. s.*
HOLD'ING,
} One that retains any thing in his hand; a tenant who holds lands under another Holder-forth, a public speaker, a preacher, or haranguer. Hold-fast, any thing which takes hold, as a hook or catch. Holding, a tenure; a farm; the burden or chorus of a song.

The *holding* every man shall beat as loud
As his strong sides can volley. *Shakspeare.*

In times past *holdings* were so plentiful, and *holders* so scarce, as well was the landlord, who could not get one to be his tenant. *Carew.*

Whence some tub *holdersforth* have made
In powdering tubs the richest trade. *Hudibras*

The several teeth are furnished with *holdfasts* suitable to the stress that they are put to. *Ray.*

The makers and *holders* of plows are wedded to their own particular way. *Mortimer.*

He was confirmed in this opinion upon seeing the *holderforth*. *Addison.*

HOLDER (William), D. D. and F. R. S., a learned author, born in Nottinghamshire, and educated in Pembroke Hall, Cambridge. In 1642 he became rector of Blechingdon, Oxford; in 1660 Doctor of Divinity; was afterwards canon of Ely and St. Paul's, and sub-dean and sub-almoner to king Charles II. He distinguished himself by teaching a young gentleman to speak who was born deaf and dumb, viz. Alexander Popham, son of colonel Edward Popham, who was some time an admiral in the service of the long parliament. Dr. Wallis however completed this task; for young Popham, having forgotten a great part of Holder's instructions, was sent to the doctor who restored him to the use of his speech. Holder published a book entitled The Elements of Speech; an essay of enquiry into the natural Production of Letters: with an appendix concerning persons that are deaf and dumb, 1669, 8vo. In the appendix he relates by what methods he brought Popham to speak. In 1678 he published in 4to. a Supplement to

the Philosophical Transactions of July 1670, with some reflections on Dr. Wallis's letter there inserted. This was written to claim the glory of having taught Popham to speak, which Dr. Wallis in the above letter had arrogated to himself; upon which Wallis published a Defence of the Royal Society, and the Philosophical Transactions, particularly those of July 1670, in answer to the cavils of Dr. William Holder, 1678, 4to. Holder was skilled in the theory and practice of music, and wrote a Treatise of the natural Grounds and Principles of Harmony, 1694, 8vo. He wrote also a Discourse concerning Time, with Application of the natural Day, lunar Month, and solar Year, &c. 1694, 8vo. He died at London, January 24th, 1696-7.

HOLDSWORTH (Edward), a polite and elegant scholar, born about 1688, and trained at Winchester school. He was thence elected demy of Magdalen College, Oxford, in July 1705, took the degree of M. A. in April 1711, became a college tutor, and had many pupils. In 1715, when he was to be chosen a fellow, he left the college, because he would not swear allegiance to the new government. The remainder of his life was spent in travelling with young noblemen as a tutor: in 1741 and 1744 he was at Rome in this capacity. He died of a fever at lord Digby's house at Coleshill, December 30th, 1747. He wrote, 1. Muscipula, a poem, of which there is a good English translation by Dr. John Hoadley, in vol. 5 of Dr. Dodsley's Miscellanies. 2. Pharsalia and Philippi; or the two Philippi in Virgil's Georgics attempted to be explained and reconciled to History, 1741, 4to. 3. Remarks and Dissertations on Virgil, published with several notes and additional remarks by Mr. Spence, 1768, 4to.

HOLE, *n. s.*
HOL'LOW, *adj. n. s.* & *v. a.*
HOL'LOW-HEARTED, *adj.*
HOL'LOWLY, *adv.*
HOL'LOWNESS, *n. s.*
HOL'LOW-ROOT, *n. s.*

Goth. Sax. and Dut. *hol*; Teut. *hohl*. A cavity, perpendicular or otherwise; a perforation; a cave; cell; mean habitation: arm-hole, the cavity under the shoulder. Hollow, excavated; this respects the body itself; the absence of its own materials produces hollowness: these words are used in a figurative sense; applied to sound, noisy, like reverberations from a cavity: to character, unfaithful; insincere; dishonest; treacherous. Hollow-root, a plant.

He touched the *hollow* of his thigh. *Gen.* xxii. 25.

——— Ne left he nought,
But through the verger he hath sought
If he might finden *hole* or trace
Wherethrough that me [I] mote forth by pace
Or any gappe, he did it close.
Chaucer. Romaunt of the Rose.

And for a countenance, in his hond he bore
An *holow* stikke, (take kepe and beware!)
In the ende of which an unce and no more,
Of silver lumaile put was.
Id. The Chanones Yemannes Tale.

Upon his bloody finger he doth wear
A precious ring, that lightens all the *hole*.
Shakspeare.

You shall arraign your conscience,
And try your penitence, if it be sound,
Or *hollowly* put on. *Id.*

The earth had not a *hole* to hide this deed. *Id.*

O earth, bear witness,
And crown what I profess with kind event,
If I speak true; if *hollowly*, invert,
What best is boaded me to mischief! *Id.*

The southern wind,
Now by his *hollow* whistling in the leaves,
Foretels a tempest. *Id.*

Who art thou, that lately didst descend
Into this gaping *hollow* of the earth? *Id.*

It is fortune's use
To let the wretched man outlive his wealth,
To view with *hollow* eye and wrinkled brow
An age of poverty. *Id. Merchant of Venice.*

Thy youngest daughter does not love thee least;
Nor are those empty-hearted whose low sound
Reverbs no *hollowness*. *Id. King Lear.*

I've heard myself proclaimed,
And by the happy *hollow* of a tree
Escaped the hunt. *Id.*

If you throw a stone or a dart, they give no sound; no more do bullets, except they happen to be a little *hollowed* in the casting, which *hollowness* penneth the air. *Bacon.*

I suppose there is some vault or *hollow*, or isle, behind the wall, and some passage to it. *Id.*

Hollow church papists are like the roots of nettles, which themselves sting not; but bear all the stinging leaves. *Id.*

Tickling is most in the soles, and under the *arm-holes* and sides. *Id.*

Conscience!
Poor plodding priests, and preaching friars make
Their *hollow* pulpits; and empty aisles
Of churches ring, with that round word.
Ben Jonson.

I have seen earth taken up by a strong wind, so that there remained great empty *hollowness* in the place. *Hakewill.*

What could be expected from him, but knotty and crooked *hollow-hearted* dealings? *Howel.*

Against the horse's side his spear
He throws, which trembles with enclosed fear;
Whilst from the *hollows* of his womb proceed
Groans not his own. *Denham.*

A loadstone is so disposed, that it shall draw unto it, on a reclined plane, a bullet of steel, which, as it ascends near to the loadstone, may fall down through some *hole*, and so return to the place whence it began to move. *Wilkins's Dædalus.*

He seemed
For dignity composed and high exploit;
But all was false and *hollow*. *Milton.*

The *hollow* abyss
Heard far and wide, and all the host of Hell,
With deaf'ning shout returned their loud acclaim.
Id.

The *hollow-hearted*, disaffected,
And close malignants are detected. *Hudibras.*

Look upon linen that has small *holes* in it: those *holes* appear black, men are often deceived in taking *holes* for spots of ink; and painters, to represent *holes* make use of black. *Boyle.*

Trees, rudely *hollowed*, did the waves sustain,
Ere ships in triumph plowed the watery plain.
Dryden.

He frets, he fumes, he stares, he stamps the ground;
The *hollow* towers with clamours ring around. *Id.*

When Alexander first beheld the face
Of the great cynick, thus he did lament:
How much more happy thou, that art content
To live within this little *hole*, than I
Who after empire, that vain quarry fly. *Id.*

Thence issued such a blast and *hollow* roar,
As threatened from the hinge to heave the door. *Id.*

Some search for *hollow* trees, and fell the woods. *Id.*

There are the tops of the mountains, and under their roots in *holes* and caverns the air is often detained. *Burnet.*

An heap of sand or fine powder will suffer no *holiowness* within them, though they be dry substances. *Id.*

A tortoise spends all his days in a *hole*, with a house upon his head. *L'Estrange.*

People, young and raw, and soft natured, think it an easy thing to gain love, and reckon their own friendship a sure price of any man's; but when experience shall have shewn them the hardness of most hearts, the *hollowness* of others, and the baseness and ingratitude of almost all, they will then find that a friend is the gift of God, and that he only who made hearts can unite them. *South.*

Multitudes were employed in the sinking of wells, and the *hollowing* of trees. *Spectator.*

I have frighted ants with my fingers, and pursued them as far as another *hole*, stopping all passages to their own nest, and it was natural for them to fly into the next *hole*. *Addison.*

A fine genius for gardening thought of forming such an unsightly *hollow* into so uncommon and agreeable a scene. *Id.*

The little springs and rills are conveyed through little channels into the main *hollow* of the aqueduct. *Id. on Italy.*

Forest grew
Upon the barren *hollows*, high o'ershadowing
The haunts of savage beasts. *Prior.*

Himself, as in the *hollow* of his hand.
Holding, obedient to his high command,
The deep abyss. *Id.*

HOLERACEÆ, from *holus*, pot-herbs, the name of the twelfth order in Linnæus's fragments of a natural method, consisting of plants which are used for the table, and enter into the economy of domestic affairs. See BOTANY.

HOLIDAY (Dr. Barten), a learned divine and poet, was the son of a tailor in Oxford, and born there about 1593. He studied at Christ Church College, and in 1615 took orders. He had been admired for his skill in poetry and oratory: and now, distinguishing himself by his eloquence as a preacher, he obtained two benefices in the diocese of Oxford. In 1618 he went as chaplain to Sir Francis Stewart, when he accompanied Count Gondamore to Spain. Afterwards he became chaplain to the king; and before 1626 was made archdeacon of Oxford. In 1642 he took the degree of D. D. at Oxford; near which place he sheltered himself during the rebellion; but after the Restoration returned to his archdeaconry, where he died in 1661. His works are, twenty sermons, published at different times; Philosophiæ politobarbaræ specimen, 4to.; Survey of the world, a poem in ten books, 8vo.; A translation of Juvenal and Persius; Technogamia, or the Marriage of the Arts, a comedy.

HOLILY, *adv.*
HOLINESS, *n. s.*
HOLY, *adj.*
HOLY-GHOST, *n. s.*
HOLY THURSDAY, *n. s.*
HOLY-WEEK, *n. s.*
HOLY-DAY, *n. s.*

Sax. halıȝ; Dut. *heyligh*; Goth. *holg*, from ƿal, healthy, or whole, or in a state of salvation: in Gr. αγιος; Lat. *sanctus*. Holy and holiness, derived from the northern languages, have now altogether a Christian signification, as referrible principally to the life and temper of a Christian; and typically to religious acts, ceremonies, and places: it is principally to the mind what sanctity is to the outward garb; the latter may be counterfeited, the former cannot: it has, however, been used in a more extended sense as good; pious; consecrated; inviolable. Holiness is the titular appellation of the pope of Rome: holy-ghost, Sax. halıȝ and ȝaꝛt, the third person in the adorable Trinity: holy Thursday, the day on which the ascension of Christ is commemorated; ten days before Whitsunday: holy-week, the week before Easter, called also Passion-week: holy-day, corrupted to holiday, the day of ecclesiastical festival; anniversary feast; a day of gaiety and joy; a time that comes seldom.

And, plainly and generally, Sacrilege is to reve *holy* thing fro *holy* place; or unholy thing, out of *holy* place; or *holy* thing out of unholy place. *Chaucer. The Persones Tale.*

This foule sinne is platly ayenst the *Holy Gost*. Al be it so that every sinne is ayenst the *Holy Gost*; yet, natheles, for as moche as bountee apperteineth proprely to the *Holy Gost*, and envie cometh proprely of malice; therefore, it is proprely ayenst the bountee of the *Holy Gost*. *Id.*

Shortly therein so perfect he became
That, from the first unto the last degree,
His mortal life he learned had to frame
In *holy* righteousnesse without rebuke or blame.
Spenser. Faerie Queene.

This victory was so welcome unto the Persians, that in memorial thereof they kept that day as one of their solemn *holy-days* for many years after. *Knolles's History.*

I here appeal unto the pope,
To bring my whole cause 'fore his *holiness*.
Shakspeare.

State, *holy* or unhallowed, what of that? *Id.*

See where his grace stands 'tween two clergymen!
And see a book of prayer in his hand!
True ornaments to know a *holy* man. *Id.*

An evil soul producing *holy* witness,
Is like a villain with a smiling cheek. *Id.*

Ill it doth beseem your *holiness*
To separate the husband and the wife. *Id.*

Thou would'st be great,
Art not without ambition; but without
The illness should attend it: what thou would'st highly,
That would'st thou *holily*. *Id.*

What, have I 'scaped love-letters in the *holiday* time of my beauty, and am I now a subject for them? *Id.*

He has deserved it, were it carbuncled
Like *holy* Phœbus' car. *Id. Antony and Cleopatra.*

With joy he will embrace you; for he's honourable,
And, doubling that, most *holy*. *Id. Cymbeline.*

Religion is rent by discords, and the *holiness* of the professors is decayed, and full of scandal. *Bacon.*

And young and old come forth to play
On a sunshine *holiday*. *Milton.*

Friendship, a rare thing in princes, more rare between princes, that so *holily* was observed to the last of those two excellent men. *Sidney.*

Rome's *holidays* you tell, as if a guest
With the old Romans you were wont to feast. *Waller.*

Bare was his hoary head; one *holy* hand
Held forth his laurel crown, and one his sceptre.
Dryden.

Courage is but a *holiday* kind of virtue, to be seldom exercised. *Id.*

Is not the care of souls a load sufficient?
Are not your *holy* stipends paid for this? *Id.*

If strength of persuasion be the light which must guide us, I ask, how shall any one distinguish the inspirations of the *Holy Ghost*? *Locke.*

Common sense could tell them that the good God could not be pleased with any thing cruel; nor the most *holy* God with any thing filthy and unclean. *South.*

His *holiness* has told some English gentlemen, that those of our nation should have the privileges.
Addison on Italy.

Then in full age, and hoary *holiness*
Retire, great teacher, to thy promised bliss *Prior.*

We see piety and *holiness* ridiculed as morose singularities. *Rogers.*

We know ourselves, our mission, and thine order;
Waste not thy *holy* words in idle uses,
It were in vain. *Byron. Manfred.*

HOLINESS, was anciently a title given to all bishops. The Greek emperors also were addressed under the title of Holiness, as being anointed with holy oil at their coronation. Du Cange adds, that some of the kings of England have had the same attribute; and that the orientals have frequently refused it to the pope.

HOLINSHED (Raphael), an English historian, famous for his Chronicles of England, Scotland, and Ireland, was descended from a good family in Cheshire; but neither the time of his birth, nor events of his life, are known. He appears to have been a man of considerable learning. His Chronicles were first published at London in 1570, in 2 vols. folio; and then in 1587, in 3 vols. In this second edition several sheets in the second and third volumes were destroyed, for containing some passages disagreeable to queen Elizabeth and her ministers; but these have since been printed apart. Holinshed was not the sole compiler of this work, being assisted in it by several other hands. The time of his death is unknown; but from his will, prefixed to Hearne's edition of Camden's Annals, it appears to have happened between 1578 and 1582.

HOLITSCH, a manufacturing town of Hungary on the Morawa, first patronised as such by the emperor Francis I. The manufacture now chiefly cultivated is that of a species of white ornamental stone. In the neighbourhood is an estate cultivated by the government, as a model of agriculture. Population 4000, thirty-four miles south-east of Brunn.

HOLKAR (Jeswunt Rao), a modern Mahratta chief, who distinguished himself by his wars with the English. He first took arms under Moadjha Scindia, and succeeded Maharow Holkar, soubah of Malwa, in the command of the Deccan. He was now able to bring into the field 100,000 men, of whom one-half were cavalry. But engaging in several unfortunate wars with his neighbours, and with the English, his power and territories were very much diminished. Holkar commenced hostilities against the English in 1804, the result of which was a treaty concluded December 24th, the following year, by which all his maritime provinces were ceded to the British. In 1817 the insurrection of the Pindarrees induced Holkar again to make war on the English, but the defection of the Peishwa deranged his operations; and he was ultimately deprived of two-thirds of his remaining dominions. He died in 1825.

HOLLA, *interj.* & *v. n.* } Fr. *hola.* A word
HOLLOW, *v. n.* } used in calling to any one at a distance: to shout; to halloo; to hoot: hollow is written incorrectly for holla.

But I will find him when he lies asleep,
And in his ear I'll *holla* Mortimer!
What *halloing* and what stir is this to-day?
Shakspeare.

List, list! I hear
Some far off *holla* break the silent air. *Milton.*

This unseen judge will wait, and in your ear
Will *hollow* rebel, tyrant, murderer. *Dryden.*

I pass for a disaffected person and a murderer, because I do not hoot and *hollow*, and make a noise.
Addison.

He with his hounds comes *hollowing* from the stable,
Makes love with nods, and kneels beneath a table.
Pope.

HOLLAND, *n. s.* Fine linen made in Holland.

Some for the pride of Turkish courts designed
For folded turbants finest *holland* bear. *Dryden.*

HOLLAND, NORTH and SOUTH, are two important provinces of the kingdom of the Netherlands, that have often given name to the Seven United Provinces, but these appellations have been merged in the title of the kingdom: and Holland is now, properly, the maritime peninsula of that name, divided into the two parts we have specified. It is bounded on the north and west by the German Ocean, on the east by the Zuider Zee and the ci-devant state of Utrecht, and on the south by the Meuse and Dutch Brabant; extending from lat. 51° 40′ to 53° 10′ N.: its longitude is about 180 miles east of London. The length of the whole, including the Texel and the other islands of the Meuse, is about ninety miles; the breadth is various, from fifteen to forty-eight, the greatest breadth being southward. It contains ninety walled towns, besides many others, and above 400 villages. Before the Revolution, in 1795, six large cities had seats in the states general, viz. Dort, Haerlem, Delft, Leyden, Amsterdam, and Gouda. The number of inhabitants was estimated at 800,000. They also reached this number in 1801; but in 1817 they had been reduced by the war to 748,000.

The soil is so soft and marshy, that, but for the constant care in forming ditches and canals, it would be hardly capable of cultivation; some part of it lies even lower than the sea, from which it is secured by dikes, twenty-five or thirty feet high, and as many broad at top. The meadow grounds are rich, and feed great numbers of cows; the making of butter and cheese being a principal occupation. These meadows are generally under water during the winter, and the inhabitants only discharge them from it by mills adapted, as in the fenny parts of England, to this particular purpose. The Hollanders are affable, industrious, laborious, absorbed in trade, excellent sailors, moderate politicians, and lovers of liberty. A free exercise of religion is allowed to all persuasions, but Calvinism is the most prevailing.

Holland now sends twenty-two members to the States General, and, in point of jurisdiction, is under the high court of the Hague. The

division into the two governments of South and North Holland is recognised by the constitution of 1814; the former containing 1170 square miles, with 389,000 inhabitants, and being divided into the six districts of the Hague, Leyden, Rotterdam, Dort, Gorcum, and the Briel; while North Holland, which, in official papers, is called by its ancient name of West Friesland, contains 930 square miles, with 359,000 inhabitants, and is divided into the four districts of Amsterdam, Haerlem, Hoorn, and Alkmaar.

The following is the population of the chief towns:—

Amsterdam . . .	200,000
Rotterdam . . .	54,000
Hague	42,000
Leyden	31,000
Haerlem . . .	20,000
Dort	19,000
Delft	14,000
Gouda	12,000
Alkmaar . . .	10,000
Hoorn	9,000

This country was anciently inhabited by the Batavians, who derived their origin from the Catti, a people of Germany. Having been obliged to abandon their country on account of civil wars, they came to establish themselves in an island, formed by the waters of the Rhine and Wahal or Leck, and named their country Batavia or Betuwe, from Batton, the son of their king. These people served in the Roman armies in quality of auxiliary troops; and historians inform us, that some of them were at the battle of Pharsalia. They formed the ordinary guard of the emperor Augustus. The services which they rendered Germanicus, in Germany, were so important, that the senate gave them the appellation of brothers. They had afterwards a considerable share in the conquest of Britain, under Plancius and Agricola. They strengthened the party of Galba, and afterwards that of Vitellius; and it was principally to their valor that Julian the Apostate was indebted for the victory he obtained over the Germans near Strasburgh. The name of Holland is said to have been given it on account of the vast and thick forests of wood with which it was at one time covered; Holtlant, in German, signifying woodland. Others think that the Normans, who made a descent here about 836, gave the country this name; founding their opinion on the resemblance of names found in this country to those in Denmark and Norway, the ancient residence of the Normans; as Zealand, Oland, Schagen, Bergen, &c. On the decline of the Roman empire, the Batavians, having thrown off their yoke, came under the dominion of the Saxons, and then of the French, under Childeric I. king of France. The Normans and the Danes were the next masters, from the time of Charlemagne, and ravaged the country three times with fire and sword. When they were driven away, Charles the Bald, emperor and king of France, erected Holland into a county in 863, in favor of Thierry, duke of Aquitaine, who, five years after, was also made count of Zealand, by Louis king of Germany. In 1299 the county of Holland devolved to the counts of Hainault; and in 1436 it fell to Philip the Good, duke of Burgundy, and afterwards to the emperor Maximilian, whose descendant, Philip II. king of Spain, was the last count of Holland; the seven provinces revolting from him, and after a long struggle forming an independent republic. The states of this province had the title of the states of Holland and West Friesland, and were formed of the nobility and towns. The number of the nobility admitted into the assembly was not limited, and not always the same; they were elected by a majority of votes, and rarely exceeded ten. The towns which had a right to send deputies were originally six, but at last eighteen, of which seven were in North Holland, and eleven in South Holland. The number of deputies sent by each town was not fixed. In the late war Holland at first appeared hostile to the new republic, but never heartily co-operated with the allies. The stadtholder was willing to co-operate heartily with Britain and Prussia, but a party more powerful than his own were his enemies, and, on the invasion of Holland by the French, in the beginning of 1795, the stadtholder with his family took refuge in England. Holland was now under various forms of French domination until the year 1813. The Batavian republic was established under the authority of France in 1795; and transformed into the kingdom of Holland, and Louis Bonaparte proclaimed king on the 5th of June, 1806. On the 1st of July, 1810, Louis abdicated the throne in favor of his eldest son, and retired as a private citizen into Bohemia. But this did not meet with Napoleon's approbation, and he incorporated Holland with the French empire on the 9th of the same month. At length the people became weary of this connexion. The events of 1813 had weakened the power that bound them; the people rose, their fetters were broken, and 'Orange boven' (up with the House of Orange), resounded through the country. A provisional government was formed at Amsterdam on the 18th of November. William Frederick, of Nassau and Orange, landed from England at the close of the same month, entered Amsterdam on the 2nd of December, and was proclaimed Sovereign Prince of the United Netherlands, on the following day. By the act of congress, signed at Vienna on the 31st of May, 1815, the seventeen provinces of the Netherlands, which had formerly been subject to the dukes of Burgundy, were re-united under the prince of Orange, as William I., king of the Netherlands. See NETHERLANDS.

HOLLAND, NEW, an island of the South Pacific Ocean, the largest in the world, and long supposed to form part of a great southern continent. The Portuguese and Spaniards appear to have visited it in the sixteenth century, but it was the Dutch who first made it known to Europe. In 1605 they coasted it along the western shore as far as 13° 45′ of S. lat.; the farthest point of land in their map being called Cape Keer Weer, or Turn-again. In 1616 the west coasts were discovered by Dirk Hartag, commander of an outward bound vessel from Holland to India; and in the year 1801 there was found, by some of the

navigators by whom that coast was visited, a plate of tin, with an inscription and date, in which it was mentioned that it had been left by him. In 1627 the south coast was discovered for an extent of 1000 miles, by a ship commanded by Pieter Nuyts. In 1628 the west coast was again visited by several of the Dutch East India vessels; and in the following year a Dutch ship, commanded by captain Pelsart, was wrecked on the coast. In 1642 Abel Tasman was sent by the Dutch East India Company to complete the survey of the coast; and he accordingly visited the northern shores of New Holland, which he called Anthony Van Diemen's Land, to distinguish it from Van Diemen's Land, in the south, previously discovered. In 1644 the western coasts were further explored by Tasman, but little is known of his discoveries in this quarter. It only appears that he represented the people as savage, and going naked, and that he could not understand their language. They once came to the number of fifty, double armed, dividing themselves into two parties, intending to have surprised the Dutch, who had landed twenty-five men; but the firing of guns frightened them, so that they fled. Their prows are made of the bark of trees: their coast is dangerous: there are few vegetables: the people use no houses. The inhabitants are very numerous, and threw stones at the boats sent by the Dutch to the shore. They made fires and smoke all along the coast, which, it was conjectured, they did to give notice to their neighbours of strangers being upon the coast. They appear to live very poorly, go naked, and eat yams and other roots.

In 1688 Dampier fell in with this island, and visited it again 1699. He describes the inhabitants as the most miserable people in the world, without houses, and clothes; black, tall, thin, straight bodied, 'with small limbs, great heads, and heavy brows.' Their eyelids are always half closed, to keep the flies out of their eyes, which are here so troublesome, that no fanning will drive them away from the face; and without the assistance of both hands to keep them off, they will fill one's nostrils and mouth too, if the lips are not shut close; so that from their infancy, being thus annoyed with those insects, they never open their eyes like other people, and consequently cannot see far, unless they hold up their heads as if they were looking at something over them. They have great bottle noses, pretty full, and wide mouths; are long visaged, and of most unpleasant aspect.'

Captain Cook in 1770 traced its eastern side with an accuracy that left little to be performed by his successors. Since the voyage of this great navigator, the separation of Van Diemen's land has been ascertained by the enterprising Bass; and the voyages of D'Entrecastaux, Baudin, and Flinders, have completed the outline of the coasts.

The eastern coast, or New South Wales (which see), commences at Cape York, in 10° 30′ S. lat., and terminates at Wilson's Promontory in Bass's Strait, in 39° 0′ including an extent of 700 leagues. A chain of mountains appears to run parallel to this coast, through its whole length, whose bases are from ten to thirty leagues from the sea. Until very recently all attempts to pass this natural barrier have been unsuccessful. It has, however, at last been overcome, and, instead of the sandy deserts or the inland seas with which conjecture had occupied the interior, the discovery of beautiful meadows, watered by considerable rivers and by chains of ponds, has given to the colonists new prospects of extension and riches. The coasts towards the south are in general elevated and covered with lofty trees. Towards the north they are lower, bordered with mangrove swamps, and lined with a labyrinth of islets and coral reefs. The Blue Mountains, which rise behind the seat of the colony, at the distance of thirty miles, are a mixture of primitive and secondary rocks, and have not yet been discovered to contain any metal.

The rivers which empty themselves on the east coast are few, and of no magnitude in proportion to the extent of the country. The Hawkesbury, which is the most considerable, empties itself into Broken Bay, north of Port Jackson, and, though deeply encased, it often overflows, and has several times swept away the buildings and corn magazines on its banks.

At Port Jackson the climate is nearly similar to that of the Cape of Good Hope. In December the heat is greatest, the thermometer sometimes rising to 112°, and the grass has been known to take fire spontaneously. Short intervals of north-west wind sometimes bring a degree of suffocating heat, equal to the scirocco or kamsin, while at others masses of ice eight inches long fall as hail. Tremendous storms, attended with thunder and lightning, have also occasionally occurred, and a shock of an earthquake was experienced in 1801. The climate is nevertheless extremely healthy; and in July and August, the winter of this hemisphere, the coolness of the air is invigorating and pleasant.

The principal trees met throughout New Holland are the eucalyptus, or gum tree, of various kinds, and the casuarina, or beef wood of the colonists of Port Jackson. With the exception of some bad roots, and a few berries, nature seems to have denied this vast country any species of alimentary vegetable, but all those of Europe and many of the tropics have been introduced into the colony.

The native dog excepted, all the quadrupeds discovered in New Holland approach the didelphus genus, by the pouch or sack formed of the skin of the belly, and in which their young take shelter when alarmed. The largest of these animals is the kangaroo, which grows to the length of five feet. A smaller species, named brush kangaroo, is the size of the hare; and the little animal named the kangaroo rat is only so called from its diminutive bulk. The womat is the size of a turnspit dog, and has some resemblance to the bear. The tachyglossus has the figure of the porcupine of Africa and the manner of feeding of the ant-eater of America. The amphibious mole, ornithorincus, is a very singular animal, having the jaws of a quadruped terminated by the bill of a duck, the feet webbed and with claws, and, from the absence of breasts in the female, it is supposed to be oviparous; it is about sixteen inches long, and lives in fresh

water ponds The flying opossum has its name from the long leaps it takes from tree to tree, and which it is enabled to do by the skin which unites the fore and hind legs on each side of the body. The native dog is of the jackal species, and never barks; though it follows the native, it is not to be entirely domesticated.

The birds, which are particularly deserving mention, are the cassowary or emu, the menura superba, a pheasant which unites the beauties of the bird of paradise and the peacock. Among the parrot tribe are many beautiful species, and particularly the large white and the black cockatoo. Aquatic birds are numerous, and among them are a gigantic pelican, some new species of geese and ducks, and the black swan, which is met in vast numbers towards the south. The other birds are the brown eagle, several species of falcons, crows, kingfishers, bustards, pigeons of several species, quails, curlews, herons, &c.

Lizards and snakes are met with in abundance, and swarms of winged insects darken the air, particularly moths, of which the variety is endless.

The indigenous population of New Holland are of the grand stock of Oceanic Negroes, having the hair frizzled but not woolly, the nose flat, nostrils large, mouth enormously wide, lips thick, and eyes hollow; the teeth are white and even, the sight extremely quick, the limbs disproportionably slender, doubtless from their miserable nourishment. In some the complexion is as black as the African negro, while others are nearer a copper color. Their thick bushy beards, and the bones and reeds they stick in their noses, give the men a horrible appearance, which is not improved by the daubing their faces with red or white clays, and anointing their bodies with stinking fish oil, which, collecting the dust, forms a crust of filth that defies the sting of the musquito. Although they seem at times to feel very sensibly the chilliness of the air, they have no idea of any other clothing than a few skins of dogs or opossums sewed together, with which they cover their shoulders, and which are only used by the men, the women going entirely naked. In every other respect the New Hollanders seem to be the people under the sun who have made the least progress in civilisation.

The food of those who inhabit the coasts is confined to the fish they strike with their spears, or which their women take with hook and line, and to the shell-fish they detach from the rocks at low water; an occasional dead whale also, that drives ashore, affords them a feast, which they never quit until it is all devoured. Those who inhabit the woods subsist on the few opossums and other animals they can catch, on wild honey, lizards, and worms.

Their huts are composed of branches of trees, shaped like an oven, the fire-place before the opening, while the smoke and ordure remain inside, and here they sleep pell-mell with their knees to their mouths. Their canoes are of bark tied at the ends and extended by cross sticks. Their weapons are spears pointed with bones of animals or fish, or with bits of spar, clubs and bucklers of bark. Their implements are a stone adze, their fishing hooks of pearl-shell, and their lines of the inner bark of a tree.

Their societies consist of tribes of twenty to thirty individuals, who are distinguished by the word gal added to the name of the district they occupy; thus Botany Bay is called Gwea, and its tribe Gwea-gal. Polygamy is general, and the manner of procuring a wife is unparalleled in brutality. The man who fancies a girl watches until he finds her unprotected by any of her tribe, when he fells her to the ground with his club, and drags her bleeding and senseless to his hut, where the marriage is consummated in a manner too disgusting for description; and she afterwards follows him as his wife, without the smallest idea of escaping from the frequent repetition of the most barbarous treatment.

Among their singular customs is that of depriving the women of the two first joints of the little finger of the left hand. One tribe has also the right of extracting a front tooth from the young men of other tribes; and recently women have been met with, in the interior, with but one eye, being deprived of the other as it would appear intentionally.

The New Hollander's ideas of a future state extend to the belief, that after death they return to the clouds, whence they originally dropped, an idea also found amongst the Alforezes of Ceram. They are the slaves of superstition, believing in magic, witchcraft, and spectres; hence they will not approach a grave. They also draw omens from falling stars, and have charms against thunder and lightning. The young people are buried, but warriors past the middle age are burned. The horrible custom also prevails of burying the suckling infant with its mother, and the fœtus is often destroyed in the womb; both which practices doubtless arise from the difficulty of rearing children. Nevertheless these savages are not entirely devoid of the feelings of human beings: they have been seen to weep over the graves of their friends or relations; they show a high respect for old age; and they have not that irresistible propensity to thieving which marks the islanders of the Pacific.

The language of the tribes that inhabit the colony is sonorous and not disagreeable to the ear; but those who live both to the north and south have dialects radically different from each other, and from any known language.

On the separation of the British American colonies from England, she was at a loss where to send those criminals whom the law did not condemn to capital punishments, or whose sentence of death the sovereign mitigated. The west coast of Africa, between Cape Negro and the Cape of Good Hope, was first thought of for this purpose; but, on the recommendation of Sir Joseph Banks, New South Wales was fixed upon, and in 1788 the fleet with the persons intended to found the settlement arrived at Botany Bay; but, this place being found ineligible, the governor Philip made choice of Port Jackson, twelve miles farther north, which had been seen and named, but not examined by Captain Cook, and the infant town received the name of Sydney. Although in its infancy the colony had to con-

tend against great difficulties, arising from the necessity of procuring every species of provision from England, and above all from the evil habits of the colonists, and latterly from the dissensions amongst the chief persons forming its government: nevertheless such is the force of the innate principle of man to better his condition, that, in spite of every obstacle, the colony has always advanced, and has at last become nearly independent for necessaries of the mother country. See WALES, NEW SOUTH.

In 1811 the colonial shipping consisted of twenty-nine vessels, from fourteen to 186 tons, chiefly employed in conveying coals from Coal River, corn from the Hawkesbury and George's River, and sealing among the islands in Bass's Strait.

Port Jackson is an excellent harbour, entered between two high steep heads, and penetrating many miles, forming upwards of 100 coves. The only danger is a ledge of rocks across the entrance, leaving a channel on each side with four fathoms depth. Sydney Town is composed of good houses of stone and brick, of the officers of government and chief free settlers; the habitations of the lower class are of wood, plastered. The public buildings are a church, barracks, a jail, orphan school, a stone bridge over a little creek which receives a small run of fresh water, and the government-house.

The out settlements immediately dependent on Sydney are Paramatta at the head of the harbour, consisting of barracks, a government-house, church, and jail, with a street of dwelling houses. The Greenhills or Hawkesbury, on the banks of the river of this name, consists of a large granary of brick, and a number of wooden dwelling-houses. An establishment was found in 1805 at Coal River, in Port Hunter, north of Port Jackson, which received the name of King's Town.

The topography of New Holland, after taking leave of the colony of Port Jackson, offers little more than barren names. We shall, however, endeavour to present the reader with an idea of its principal points. Commencing at Cape York, which forms the south side of Endeavour Strait of Cook, the coast trends south-east to Cape Flattery, and then S.S.E. to Magnetic Island. South of Cape Flattery is Endeavour River, where captain Cook observed alligators and oysters of an enormous size. The natives baked their victuals in holes in the ground. From Magnetic Island, so named from the vacillation of the needle near it, the coast again takes a south-east direction, to the Great Bay of Inlets of Cook, before which are many islands; and from the latitude of 17° to 23° a chain of coral reefs defends the coast from the attacks of the sea, and has been named by captain Flinders Barrier Reefs. In Broad Sound the tide rises thirty or thirty-five feet. No fresh water was found on its shores, and this necessary object is only found in stagnant pools in Shoal-water Bay, where captain Flinders observed pummice stone washed up on the shore. The eastern direction of the coast ends at Sandy Cape, the south point of Hervey Bay, where the huts of the natives were observed by Cook to be constructed with more solidity than to the south. Glass-house Bay was named from several hills behind it resembling those edifices. It receives some rivers, considerable in comparison with the scanty rills met on all the rest of the coast to the north; and pummice stone was found on its shores.

From Point Look-out the coast takes a direction to the west of south, and has no place of shelter to Port Stephens, where commences the immediate territory of the colony of Port Jackson, named Cumberland County. Port Stephens (Yaca-aba of the natives) is full of shoals, and only fit for small craft. Broken Bay is a large expanse of water, dividing into many branches, and receiving the river Hawkesbury, the most considerable of New Holland; it is navigable to the settlement at the Green Hills, ninety miles from the sea; but about twelve miles above this, its bed is crossed by a bar of rocks.

South of Port Jackson the coast has been minutely explored, and found to possess the following places in succession. Botany Bay, thus named by Sir Joseph Banks, from the great variety of plants found on its shores; it is a large expanse of water, but so filled by banks as to afford no anchorage for ships, except exposed to the sea. Its shores are also in many places swampy. It receives George's River, of considerable size, on which are some farms, whose produce is sent by sea to Sydney.

From Cape Howe the coast takes an abrupt westerly direction, trending about south-west to Wilson's Promontory, in Bass's Strait. This promontory, which is the south point of New Holland, is a vast mass of granite, joined to the continent by a narrow low isthmus. Between it and Cape Howe the shore presents an unbroken continuity of white sandy beach.

On the south coast of New Holland, in Bass's Strait, are Western Port and Port Philip. The former, discovered by Bass, has since been examined by Baudin, and found to contain two islands instead of one. It is a large basin, fit for the reception of ships of burden.

Port Philip, discovered by lieutenant Grant, is entered from a large bay, to which the English navigator gave the name of King, and the French that of Talleyrand. From an entrance only half a mile wide Port Philip expands to a basin 150 miles in circuit. Its shores are in general moderately elevated and sandy, but covered with wood, particularly the casuarina. Except a small river, which it receives, it is almost totally destitute of fresh water, and hence the intention of forming an establishment here was abandoned.

From Cape Albany Otway (Cape Marengo of the French) the west point of Bass's Strait, the coast takes a direction to the north of west. The whole extent, from 130° of longitude to Bass's Strait, was visited nearly at the same time by captain Flinders, and Baudin the French navigator.

From Cape Bridgewater (Montaigne) to the Gulf of St. Vincent (Bay Josephine) the coast is composed of sandy cliffs, and frightfully barren.

Spencer's Gulf (Gulf Buonaparte) is separated from that of St. Vincent by a peninsula named York by captain Flinders, and Cambaceres by the French; it is seventy leagues deep and ten to twenty-five broad, and terminates in a mangrove swamp. Near the entrance of the gulf, on the west shore, is Port Lincoln (Champagny), an excellent harbour, formed by three basins, whose entrance is covered by an island.

The coast which forms the west shore of the Australian Bight of Flinders, was discovered by Nuyts, in 1627. From the head of the bight to longitude 123° it is composed of sandy cliffs, from 400 to 600 feet high, forming a level platform, with very few trees, and beyond which inland nothing is visible from the sea. On this singular line of coast captain Flinders observes, 'that the equality of elevation, and the evidently calcareous nature, seem to bespeak it to have been the exterior line of a vast coral reef, which is always more elevated than the interior part. From the gradual subsiding of the sea, or perhaps by a sudden convulsion of nature, this bank may have attained its present height above the surface of the sea; and on this supposition, together with the fact of no hill or elevation being seen within it, it may be presumed, that in that direction there is either a low sandy plain, or the bank may be a barrier separating the external from an internal sea.' Behind the Lucky Bay of Flinders is a fresh water lake, a mile in extent, communicating with the sea by a rivulet. The coast continues low and sandy, with some intervals of barren hills, apparently granite, to King George the Third's Sound of Vancouver.

This is a large gulf with two good ports. The shores are composed of perpendicular cliffs, or sand-hills, behind which, in the interior, rise high mountains, whose white and elevated summits resemble vast edifices in ruins; Mount Gardner has the appearance of being a volcano. On some of the promontories perfect coral is found, at the height of 1000 feet above the sea.

The south-west part of New Holland is named in the maps Leeuwin, or Lion's Land, from the Dutch ship that first visited it in 1660. Cape Leeuwin is the south-west point.

The land of Edels comprehends the middle of the west coast. Swan River in 32° 4′, was ascended by the French twenty leagues, and found to run through a low country, traversed by calcareous strata, and covered with large eucalyptus.

Endracht, or Concord Land, extends along the northern part of the west coast, under the tropic.

The Shark's Bay of Dampier is surrounded by sandy shores, but wooded. Dampier mentions seeing here rabbits with very short fore legs, evidently the kangaroo. The French naturalists observed that these coasts are covered with petrified shells, and that the incrustations calcareo-greëous formed them. The peninsula of Peron divides Shark's Bay into two gulfs, both forming good roads, but devoid of fresh water.

De Witt's Land includes all the north-west part of New Holland, and is the least explored. The points seen by Dampier are composed of sandy downs, with fir-trees (doubtless the casuarina) and no water. Cape Murat of the French seems to be the Cape William of the Dutch. Capes Poivre, Malouet, and Dupuy, in 20° 30′, form a great promontory, between which and Rosemary Island, one of the archipelago of Dampier, the coast is entirely unexplored.

About the 121° there is an opening not examined, twenty-six leagues in breadth, whence the coast extends to the north-west and north. It is not certain whether Cape Missiessy in 19° 12′, and Cape Vallerat in 18° 12′, are on an island or the continent. From Cape Hugyens, in 17° 38′, the coast lies north. Near the Cape is Gantheaume Island, of considerable size.

From Cape Rhulière to Cape Van Diemen in 11° 10′, the coast forms a great gulf to the south-east, and the land of De Witt terminates at the latter Cape.

The land of Arnheim extends from Cape Van Diemen to the gulf of Carpentaria. In Van Diemen's Bay, on this coast, the sea is said to be occasionally luminous, and hence this phenomenon probably spreads into the Banda Sea, as already noticed. Further east the Dutch charts mark Difficult Bay, which receives the river Speult, and before which is Crocodile Island.

The gulf of Carpentaria in the old Dutch charts presents such a number of rivers, that it was generally considered as receiving almost all the fresh waters of New Holland. Captain Flinders, who sailed entirely round it, found that not one of these supposed rivers has any existence; but, on the contrary, that fresh water is generally more scarce here than even on the east coast. The western side of the gulf is moderately elevated and lined by chains of considerable islands, while the eastern coast presents a continuity of very low sandy shores, entirely free from islands. The principal trees are the eucalyptus and casuarina.

The first considerable bay on the west shore is that of Arnheim, before which are the Wessels and English Company's Islands, composed of sterile hills, but with valleys, through which run streams of fresn water, and in which are found the wild nutmeg and cabbage palm. These islands are visited by Malay proas from Timor and Macassar to procure trepang. Great Island, of the Dutch charts, named Busching by the German geographers, is before Limmen's Bight. Sir Edward Pellew's Islands, farther south, abound in the cabbage palm and kangaroos; and Wellesley's Group, the last towards the head of the gulf, are frequented by innumerable green turtle.

The natives seen by captain Flinders in the gulf, differed in no respect from those of Port Jackson, except in having lost two of the upper front teeth, and in being circumcised. A curious fact in the history of these savages, unless it is supposed that they have adopted this practice from the Mahommedan Malays who visit the gulf, which is not, however, probable. The canoes of these people are composed of strips of bark, whose edges overlay each other and are sewed together.

Holland (Philemon), M. D., commonly called the translator-general of his age, was educated in the university of Cambridge. He was long a schoolmaster at Coventry, where he also practised physic. He translated Livy, Pliny's Natural History, Plutarch's Morals, Suetonius, Ammianus Marcellinus, Xenophon's Cyropædia, and Camden's Britannia, into English; and the geographical part of Speed's Theatre of Great Britain into Latin. The Britannia, to which he made many useful editions, was the most valuable of his works. It appears from the date of the Cyropædia, that he continued to translate till he was eighty years of age. He died in 1636, aged eighty-five.

HOLLAR (Wenceslaus), a celebrated engraver, born at Prague in 1607. His parents were in a respectable line of life; and he was at first designed for the law. But the civil commotions which happened in his youth, ruining his family affairs, he was placed with Marian, a very able designer and engraver of landscapes, under whose instructions he made rapid progress. He now principally excelled in drawing geometrical and perspective views and plans of buildings, ancient and modern. He travelled through several of the great cities of Germany; but, notwithstanding his merit, met with so little encouragement, that he found it very difficult to support himself. The earl of Arundel being in Germany, however, took him under his protection, and recommended him to king Charles I. of England. He engraved a variety of plates from the Arundel collection, and the portrait of the earl himself on horseback. The civil wars which happened soon after in this country ruined his fortune. He was taken prisoner, with some of the royal party, and with difficulty escaped; when he returned to Antwerp, and joined his old patron. Here he settled for some time, and published a considerable number of plates; but, his patron leaving the place, Hollar fell again into distress, and was obliged to work for the booksellers. At the Restoration he returned to England, where he still could but barely subsist; and the plague, with the succeeding fire of London, putting a stop to business for some time, his affairs were so much embarrassed, that he never afterwards obtained a tolerable maintenance. It is said that he used to work for the booksellers at the rate of fourpence an hour; and always had an hour-glass before him. He died in 1677. His works amount nearly to 24,000 prints, according to Vertue's Catalogue; and the lovers of arts are zealous to collect them. They are etchings performed almost entirely with the point; and possess great spirit. His views of abbeys, churches, ruins, &c., with his shells, muffs, and every species of still life, are admirable; his landscapes frequently have great merit; and his distant views of towns and cities are not only executed in a very accurate, but a very pleasing manner.

Hollow Tower, in fortification, is a rounding made of the remainder of two brisures, to join the curtain to the orillon, where the small shot are played, that they may not be so much exposed to the view of the enemy.

HOLLY, *n. s.* Saxon, þolęyn; Dutch, *huls*; Lat. *ilex*. A plant. The leaves are set about the edges with long, sharp, stiff prickles: the berries are small, round, and generally of a red color, containing four triangular striated seeds in each. Of this tree there are several species; some variegated in the leaves, some with yellow berries, and some with white.—Miller.

Fairest blossoms drop with every blast;
But the brown beauty will like *hollies* last. *Gay.*

Some to the *holly* hedge
Nestling repair, and to the thicket some;
Some to the rude protection of the thorn. *Thomson.*

Holly, in botany. See Ilex.

Holly, Knee. See Ruscus.

Holly, Sea. See Eryngium.

HOL'LYHOCK, *n. s.* Sax. þolիþeck commonly called holyoak. Rosemallow. It is in every respect larger than the common mallow.

Holyoaks far exceed poppies for their durableness, and are very ornamental. *Mortimer.*

Hollyhock. See Alcea.

HOL'LYROSE, *n. s.* } Plants.—Ainsworth.
Hol'lytree. }

HOLMAN (Joseph George), a dramatic writer and performer, was born in London, and educated at Queen's College, Oxford, with a view to the church; but, having a passion for the stage, he soon quitted the university; and made his debut, in 1784, at Covent Garden theatre. At the end of the season he repaired to Dublin, and to Edinburgh; but remained with the Covent Garden company until 1800. Upon a difference with the manager, he repaired to America, where he became manager of the theatre in Charlestown. His death took place in 1817, together with that of his second wife, two days after their marriage, by the yellow fever. His productions are, Abroad and at Home, a comic opera; Red Cross Knights, a play; Votary of Wealth, a comedy; What a Blunder, a comic opera; Love gives the Alarm, a comedy; and The Gazette Extraordinary, a comedy.

Holme, *n. s.* Holme or howme, whether jointly or singly, comes from the Saxon þolme, a river island; or if the place be not such, the same word signifies also a hill, or mountain. The ilex; the evergreen oak.

Under what tree did'st thou take them companying together? who answered, under a *holm* tree. *Sus.* 58.

The carver *holme*, the maple seldom inward sound. *Spenser.*

Holme, in botany. See Ilex.

Holme Sound, a beautiful frith, on the coast of Orkney, leading to the German Ocean by Stromness. It has a circular island in the middle, called Lambholme, three miles in circumference, on which there is a farm, and which forms with the main land a pretty safe place of anchorage for ships of 200 tons burden. It has a small pier, along side of which vessels of fifty tons may lie securely.

HOLMES, Flat and Sharp, two small islands in the British Channel, three leagues from the coast of Caerdiff. The former has about sixty acres of land, well cultivated, and a light-house, where several pilots are to be found. The latter is between Somerset and Wales; and is a per-

pendicular rock, about 400 feet high, inaccessible except by two small passages. The soil is sandy and barren.

HOLMITE, a new mineral, which occurs crystallised in the form of an oblique four-sided prism, and having a specific gravity of 3·597. Its constituents are 27 lime, 21 carbonic acid, 6½ alumina, 6½ silica, 29 oxide of iron, and 10 water.

HO'LOCAUST, *n. s.* Gr. ολος and καιω. A burnt sacrifice; a sacrifice of which the whole was consumed by fire, and nothing retained by the offerer.

Isaac carried the wood for the sacrifice, which being an *holocaust*, or burnt-offering, to be consumed unto ashes, we cannot well conceive a burthen for a boy. *Browne.*

Let the eye behold no evil thing, and it is made a sacrifice; let the tongue speak no filthy word, and it becomes an oblation; let the hand do no unlawful action, and you render it a *holocaust*. *Ray.*

Eumenes cut a piece from every part of the victim, and by this he made it an *holocaust*, or an entire sacrifice. *Broome.*

HOLOCAUSTS, from ολος, whole, and καιω, I consume with fire, are often mentioned by the heathens as well as Jews; particularly by Xenophon, who speaks of sacrificing holocausts of oxen to Jupiter, and of horses to the sun: and they appear to have been in use long before the institution of the other Jewish sacrifices by the law of Moses: see Job i. 5, xlii. 8, and Gen. viii. 20, xxii. 13. On this account the Jews, who would not allow the Gentiles to offer on their altar any other sacrifices peculiarly enjoined by the law of Moses, admitted them by the Jewish priests to offer holocausts; because these were a sort of sacrifices prior to the law, and common to all nations. Holocausts were deemed by the Jews the most excellent of all their sacrifices. It is said that this kind of sacrifice was in common use among the heathens, till Prometheus introduced the custom of burning only a part, and reserving the remainder for his own use. See SACRIFICE.

HOLOFERNES, a lieutenant-general of the armies of Nabuchodonosor, king of Assyria, who, having in a remarkable encounter overcome Arphaxad king of the Medes, sent to all the neighbouring nations requesting them to submit to his empire, and pretending that there was no power capable of resisting him. At the same time, he passed the Euphrates, at the head of a powerful army, entered Cilicia and Syria, and subdued almost all those provinces. Being resolved to conquer Egypt, he advanced towards Judea, little expecting any resistance from the Jews. But he was soon informed that they were preparing to oppose him; and he accordingly began to besiege Bethulia. Having cut off the water which supplied it, and set guards at the only fountain which the besieged had near the walls, the inhabitants were soon reduced to extremity, and resolved to surrender, if God did not send succours in five days. A female named Judith, being informed of their resolution, now resolved, it is said, to kill Holofernes in his tent. She accordingly repaired to his tent richly attired, and pretended that God had inspired her with the design of surrendering herself to him; when, in raptures with her beauty, he invited her to a great feast, and sunk upon his couch intoxicated. Judith, who in the night was left alone in his tent, cut off his head with his sword; and, departing with her servant, returned with it to Bethulia. At day-break the besieged made a sally upon their enemies, who, going into the general's tent, discovered his headless carcase. They now fled with precipitation, leaving their camp, and its rich spoil, to the Jews; who pursued them, killed a great number, and returned loaded with booty. There is a great diversity of opinions concerning the time when this war between Holofernes and the Jews happened. Some date it in the captivity of Manasseh, and the pontificate of Eliakim the high-priest; others place it at some time after the Babylonish captivity; and many doubt the truth of the whole transaction.

HO'LOGRAPH, *n. s.* Gr. ολος γραφω. This word is used in the Scotish law to denote a deed written altogether by the granter's own hand.

HOLOGRAPH, or HOLOGRAPHUM, of ολος, all, and γραφω, I write, in the civil law, is chiefly used of a testament written wholly in the testator's own hand. The Romans did not approve of holographic testaments; and, though Valentinian authorised them, they are not used where the civil law is in full force.

HOLOSTEUM, in botany, a genus of the trigynia order, triandria class of plants; natural order twenty-second, caryophyllei: CAL. pentaphyllous; the petals five: CAPS. unilocular, and nearly cylindrical, opening at top. Species five, of which one only, H. umbellatum, found flowering on old walls in the spring, is a native of Britain.

HOLOTHURIA, in zoology, a genus belonging to the order of vermes mollusca. The body detached, naked, gibbous, terminated by the anus: many tentacula at the other extremity, surrounding the mouth. There are twenty-three species, all inhabitants of the ocean.

1. H. pentactes, the five-rowed holothuria, has the mouth encompassed with tentacula, the body bearing tentacula five different ways. The animal is of a red color, nearly oval, or somewhat cylindrical, assuming various shapes. The mouth is set round with ten rays bristly at the points; the body longitudinally dotted in five places with clay-colored hollow warts, situated two together. It inhabits the sea of Norway, taking in and casting out again the water as it swims.

2. H. physalis, the bladder-shaped holothuria. The body of this species is oval, approaching to triangular, of a glossy transparency; the back sharp-edged, of a dark green color, whence run out a number of sinews: anteriorly the body is of a reddish hue. The trunk spiral, reddish towards the thicker end. Many tentacula of unequal length under that thicker end; the shorter ones are taper and thicker, the middle ones capillary, the point clay-color, and in shape like a ball; the rest are longer and filiform, of which the middlemost is thicker, and twice as long. Brown, in his Jamaica, calls it a diaphanous bladder with numerous tentacula representing a man's

belly; above, it is furnished with a comb full of cells: under the other extremity hang a number of branchy tentacula.

3. H. tremula, the quivering holothuria, commonly measures eight inches in length when dead; but alive it extends itself more than a foot, or contracts its body into a ball. Its figure is cylindric, the diameter of which is every way equal to an inch and a few lines. The back, of a dark brown, bears a variety of fleshy pyramid-like nipples, of a dark color likewise at their basis, but white at their apex. Out of them all exudes a whitish mucilage, serving to lubricate the body. The belly is of a pale brown, and set all over with cylindric tentacula, in such numbers that the head of a pin could scarcely find room between. Their diameter is not much above a line, and their length is that of four lines. They are of a shining whiteness, except the extremity, which is of a dark color, and shaped like a socket. By the help of these tentacula the holothuria fixes its body at the bottom of the sea, so as not to be easily forced away by tempests, which would otherwise happen the more frequently, as this zoophyte dwells near the shores where the water scarcely rises to a fathom's height.

HOLP, } The old preterite and participle
HOLPEN. } of HELP, which see.

His great love, sharp as his spur, hath *holp* him
To's home before us. *Shakspeare.*

In a long trunk the sound is *holpen*, though both the mouth and the ear be a handful from the trunk; and somewhat more *holpen* when the hearer is near, than when the speaker. *Bacon.*

HOLROYD (John Baker), lord Sheffield, a modern political writer and statesman, was a native of Yorkshire, and descended from an ancient family. When young he served under the marquis of Granby, in Germany, and afterwards travelled. On his return to England in 1776 he retired to the country, but during the American war raised at his own expense a regiment of dragoons, of which he had the command; and was commonly called colonel Holroyd. He was created lord Sheffield, of Dunamore in Ireland, while he sat in the house of commons as member for Bristol. He was next promoted to an Irish earldom; and in 1802 to an English barony. His death happened May 30th, 1821, at the age of eighty. Lord Sheffield wrote Observations on the Commerce of the American States, which went through several editions; besides tracts on the Slave Trade, and on Irish affairs. He is most known, however, as the friend of Gibbon, and the editor of his posthumous works.

HOLSTEIN, an extensive duchy of Denmark, at the northern extremity of Germany, bounded by the German Ocean and the Elbe west and south, the Baltic on the east, and Sleswick on the north; on the coast it has the gulf of Kiel, the bay of Colberg, and the gulf of Lubeck. Its superficial extent is about 3250 square miles.

The eastern part is hilly, and abounds in woods and lakes; but Holstein has no mountains of importance. In the neighbourhood of Kiel, the capital, and Lubeck, the ground is well cultivated and fertile; but the central part of the duchy is barren and heathy: the western part, on the shores of the Elbe and the German Ocean, is a flat low alluvial tract, secured with dikes against the sea. The soil of the higher parts is often light and sandy. The principal rivers of Holstein are the Elbe, the Eyder, and the Stor; the only lake of consequence is the Ploen. The canal of Kiel (See DENMARK) joins the Baltic to the Eyder and the German Ocean. The productions of Holstein are very similar to those of England, viz. wheat, barley, and oats; potatoes, hemp, flax, hops, and fruit; but its wealth is in its pasturage, sheep, and cattle. It possesses also vast numbers of horses, and the breeds are in general good. The mineral products are lime and salt, manufactured at Oldenlohe: the chief quarries of lime are in the neighbourhood of Segeberg. The only important sea-port is Altona. Gluckstadt, a smaller sea-port, is situated lower down the Elbe. Altona has a population of 23,000; Rendsburgh, 7600; Kiel (the capital), 7100; and Gluckstadt, 5200: the whole duchy about 360,000 souls. Lutheranism is the prevailing religion.

The exports of Holstein are cattle, horses, cheese, butter, and corn: 6000 horses are supposed to be sent abroad annually. The manufactures, with the exception of those of Altona, are not extensive.

This duchy is divided into Holstein Proper, the lordship of Pinneberg, and the county of Ranzau; the last two being small districts in the south-west, adjacent to Altona. Older divisions, now obsolete, were Stormarig, Ditmarsch, Wagria, and Holstein Proper. The whole is subdivided into bailiwics.

Charlemagne declared Holstein the northern frontier of Germany along the Eyder: it was then constituted an earldom, subsequently a duchy, and in 1523 became united with Denmark, on the reigning duke obtaining that crown: since then its history is identified with that of DENMARK, which see. In 1806, on the formation of the confederation of the Rhine, the whole of the duchy, along with Pinneberg, Ranzau, and Altona, were declared to form no longer a part of the empire; and the king of Denmark lost his seat in the diet. In 1815, on the establishment of the Germanic confederation, he was re-admitted by the congress of Vienna, and was allowed, for this duchy and Lauenburg, three votes in the general assembly, and a place, the tenth in rank, at the ordinary diet. The interior constitution of Holstein has since received material improvement; and the Danish laws are universally introduced.

HOLSTEIN (Luke), or Holstenius (Lucas), a learned German, born at Hamburg in 1596. He was bred a Lutheran; but, being converted to popery by F. Sirmond the Jesuit, he went to Rome, and attached himself to cardinal Francis Barberini, who took him under his protection. Pope Urban VIII. gave him a canonry of St. Peter's; Innocent X. made him librarian of the Vatican; and Alexander VII. sent him, in 1655, to queen Christina of Sweden, whose formal profession of the Catholic faith he received at Inspruck. He spent his life in study, and was very learned both in sacred and profane antiquity. Though

he was not the author of any great works, his notes and dissertations on the works of others have been highly esteemed for the judgment and precision with which they are drawn up.

HOL'STER, *n. s.* Sax. ꝑeolꝛtep; Dan. *hylster*, from to hold, a hiding-place. A case for a horseman's pistol.

> In's rusty *holsters* put what meat
> Into his hose he could not get. *Hudibras.*

HOLT, whether at the beginning or ending of the name of any place, signifies that it is or hath been woody, from the Saxon ꝑolꝛ, a wood; or sometimes possibly from the Saxon ꝑol, i. e. hollow, especially when the name ends in tun or dun.

Holt (Sir John), eldest son of Sir Thomas Holt, serjeant at law, was born in 1642. He entered himself of Gray's Inn in 1658; and soon became a very eminent barrister. In the reign of James II. he was made recorder of London, which office he discharged with much applause for about a year and a half; but lost his place for refusing to support the king's arbitrary measures. On the arrival of the prince of Orange, he was chosen a member of the convention parliament, which afforded him a good opportunity of displaying his abilities: so that, as soon as the government was settled, he was made lord chief justice of the court of king's bench, and a privy counsellor. He continued chief justice twenty-two years, with great repute for steadiness, integrity, and thorough knowledge in his profession. Upon great occasions he asserted the law with intrepidity, though he thereby incurred by turns the indignation of both houses of parliament. He published some Reports, and died in 1709. He had a British abhorrence of the interference of the military in popular tumults. When applied to sanction, by the presence of one of his people, the proceedings of the military sent to quell a riot excited by the infamous practice of crimping, the chief justice asked the officer what he intended to do if the populace refused to disperse. He replied, 'we have orders to fire upon them:' 'Have you so?' said the judge; 'then observe, if one man is killed, I will take care that you and every soldier of your party shall be hanged. Sir, acquaint those who sent you, that no officer of mine shall attend soldiers, and let them know, likewise, that the laws of this land are not to be executed by the sword. These things belong to the civil power, and you have nothing to do with them.'

Holt, a market town of the county of Norfolk, pleasantly situate on a hill eighteen miles north from East Dereham, and 119 from London. It is a neatly built town, with a good sessions-house, which is also used for an assembly-room. The poor-house is a handsome building; and there is an excellent free-school, founded by Sir John Gresham, in the market-place, which was annexed to it a scholarship and fellowship in Sydney College, Cambridge. The patronage and government of this school is in the London Fishmongers' Company. Market on Saturday.

HOLWELL (John Zephaniah), F. R. S., a gentleman memorable on account of his literary merits, as well as from his being the last survivor of the twenty-three who escaped the dreadful catastrophe in the Black Hole at Calcutta, in 1756. He was born in 1700, and at an early period of life was sent to Bengal as a writer in the East India Company's service. In 1756 he was second in council at Fort William, when an offence was given to the nabob of Bengal by the governor's protecting a fugitive native. In revenge for this, the nabob marched against the fort with a powerful army. Drake, the governor, who had given the offence, deserted his station, and the command devolved on Mr Holwell, who, with the few men he had, bravely defended the place to the last extremity. The melancholy consequences are related in our articles Calcutta and India. Mr. Holwell's excellent constitution overcame all his hardships, and soon after his release he returned to England. In 1758 he published a well written and affecting narrative of the sufferings of himself and his companions. He wrote also several tracts on Indian affairs, particularly a work in three parts, entitled Events relative to Bengal and Hindostan. The Manner of Inoculating for the Small Pox in the East Indies. A new Experiment for the Prevention of Crimes; published in 1786. He also published a tract, entitled Dissertations on the Origin, Nature, and Pursuits of Intelligent Beings, and on Divine Providence, Religion, and Religious Worship. Mr. Holwell died at his seat at Pinner, in Middlesex, on the 5th of November, 1798, in the ninety-eighth year of his age.

Holy Ghost. See Theology.

Holy Ghost, Order of the, one of the principal military orders in France, instituted by Henry III. in 1569. It consisted formerly of 100 knights, who were to make proof of their nobility for three descents. The king was the grand master or sovereign; and, as such, took an oath on his coronation day to maintain the dignity of the order. The knights wore a golden cross (see diagram), hung about their necks by a blue silk riband or collar. But before they received the order of the Holy Ghost, that of St. Michael was conferred as a necessary degree; and for this reason their arms were surrounded with a double collar.

HOLYHEAD, a sea-port and market-town, cape, and parish of Wales, on the Isle of Anglesea, in the Irish Channel, whence packet-boats for Dublin usually sail every day. It has a market on Saturday. The parish is a peninsula about six miles long, and two or three broad, bounded nearly the sea. The church stands above the harbour, within an old quadrangular fortification, with a bastion at each corner, built about 450. On a mountain near it is another old fortification called Turris Munimentum, which is a stone wall without mortar; and in its centre is a small turret, that contains a well. Holyhead was formerly visited by Irish rovers, and was defended as a place of consequence. There are several druidical remains in its neighbourhood. The church was built in the reign of Edward III. and is in the form of a cross,

with a very antique porch and steeple. The old chapel near it is now converted into a school-house. A salt-house was erected on an island in the harbour in queen Anne's reign, but it is now in ruins. It is said that one of the Welsh princes founded a college here about the year 580; but some suppose that it was not founded till the beginning of the twelfth century. The head of this college was called Pendas, and was one of the three spiritual lords of Anglesea. At the dissolution of the monasteries it became the property of the Gwynnes, till in 1648, it was settled by Thomas Gwynne, esq. on Jesus' College, Oxford, for the maintenance of two fellows and as many scholars. It has good inns, but no fresh water, except from the clouds, nor any bread but what comes from Ireland. A bath and assembly-room were erected in 1770. Under the mountains that overhang the town is a large cavern in the rock, supported by natural pillars, called the Parliament House, accessible only by boats, and the tide runs into it. The rocks abound with sea-ware, of which they make kelp. In the neighbourhood there is a large vein of white fullers' earth, and another of yellow. It lies nine miles south of the isle of Skerries, sixty east of Dublin, and 290 north-west of London.

Holy Island, a small island on the coast of England, ten miles south-east of Berwick, in Northumberland. Bede calls it a semi-island, as being twice an island and twice continent in one day; for, at the flowing of the tide, it is encompassed by water; and, at the ebb, there is almost dry passage both for horses and carriages to and from the main land; from which, if measured on a straight line, it is about two miles east; but, on account of some quicksands, passengers are obliged to make so many detours that the length of the way is nearly doubled. The water over these flats at spring tides is only seven feet deep. This island was by the Britons called Inis Medicante, and Lindisfarn; and, from its becoming the habitation of some of the first monks in this country, it afterwards obtained its present name of Holy Island. It measures from east to west about two miles and a quarter, and from north to south nearly one mile and a half. At the north-west part runs out a spit of land of about a mile in length. The monastery is situated at the south extremity; and a little north of it stands the village, chiefly inhabited by fishermen. There is plenty of fish and fowls; but the air and soil are bad. The north and east coasts are formed of perpendicular rocks; the other sides sink by gradual slopes to the sands. There is a commodious harbour, defended by a block-house; which last was surprised and taken in 1715, but was soon retaken. Holy Island, though really part of Northumberland, belongs to Durham; and all civil disputes must be determined by the justices of that county. It was a very ancient episcopal seat, and had eighteen bishops till the removal of the see to Chester. The north and south walls of the church are standing; part of the west end remains, but the east is down. The columns of the nave are of four different kinds, twelve feet high and five feet diameter, massy and richer than those of Durham; the bases and capitals plain, supporting circular arches. Over each arch are large windows in pairs, separated by a short column: and over these are smaller single windows. In the north and south walls are some pointed arches. The length of the body is 138 feet, breadth eighteen feet, and with the two aisles thirty-six feet. Somewhat to the east is the base of a cross, and to the west the present parish church.

Holy-Rood Day, a festival observed by the Roman Catholics, in memory of the exaltation of our Saviour's cross.

Holy-Rood House. See Edinburgh.

HOLYWELL, a town of North Wales, in Flintshire, chiefly celebrated for a spring, called St. Winifred's Well, from whence it takes its name. This well lies at the bottom of three high hills, and is covered by a small Gothic building, which is said to have been erected by the countess of Richmond, mother of Henry VII. The Gothic work on the outside of this building, which forms a canopy to the wall, is very handsome. The accommodations for bathing are very good; the water is very clear, and never freezes, boils up like a caldron, and discharges upwards of twenty-six tons of water in a minute. It now turns several mills erected for working copper, making brass wire, paper, and snuff, and winding cotton, &c. At the back of the town is a hill, in which lead ore is found. It is fifty-two miles N. N. W. of Shrewsbury, and 212 north-west of London.

HOLZMINDEN, a town of Germany, in the states of Brunswick, principality of Wolfenbuttel, at the confluence of the Weser and the Holz, containing 3300 inhabitants. It has large iron works, and a brisk trade in wood. Three miles north-east of Corvey, and twenty west of Grubenhagen.

HOM'AGE, *n. s.* & *v. a.* } Fr. *hommage*; low
Hom'ager, *n. s.* } Lat. *homagium*; Fr. *hommager*, from homo, a man, homage being the service of every man. Service paid and fealty professed to a sovereign, or a superior lord; obeisance; respect paid by external action. Bishops do homage before the king on appointment to their sees.

For, sothly, he ne shuld have, than, in all his lif corage to sinne—but give his herte and body to the service of Jesu Crist, and thereof do him *homage*.
Chaucer. The Persones Tale.

Call my sovereign yours,
And do him *homage* as obedient subjects.
Shakspeare.

Thou blushest, Antony; and that blood of thine
Is Cæsar's *homager*. *Id.*

His subjects, traytors, are received by the duke of Bretagne, his *homager*. *Bacon's Henry VII.*

The chiefs, in a solemn manner, did their *homages*, and made their oaths of fidelity to the earl marshal.
Davies.

His spear against her head he fiercely threw,
Which to that face performing *homage* due,
Kissing her helmet, thence in thousand shivers flew.
Fletcher's Purple Island.

The gods great mother, when her heavenly race
Do *homage* to her. *Denham.*

A tuft of daisies on a flowery lay
They saw, and thitherward they went their way;
To this both knights and dames their *homage* made,
And due obeisance to the daisy paid. *Dryden.*

Go, go, with *homage* yon proud victors meet!
Go, lie like dog beneath your master's feet. *Id.*

What is station high?
'Tis a proud mendicant; it boasts and begs;
It begs an alms of *homage* from the throng,
And oft the throng denies its charity.
Young's Night Thoughts.

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.—I will call her.
Byron. Manfred.

To what gulphs
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.
Id. Sardanapalus.

HOMBERG (William), a celebrated physician, chemist, and philosopher, born in Batavia, in the East Indies, in 1652. His father was a Saxon gentleman, who afterwards settling at Amsterdam, this son prosecuted his studies there; and thence removed to Jena, and to Leipsic. In 1642 he was made advocate at Magdeburg, where he studied experimental philosophy. Some time after he travelled into Italy; and studied medicine, anatomy, and botany, at Padua. He afterwards studied at Bologna, and at Rome. He at length travelled into France, England, and Holland; obtained the degree of M. D. at Wittemberg; travelled into Germany and the North; visited the mines of Saxony, Bohemia, Hungary, and Sweden; and returned to France, where M. Colbert made him such advantageous offers as induced him to fix his residence at Paris. M. Homberg, who was already well known for his discovery of phosphorus, for a pneumatic machine of his own invention, more perfect than that of Guericke, was received into the Academy of Sciences in 1691, and had the care of the laboratory. The duke of Orleans, afterwards regent, made him his chemist, presented him with a pension, and, in 1704, made him his first physician. He had abjured the Protestant religion in 1682, and died in 1715. There are many learned and curious pieces of his writing, in the memoirs of the Academy of Sciences, and in several journals.

HOMBERG IN HESSE, a walled town of Hesse-Cassel, Germany, on the Elze, with 2900 inhabitants, and manufactures of iron and glass. It consists of the old and new town; and has an ancient castle on a hill, remarkable for a well of the extraordinary depth of 480 feet. Twenty miles south of Cassel, and eleven S.S.E. of Fritzlar.

HOMBURG ON THE HEIGHT, a town of Germany, the capital of the principality of Hesse-Homburg. It is situated on the Lahn, and has manufactures of watches, caps, stockings, and hats. Nine miles north of Frankfort. Population 3000.

HOME', *n. s.* & *adj.* } Goth. *haim;* Swed.
HOME'LILY, *adv.* } *heim;* Dan. *hiem;* Sax.
HOME'LINESS, *n. s.* } ham; Scot. *hame.* His
HOME'LY, *adj.* & *adv.* } own house; a private dwelling; his own country; place of constant residence: when united with a substantive it signifies of the same country. Home, to one's house or country; close to one's own bosom or affairs; to the utmost, fully, entirely. Homely, plain, coarse, rude; plain, not elegant; not beautiful: applied both to persons and things. The word home conveys a meaning to an Englishman which no foreign language can supply, and is rather to be felt than expressed: it is applied to persons and things.

Alla the king cometh *home*, sone after this,
Unto his castel, of the which I you told;
And asketh wher his wif and child is.
Chaucer. The Man of Lawes Tale.

God grante thee thin *homly* fo to espie
For in this world n'is werse pestilence,
Than *homly* fo all day in thy presence.
Id. The Marchantes Tale.

Not only this Griseldes thurgh hire wit
Coude all the fete of wifly *homlinesse.*
Id. The Clerkes Tale.

For right as men sayn that overgret *homlinesse* engendereth dispreising; so fareth it, by to gret humilitee or mekeness. *Id. The Tale of Melibeus.*

Within this wood, out of a rock did rise
A spring of water, mildly tumbling down;
Whereto approached not in any wise
The *homely* shepherd, nor the rader clown.
Spenser.

I'm now from *home*, and out of that provision
Which shall be needful for your entertainment.
Shakspeare.

Accuse him *home* and *home*. *Id.*

Home-keeping youth have ever *homely* wits. *Id.*

Our stomachs will make what's *homely* savoury.
Id.

Like rich hangings in an *homely* house,
So was his will in his old feeble body. *Id.*

Be plain, good son, and *homely* in thy drift:
Riddling confession finds but riddling shrift. *Id.*

How can tyrants safely govern *home*,
Unless abroad they purchase great alliance? *Id.*

Their determination is to return to their *homes*, and to trouble you no more. *Id.*

With his prepared sword he charges *home*
My unprovided body. *Id. King Lear.*

A loyal sir
To him thou followest: I will pay thy graces
Home both in word and deed. *Id. Tempest.*

Men of age object too much, adventure too little, and seldom drive business *home* to the full period; but content themselves with a mediocrity of success.
Bacon.

Let the exportation of *home* commodities be more in value than the importation of foreign. *Id.*

That cometh up *home* to the business, and taketh off the objection clearly. *Sanderson.*

Homely persons, the more they endeavour to adorn themselves, the more they expose the defects they want to hide. *Clarendon.*

It is for *homely* features to keep *home;*
They had their name thence. *Milton.*

But when such amity at home is showed,
What then are their confederacies abroad.
Marvell.

Each place handsome without curiosity, and *homely* without loathsomeness. *Sidney.*

Crafty enough either to hide his faults, or never to shew them, but when they might pay *home*. *Id.*

I am sorry to give him such *home* thrusts; for he lays himself so open, and uses so little art to avoid them, that I must either do nothing, or expose his weakness. *Stillingfleet.*

Something like *home* that is not *home* is to be desired; it is found in the house of a friend. *Temple.*

Home is the sacred refuge of our life,
Secured from all approaches but a wife.
Dryden.

When Hector went to see
His virtuous wife, the fair Andromache,
He found her not at *home*; for she was gone. *Id.*

Those who have *homes*, when *home* they do repair,
To a last lodging call their wandering friends. *Id.*

Thus, like the god his father, *homely* drest,
He strides into the hall a horrid guest. *Id.*

Their *homely* fare dispatched, the hungry band
Invade their trenchers next. *Id.*

Poison may be false;
The *home* thrust of a friendly sword is sure. *Id.*

With honour to his *home* let Theseus ride,
With love to friend. *Id.*

At *home* the hateful names of parties cease,
And factious souls are wearied into peace. *Id.*

He that encourages treason lays the foundation of a doctrine that will come *home* to himself.
L'Estrange.

One of Adam's children in the mountains lights on a glittering substance; *home* he carries it to Adam, who finds it to be hard, to have a bright yellow colour, and exceeding great weight. *Locke.*

It is observed by some, that there is none so *homely* but loves a looking-glass. *South.*

This is a consideration that comes *home* to our interest. *Addison.*

Homer has opened a great field of raillery to men of more delicacy than greatness of genius, by the *homeliness* of some of his sentiments. *Id.*

Break through the thick array
Of his thronged legions, and charge *home* upon him.
Id.

Flandria, by plenty made the *home* of war,
Shall weep her crime, and bow to Charles restored.
Prior.

They who pass through a foreign country, towards their native *home*, do not usually give up themselves to the pleasures of the place. *Atterbury.*

I can only refer the reader to the authors themselves, who speak very *home* to the point. *Id.*

These considerations, proposed in general terms, you will, by particular application, bring *home* to your own concern. *Wake.*

Now Strephon daily entertains
His Chloe in the *homeliest* strains. *Swift.*

He makes choice of some piece of morality; and, in order to press this *home*, he makes less use of reasoning. *Broome.*

She comes too meanly drest to win our smile;
And calls herself Content, a *homely* name!
Young's Night Thoughts.

His warm but simple *home*, where he enjoys
With her who shares his pleasures and his heart
Sweet converse. *Cowper's Task.*

May the grass wither from thy feet! the woods
Deny thee shelter! earth a *home!* the dust
A grave! the sun his light! and heaven her God!
Byron.

Where rose the mountains, these to him were friends;
Where rolled the ocean thereon was his *home*,
Where a blue sky, and glowing clime extends,
He had the passion and the power to roam.
Id. Childe Harold.

HOME (Henry), lord Kames, an eminent Scottish lawyer, and author, descended from an ancient family, was born in 1696, in Berwickshire. In early youth he was lively, and eager in the acquisition of knowledge. After studying the civil and the municipal law of his country, at Edinburgh, he attended for some time the chamber of a writer to the signet. The strength and vivacity of his natural abilities, combined with unwearied application, soon raised him to be an ornament to the Scottish bar; and, on the 2d of February, 1752, he was advanced to the bench as one of the judges of the court of session, under the title of lord Kames. Before this period, however, notwithstanding the unavoidable labors of his profession, he had become the author of several works. In 1728 he published Remarkable Decisions of the Court of Session from 1716 to 1728 in 1 vol. folio.—In 1732 appeared Essays upon several subjects in Law, viz. Jus tertii; Beneficium Cedendarum Actionum; Vinco Vincentem; and Prescription; in 1 vol. 8vo. This was succeeded, in 1741, by Decisions of the Court of Session from its first institution to the year 1740, abridged and digested under proper heads, in form of a Dictionary, in 2 vols. folio: a very laborious work, and of the greatest utility to the practical lawyer. In 1747 appeared Essays upon several subjects concerning British Antiquities, viz. 1. Introduction of the feudal law into Scotland. 2. Constitution of parliament. 3. Honor, dignity. 4. Succession, or descent; with appendix upon hereditary and indefeasible right, composed in 1745, and published in 1747, in 1 vol. 8vo. It may be proper, though not in strict chronological order, to continue the list of his writings on law, before we mention his works on other subjects. In 1757 he published The Statute Law of Scotland abridged, with Historical Notes, in 1 vol. 8vo. In 1759 he produced a new work, entitled Historical Law Tracts, in 1 vol. 8vo. In 1760 he published in 1 vol. folio The Principles of Equity; a work which shows both the fertility of the author's genius and his indefatigable application. In 1766 he gave to the public another volume, in folio, of Remarkable Decisions of the Court of Session, from 1730 to 1752. In 1777 appeared his Elucidations respecting the Common and Statute Law of Scotland, in 1 vol. 8vo. In 1780 a volume in folio, of Select Decisions of the Court of Session, from 1752 to 1768.

Lord Kames was much inclined to metaphysical disquisitions. In 1751 he published Essays on the Principles of Morality and Natural Religion, a small volume, which gave rise to much controversy. It contained, in the most explicit terms, the doctrine which then made so much noise, under the appellation of philosophical necessity. In 1761 he published an Introduction to the Art of Thinking, in 1 vol. 12mo. His Elements of Criticism appeared in 1762, in 3 vols. 8vo. A farther evidence of the various pursuits of his active mind was given in 1772, when he published a work in one volume 8vo, entitled The Gentleman Farmer, being an attempt to improve Agriculture by subjecting it to the test of Rational Principles. This book met with a very favorable reception in Scotland, where, as a practical farmer, its author gave many proofs of his skill. After he succeeded, in right of his lady, to the ample estate of Blair Drummond in Perthshire, he formed, and in part successfully ex

ecuted, a plan for turning a large moss, consisting of at least 1500 acres into arable land. In 1773 lord Kames published Sketches of the History of Man, in 2 vols. 4to. His last work, entitled Loose Hints upon Education, chiefly concerning the Culture of the Heart, was published in 1781, in 1 vol. 8vo, when its venerable author was in his eighty-fifth year. Lord Kames published many temporary and fugitive pieces. He for a a great length of time had the principal management of all the societies and boards for promoting the trade, fisheries, and manufactures, in Scotland. He took likewise a chief lead in the distribution and application of the funds arising from the estates in Scotland, which had unfortunately been annexed to the crown. Nor was he less zealous in supporting, both with his writings and personal influence, various literary associations. Lord Kames died on the 27th day of December, 1782. As he had no disease but the debility necessarily resulting from extreme old age, a few days before his death he went to the court of session, addressed all the judges separately, told them he was speedily to depart, and took a solemn and an affectionate farewel. A life of lord Kames, with a view of his writings, was published by lord Woodhouselee.

Home (John), an eminent dramatic poet, born in the vicinity of Ancrum, in Roxburghshire, in 1724. It being the desire of his parents that he should enter the church, he attended the philosophical and theological classes of the university of Edinburgh for several years. But his studies were for a while suspended by the public commotions of the year 1745. Mr. Home was one of about twenty students of the university who offered their services as volunteers, to act against the common enemy. But intimidated by the number of their opponents, or adverse to the hardships of a military life, the college company soon disbanded. Mr. Home, however, retained his arms, and marched with a detachment of the royal army to Falkirk; where, in the battle fought in its neighbourhood, in which the rebels vanquished the king's troops, he was taken prisoner, and confined for some time in the castle of Doun. From this place of captivity he effected his escape; and, the battle of Culloden having blasted all the hopes of the pretender's adherents, tranquillity and order were soon restored. Mr. Home resumed his studies, and was licensed to preach in 1747. Not long after he visited England; for it appears that he was introduced to Collins the poet, at Winchester, by a Mr. Barrow, who had been his fellow-student at the university. Collins addressed to him his Ode on the Superstition of the Highlanders, considered as the subject of poetry, composed in 1749, but not published till many years after his death. In 1750 he was settled minister of Athelstaneford, in East Lothian; but having been accustomed to the bustle of a city, and the society of men of letters, Mr. Home found himself rather disagreeably situated, in an obscure village, where he had no opportunity of distinguishing himself. It was about this period that, in his retirement, he began seriously to court the dramatic muse. The first tragedy he wrote was Agis, founded on a portion of the Lacedæmonian history. This being rejected by the London theatres, he next composed his celebrated Douglas. In presenting this to the London manager, he had the mortification of a second refusal; and Garrick said afterwards that no circumstance, in the course of his management, gave him so much concern as the rejection of this play. But the ardor of Home was not to be thus suppressed. Being acquainted with the leading characters in Scotland, a ready reception of his play at Edinburgh was secured, and at the first representation of it in the theatre in Canongate, on the 14th of December, 1756, Mr. Home and several of his clerical brethren were present. The hue and cry was immediately raised; that a clergyman should write a play, and that ministers of the gospel should witness its performance, were crimes unheard of in the annals of the church. The author was summoned to appear before the bar of the presbytery; his friends were peremptorily dragged before the same tribunal, some of them dismissed with censure, and others suspended from their office. While such was the state of affairs in Scotland, Douglas having been performed to crowded houses during the greater part of the season, and fully gratifying the most sanguine hopes of the author, it was, through the interest of David Hume, brought forward on the London stage. Here it soon became a standard tragedy, and maintains its ground to the present day. The clamors of his enemies having not yet subsided in Scotland, Mr. Home preached his farewell sermon to his congregation on the 5th of June, 1757; and, to prevent further proceedings in the church courts against him, gave in the resignation of his charge to the presbytery of Haddington two days after. With his living, Mr. Home appears for a while to have abandoned his native land, for he now repaired to London, where he produced several other tragedies, under the patronage of Garrick. They are all, however, greatly inferior to his Douglas. Agis, the first of his dramatic pieces, was finely acted, and assisted by spectacle; otherwise, it is probable that it would not have been performed a second night. His third tragedy was founded on the cruel treatment which the two Setons, sons of the governor of Berwick, had experienced from the English. At Garrick's suggestion, the title was altered, from the siege of Berwick to the siege of Aquileia, and it was acted in 1759. Some of the passages are very fine, but upon the whole it is a tame performance. Mr. Home's last production, Alfred, lived only three nights. In the year 1760 Mr. Home published a volume of plays, containing Agis, Douglas, and the Siege of Aquileia, which he dedicated to his present majesty, then prince of Wales. Three other tragedies appeared some time after. The whole were collected and edited in two volumes at Edinburgh, in 1798, under the inspection of the late Mr. Woods. Mr. Home, at the advanced age of seventy-eight, published his long-meditated work, entitled The History of the Rebellion in Scotland, in 1745—6, in which he recorded the exploits and remarks of his youth, but the public were disappointed in it. For a considerable time prior to his death, Mr. Home's

mind as well as body, seemed to be much impaired, and in this distressful state he lingered for many years. He died at Merchiston House, on the 4th of September, 1808, in the eighty-fifth year of his age.

HOME'BORN, *adj.* Home and born. Native; natural.

Though to be thus elemented, arm
These creatures from *homeborn* intrinsick harm.
Donne.

Domestic; not foreign.

Numerous bands
With *homeborn* lyes, or tales from foreign lands.
Pope.

HOME'BRED, *adj.* Home and bred. Native; natural.

God hath taken care to anticipate every man, to draw him early into his church, before other competitors, *homebred* lusts, or vicious customs of the world, should be able to pretend to him. *Hammond.*

No *homebred* jars her quiet state controul,
Nor watchful jealousy torments her soul. *Gay.*

Not polished by travel; plain; rude; artless; uncultivated.

Only to me two *homebred* youths belong.
Dryden.

Domestic; not foreign.

But if of danger, which hereby doth dwell,
And *homebred* evil, ye desire to hear,
I can you tydings tell. *Spenser. Faerie Queene.*

This once happy land,
By *homebred* fury rent, long groaned.
Phillips.

HOME'FELT, *adj.* Home and felt. Inward; private.

Yet they in pleasing slumber lulled the sense,
And in sweet madness robbed it of itself;
But such a sacred and *homefelt* delight,
Such sober certainty of waking bliss,
I never heard till now. *Milton.*

Happy next him who to these shades retires,
Whom nature charms, and whom the muse inspires,
Whom humbler joys of *homefelt* quiet please,
Successive study, exercise, and ease. *Pope.*

HOME'LYN, *n. s.* A kind of fish.

HOME'MADE, *adj.* Home and made. Made at home; not manufactured in foreign parts.

A tax laid on your native product, and *homemade* commodities, makes them yield less to the first seller.
Locke.

HOMER, *n. s.* A Hebrew measure of about three pints.

HOMER, the prince of the Greek poets, flourished, according to Dr. Blair, about 900 B. C.; according to Dr. Priestley, 850; according to the Arundelian marbles, 300 after the taking of Troy; and, agreeably to them all, above 400 years before Plato and Aristotle. Seven cities disputed the glory of having given him birth, which are enumerated in the following distich:—

Smyrna, Rhodes, Colophon, Salamis, Chios, Argos, Athenæ;
Orbis de patria certat, Homere tua.

Or, as a modern poet has complained:—

Seven mighty towns contend for Homer dead,
Through which the living Homer begged his bread.

We have no authentic particulars of his life. The most regular account is that which goes under the name of Herodotus, and is usually printed with his history: and though it is supposed to be spurious, yet, as it is ancient, was made use of by Strabo, and exhibits the idea which the later Greeks, and the Romans in the age of Augustus, entertained of Homer, we must content ourselves with it. Menalippus, a native of Magnesia, is said to have settled at Cumæ, where he married the daughter of a citizen called Homyres, and had by her a daughter, Critheis. The father and mother dying, the young woman was left under the tuition of Cleonax, her father's friend, by whom she was seduced, and who, on her proving with child, sent her to Smyrna, which was then building, to conceal the misfortune. This was eighteen years after the founding of Cumæ, and about 168 after the destruction of Troy. Critheis was here delivered of Homer, whom she called Melesigenes, because he was born on the banks of that river. Her good conduct afterwards induced Phemius, a schoolmaster, to marry her, and adopt her son After the death of Phemius and Critheis, Homer succeeded to his father-in-law's school; until a shipmaster named Mentes, who was a man of learning, persuaded him to travel with him. This brought him to Egypt; whence he brought into Greece the names of their gods, the chief ceremonies of their worship, and a more improved knowledge of the arts. He also visited other parts of Africa and Spain; in his return whence he touched at Ithaca, where he was first troubled with a disease of his eyes. Being recommended to Mentor, one of the chief men of Ithaca, he was here informed of many things relating to Ulysses, which he afterwards inserted in his Odyssey; and, after much time spent in visiting the coasts of Peloponnesus and the islands, arrived at Colophon, where he lost his sight. He now returned to Smyrna, and finished his Iliad. Some time after, the low state of his finances obliged him to go to Cumæ, where his poems were highly applauded; but when he proposed to immortalise their town, if they would allow him a salary, he was answered, that there would be no end of maintaining all the Ὁμηροι, or blind men: hence he is said to have obtained the name of Homer. He afterwards wandered through several places to Chios, where he married, and composed his Odyssey. Some time after, having produced various verses in praise of the cities of Greece, especially of Athens and Argos, he went to Samos, where he spent the winter reciting them. In the spring he proceeded to Io, one of the Sporades, intending to continue his voyage to Athens. Landing, however, at Chios by the way, he fell sick and died, and was buried on the sea shore. The principal works ascribed to Homer are the Iliad and Odyssey. The Batrachomyomachia, or battle of the frogs and mice, is rejected by almost all modern critics, as a parody incompatible with the simplicity of the Homeric age. Of his Hymns some are acknowledged by Lucian and Pausanias; others are undoubtedly spurious. Of the Iliad and Odyssey, the editions are very numerous. The best are those of Barnes, Clarke, and Heyne. The two leading English translations are those of Pope and Cowper, in rhyme and blank verse.

It has, however, been much controverted whether the Iliad and Odyssey were originally epic poems of the kind they now appear to be; and particularly, whether they were the production of any one individual, or only a happy assemblage of detached rhapsodies. This question has been ably discussed by Heyne and Wolf, the modern critics upon Homer; and the arguments of these great scholars, cannot be dismissed as rash conjectures. We shall avail ourselves, therefore, of Mr. Talfourd's able abstract of them in Mr. Rutt's Appendix to Dr. Priestley's Lectures on Oratory and Criticism.

'The first object, in a case of this kind,' observes this ingenious gentleman, 'should be to ascertain those facts in which all parties agree. The light which external history affords us is rather feeble and dubious. It must be admitted, that there is no fact well authenticated respecting the existence of the poems in a connected form, until we are told that they were brought into Greece by Lycurgus. Plutarch, in his Life of that legislator, informs us that, in his journey in Asia, 'he probably had sight of Homer's poems, which were first preserved by the posterity of Creophylus; and, having observed that the delightful fictions thrown over them did not prevent the author from abounding in maxims of state policy and rules of moral action, transcribed them, and carried with him into Greece that entire collection which we have now among us. For at that time there was only an obscure rumor in Greece of the fame of these poems, and only a few scattered fragments in circulation, until Lycurgus published them entire.' Hence Cleomenes called Homer the poet of the Spartans. Besides Plutarch, Dio Chrysostom, Heraclides Pontus, and Ælian, bear testimony to the fact of the poems having, in some state or other, been introduced into Greece by Lycurgus. Heyne, indeed, contends that nothing more is to be gathered from these authorities, than that the poems were preserved among the Chians by means of the recitations of the rhapsodists; and that the knowledge of their merit was brought to Sparta by her lawgiver, on his return from his travels. Whatever was done by Lycurgus fell very short of exhibiting the poems in that state in which even the Greeks afterwards possessed them. For a number of writers agree in declaring that the honor of this noble work belongs to Pisistratus, or to some of his family. Solon now made a law for the recital of the poems; and is even said to have directed that this office should be performed, not by repeating them in fragments, without regard to the progress of the story, but in some order of regular succession.

'It must be allowed that the expression of Cicero, that Pisistratus 'primus Homeri libros confusos antea, disposuisse dicitur,' will not prove much, even respecting the opinion of the orator, as to their original condition. For it does not follow, because the books of Homer were confused or disarranged in the time of their first editor, that they were not composed in a regular series. Indeed the expression, 'works of Homer then in confusion,' seems to imply that Pisistratus did not divide the poems into books for the first time, or first apply to them that denomination. The other external evidence on either side is but trivial. The works must be for the most part, their own witnesses.

'The chief arguments by which the hypothesis adopted by Wolf and Heyne is supported are, 1. It is exceedingly improbable that, in any age to which Homer's personal existence can be referred, one man should have been capable of composing works of the extent, consistency, and poetical elevation of the Iliad and Odyssey. 2. It seems impossible that poems of so great a length as the Iliad and the Odyssey should have been composed and preserved entire, without being committed to writing; and it is certain that there is not the least trace, even in tradition, of any complete written or engraved copy of the works of Homer till the exertions of his Athenian editor, or at least till those of Lycurgus. 3. The profession of the rhapsodists, as is evident from many Greek writers, flourished from the earliest periods. Their name, compounded from ῥαπτειν ωδην, to join together or compose verses, signified their occupation and character. They answered, in many respects, to the Celtic bards. They chaunted, sung, or recited poems, chiefly, at least in the earliest times, of their own composition, at the tables of princes, and in public assemblies, as well as in the houses of the great. They were held in high esteem and even veneration, more especially in the earliest periods; and they were the sole depositaries of the religion, the moral precepts, and the old and favorite legends of the people among whom they lived. —It is further alleged that there are parts of the Iliad and Odyssey, even as they now exist, which are either entirely spurious, or very much corrupted from the original. Of the former of these descriptions seems to be the passage in the eighteenth book of the Iliad, from v. 356 to v. 368, in which, from the mourning of the Greeks over the body of Patroclus, we are suddenly presented with a taunting speech of Jupiter to Juno, and her angry reply, neither of which bears the least relation to the immediate subject; and, at the close, we as suddenly return to Thetis, in her ascent to the palace of Vulcan. In the fourth book of the Odyssey a passage occurs, at the 620th line, where a conversation with Menelaus is abruptly broken off, and four lines follow of which all explanation seems hopeless. Eustathius has recourse to the violent measure of changing the whole scene from the palace of Menelaus at Sparta to that of Ulysses at Ithaca. But the passage is now universally agreed to be either misplaced or spurious. Other and yet more important instances are brought forward by Heyne, in the notes to the different books of his edition of Homer.

'On the other side, the following arguments are adduced, to establish the individuality of the author of the Iliad :—1. The genius which the Iliad exhibits is no proof that it is not the production of a single mind in a barbarous age. Those who speak of poetry as a progressive art, and liken it to the improvements of social life, and things which depend for their excellence on experience, seem to know little of its essence. I has no connexion with the progressions of time

it depends not on external circumstance; it follows not in the train of knowledge, nor improves as mathematical science is unfolded; its origin is in the heart, and its objects are to be found in every part of the creation. Indeed, the age of Homer was far more favorable to its perfection than later times. The truth is, that no one ever supposes Homer to have written with a standard of epic poetry before him, like that which Aristotle has drawn from his works. He composed from the impulses of an harmonious mind; and his compositions were, therefore, harmonious. There is nothing wonderful, or even paradoxical, in this. Genius is the soul of art. The unities admired by the critics must originally take their rise from the heart, from the natural perception of loveliness, from the innate admiration of order, or they are worthless. Genius broods over the events it celebrates, and brings them into keeping and harmony. There is nothing really so methodical as the most daring invention, in so far as method is more than an empty form. If Homer conceived the plan of an epic in his mind, and strove to write 'up to the height of his great argument,' it was because he felt that within such a compass his mind would discover a fit and noble range. 2. The objection which arises from the ignorance of letters, or the want of the materials for writing, is certainly of a more formidable kind. But it is to be remembered, that the very uncertainty attending the introduction of letters into Greece proves that they must have been of high antiquity, and certainly before the first Olympiad, when a regular computation of time began. The testimony of Josephus, who speaks merely in a sceptical tone, and not at all in that of decided negative, is rendered of less importance by the circumstance that he was attempting to depreciate, as far as possible, the antiquities of Greece, and to throw discredit on its early history. But, even supposing the works of Homer not to have been originally transcribed, the very opponents of his personality have furnished us with the means by which they were probably transmitted. The rhapsodists, whom they suppose, and probably with justice, to have recited his poems, were no unworthy depositaries of so great a treasure, especially if we hold them in the veneration with which they would desire us to regard them. 3. Setting aside, for the sake of argument, all the technical rules of epic poetry, which have been sometimes said to have been observed in the works imputed to Homer, there is very strong internal evidence that they are, or, at least, that one of them is, the production of an individual genius. In the whole texture one pervading mind is clearly to be seen. Poets even of the same age, and when treating of nearly the same subject, can scarcely be supposed to have attained so complete a uniformity of style. If two leaves of the forest are never found exactly to correspond, how shall we believe that a number of minds, and these of the first and most original class, should so exactly agree? The same epithets recur, the same kind of similes prevail, the same mode of expression is used in the last as in the first book of the Iliad.—And, lastly, that there are interpolations in the Iliad and Odyssey may be readily admitted, without affecting the authenticity of the whole. And it is to be observed, that some corruptions have been noticed as such by the most ancient critics—a circumstance which proves, that, though their attention was directed to the question, they never doubted, as they have never expressed any doubt, of the genuineness of the great mass of the poems. The evidence in favor of the common hypothesis, from the testimony of every age, is exceedingly strong. Pindar, who lived 485 years before Christ, repeatedly mentions Homer as he would any other person, and not as a collection of verses. He speaks of the Iliad as having rendered Ajax immortal, and he alludes to the perils of Ulysses as having been celebrated, adored, and rendered greater, by the delightful poetry of Homer. In the fragments collected by Brunck, Mimerinus and Simonides both allude to Homer. The latter speaks of him as the man of Chios, and quotes the beautiful comparison made by Glaucus, of human life to the fall of leaves and their springing forth again into verdure. Herodotus repeatedly refers to our bard. He quotes the Iliad and the Odyssey, and distinguishes between them. He even, which is stronger than all, denies the Cypriacs to be genuine productions of Homer, because they contradict the Iliad. Thucydides also frequently alludes to him, and always without any intimation that he is speaking of a number of songs by various authors. Aristotle flourished but a short interval from the time when the family of Pisistratus were in power, and yet nothing can be more clear than that he had no idea that they had, for the first time, collected together and arranged the poems which they edited; for he criticises at large that very arrangement; he gives it the highest praise; he makes it the basis of a system of epic poetry; and yet he never attributes this to any other than to the original author. He bestows no praise on Pisistratus, who, in this respect, deserved it all.'

Homer (Henry), Rev., the son of a clergyman, the rector of Birdingbury, Warwickshire, was born there in 1752. He received the rudiments of his education at Rugby school, and afterwards took the degree of bachelor in divinity at Emanuel College, Cambridge, in 1783. Mr. Homer, in conjunction with Dr. Coombe and others, assisted in bringing out a variorum edition of Horace, and ably edited the works of Cæsar, Livy, Tacitus, Sallust, and the epistles of Ovid. His death took place in 1791.

HOME'SPUN, *adj.* Home and spun. Spun or wrought at home; not made by regular manufacturers.

Instead of *homespun* coifs were seen
Good pinners, edged with colberteen. *Swift.*

Not made in foreign countries.

He appeared in a suit of English broad-cloth, very plain, but rich: every thing he wore was substantial, honest, *homespun* ware. *Addison.*

Plain; coarse; rude; homely; inelegant.

They sometimes put on, when they go ashore, long sleeveless coats of *homespun* cotton. *Sandy's Tr.*

We say, in our *homespun* English proverb, He killed two birds with one stone. *Dryden.*

Our *homespun* authors must forsake the field,
And Shakspeare to the soft Scarlatti yield.
Addison.

HOMESPUN', *n. s.* A coarse, inelegant, rude, untaught, rustic man. Not in use.

What hempen *homespuns* have we swaggering here,
So near the cradle of the fairy queen? *Shakspeare.*

HOME'STALL, *n. s.* } Sax. þam and ꝥeþe.
HOME'STEAD, *n. s.* } The place of the house.

Both house and *homestead* into seas are borne,
And rocks are from their own foundations torn.
Dryden.

HOME'WARD, *adj.* } Sax. þam and peapð.
HOME'WARDS, *adj.* } Towards home; towards the native place; towards the place of residence.

For Goddes love, let us now sone at eve
Our levè take, and *homwarde* let us tourne.
Chaucer. Troilus and Creseide.

My affairs
Do even drag me *homeward.*
Shakspeare.

Since such Love's natural station is, may still
My love descend, and journey down the hill,
Not panting after growing beauties; so
I shall ebb on with them who *homeward* go.
Donne.

Look *homeward*, angel now, and melt with ruth;
And, O ye dolphins, waft the hapless youth!
Milton.

Then Urania *homeward* did arise,
Leaving in pain their well-fed hungry eyes.
Sidney.

And wandering *homewards*, seek our safety hence.
Dryden.

Like a long team of snowy swans on high,
Which clap their wings, and cleave the liquid sky,
Which, *homeward* from their watery pastures borne,
They sing, and Asia's lakes their notes return. *Id.*

Or when the ploughman leaves the task of day,
And trudging *homeward* whistles on his way;
When the big-uddered cows with patience stand,
Waiting the strokings of the damsel's hand. *Gay.*

HOM'ICIDE, *n. s.* } Fr. *homicide;* Lat.
HOMICI'DAL, *adj.* } *homicidium*, from homo. Manslaughter; destruction: murder, in some cases. Homicidal, murderous; destructive; bloody.

Homicide (that is manslaughter) is in divers wise.
Som maner of *homicide* is spirituel and som is bodily.
Chaucer. The Persones Tale.

The apostles command to abstain from blood: construe this according to the law of nature, and it will seem, that *homicide* only is forbidden; but construe it in reference to the law of the Jews, about which the question was, and it shall easily appear to have a clean other sense, and a truer, when we expound it of eating, and not of shedding blood. *Hooker.*

I'd undertake the death of all the world,
So might I live one hour in your sweet bosom.
— If I thought that, I tell thee, *homicide*,
These nails should rend that beauty from my cheeks.
Shakspeare.

What wonder is't that black detraction thrives!
The *homicide* of names is less than lives. *Dryden.*

Hector comes, the *homicide*, to wield
His conquering arms, with corps to strew the fie'd.
Id.

The troop forth issuing from the dark recess,
With *homicidal* rage, the king oppress. *Pope.*

HOMICIDE, in law, signifies in general the taking away of any person's life. It is of three kinds; justifiable, excusable, and felonious. The first has no share of guilt at all; the second very little; but the third is the highest crime against the law of nature that man is capable of committing.—*Blackstone.*

HOMICIDE, EXCUSABLE, is of two sorts, according to this learned commentator, per infortunium, by misadventure; or se defendendo, upon a principle of self-preservation. We will first see wherein these two species of homicide are distinct, and then wherein they agree.

1. Homicide per infortunium, or by misadventure, is where a man, doing a lawful act, without any intention of hurt, unfortunately kills another: as where a man is at work with a hatchet, and the head thereof flies off and kills a stander-by; or where a person, qualified to keep a gun, is shooting at a mark, and undesignedly kills a man; for the act is lawful, and the effect is merely accidental. So where a parent is moderately correcting his child, a master his apprentice or scholar, or an officer punishing a criminal, and happens to occasion his death, it is only misadventure, for the act of correction was lawful: but if he exceeds the bounds of moderation, either in the manner, the instrument, or the quantity of punishment, and death ensues, it is manslaughter at least, and in some case (according to the circumstances) murder; for the act of immoderate correction is unlawful. Thus, by an edict of the emperor Constantine, when the rigor of the Roman law with regard to slaves began to relax and soften, a master was allowed to chastise his slave with rods and imprisonment, and if death accidentally ensued he was guilty of no crime: but if he struck him with a club or a stone, and thereby occasioned his death, or if in any other yet grosser manner 'immoderatè suo jure utatur, tunc reus homicidii fit.' But to proceed. A tilt or tournament, the martial diversion of our ancestors, was however an unlawful act; and so are boxing and sword-playing, the succeeding amusements of their posterity: and, therefore, if a knight in the former case, or a gladiator in the latter, be killed, such killing is felony of manslaughter. But, if the king command or permit such diversion, it is said to be only misadventure; for then the act is lawful; in like manner as, by the laws both of Athens and Rome, he who killed another in the pancratium, or public games, authorised or permitted by the state, was not held to be guilty of homicide. Likewise to whip another's horse, whereby he runs over a child and kills him, is held to be accidental in the rider, for he has done nothing unlawful; but manslaughter in the person who whipped him, for the act was a tresspass, and at best a piece of idleness, of inevitably dangerous consequence. And in general, if death ensues in consequence of an idle, dangerous, and unlawful sport, as shooting or casting stones in a town, or the barbarous diversion of cock-throwing; in these and similar cases the slayer is guilty of manslaughter, and not misadventure only; for these are unlawful acts.

2. Homicide se defendendo, or in self-defence, upon a sudden affray, is also excusable, rather than justifiable, by the English law. This species of self-defence must be distinguished from that just now mentioned, as being calculated to hinder the perpetration of a capital crime; which is not only a matter of excuse, but of justification. But

the self-defence which we are now speaking of, is that whereby a man may protect himself from an assault, or the like, in the course of a sudden brawl or quarrel, by killing him who assaults him. And this is what the law expresses by the word chance-medley, or (as some rather choose to write it) chaud-medley; the former of which in its etymology signifies a casual affray, the latter an affray in the heat of blood or passion; both of them of pretty much the same import; but the former is in common speech too often erroneously applied to any manner of homicide by misadventure; whereas it appears by stat. 24 Henry VIII. c. 5, and our ancient books, that it is properly applied to such killing as happens in self-defence upon a sudden rencounter. The right of natural defence does not imply a right of attacking: for, instead of attacking one another for injuries past or impending, men need only have recourse to the proper tribunals of justice. Wherefore, to excuse homicide by the plea of self-defence, it must appear that the slayer had no other possible means of escaping from his assailant. In some cases this species of homicide (upon chance-medley in self-defence) differs but little from manslaughter, which also happens frequently upon chance-medley in the proper legal sense of the word. But the true criterion between them seems to be this: when both parties are actually combating at the time when the mortal stroke is given, the slayer is then guilty of manslaughter; but if the slayer hath not begun to fight, or (having begun) endeavours to decline any further struggle, and afterwards, being closely pressed by his antagonist, kills him to avoid his own destruction, this is homicide excusable by self-defence. For which reason the law requires, that the person who kills another in his own-defence, should have retreated as far as he conveniently or safely can, to avoid the violence of the assault, before he turns upon his assailant; and that not fictitiously, or in order to watch his opportunity, but from a real tenderness of shedding blood. And though it may be cowardice in time of war, between two independent nations, to flee from an enemy; yet, between two fellow subjects, the law countenances no such point of honor: because the king and his courts are the vindices injuriarum, and will give to the party wronged all the satisfaction he deserves. In this the civil law also agrees, or perhaps goes rather farther; qui cum aliter tueri se non possunt, damni culpam dederint, innoxii sunt. The party assaulted must therefore flee as far as he conveniently can, either by reason of some wall, ditch, or other impediment, or as far as the fierceness of the assault will permit him; for it may be so fierce as not to allow him to yield a step, with manifest danger of his life, or enormous bodily harm; and then in his defence he may kill his assailant instantly. And, as the manner of the defence, so is also the time to be considered: for if the person assaulted does not fall upon the aggressor till the affray is over, or when he is running away, this is revenge and not defence. Neither under the color of self-defence, will the law permit a man to screen himself from the guilt of deliberate murder; for if two persons, A and B, agree to fight a duel; and A gives the first onset, and B retreats as far as he safely can, and then kills A, this is murder, because of the previous malice and concerted design. But if A upon a sudden quarrel assaults B first, and, upon B's returning the assault, A really and bona fide flies; and, being driven to the wall, turns again upon B and kills him, this may be se defendendo, according to some; though others have thought this opinion too favorable: inasmuch as the necessity, to which he is at last reduced, originally arose from his own fault. Under this excuse of self-defence the principal civil and natural relations are comprehended: therefore, master and servant, parent and child, husband and wife, killing an assailant in the necessary defence of each other respectively, are excused; the act of the relation assisting being construed the same as the act of the party himself. There is one species of homicide se defendendo where the party slain is equally innocent as he who occasions his death: and yet this homicide is also excusable from the great universal principle of self-preservation, which prompts every man to save his own life preferably to that of another, where one of them must inevitably perish. As, among others, in that case mentioned by lord Bacon, where two persons being shipwrecked, and getting on the same plank, but finding it not able to save them both, one of them thrusts the other from it, whereby he is drowned. He who thus preserves his own life, at the expense of another man's, is excusable through unavoidable necessity, and the principle of self-defence; since their both remaining on the same weak plank is a mutual, though innocent, attempt upon, and endangering of, each other's life. Let us next take a view of the circumstances wherein these two species of homicide, by misadventure and self-defence, agree; and those are in their blame and punishment. For the law sets so high a value upon the life of a man, that it always intends some misbehaviour in the person who takes it away, unless by the command or express permission of the law. In the case of misadventure it presumes negligence, or at least a want of sufficient caution in him who was so unfortunate as to commit it, who therefore is not altogether faultless. And, as to the necessity which excuses a man who kills another se defendendo, lord Bacon entitles it necessitas culpabilis, and thereby distinguishes it from the former necessity of killing a thief or a malefactor. For the law intends that the quarrel or assault arose from some unknown wrong, or some provocation, either in word or deed: and since in quarrels both parties may be and usually are in some fault, and it scarcely can be tried who was originally in the wrong, the law will not hold the survivor entirely guiltless. But it is clear, in the other case, that, where I kill a thief who breaks into my house, the original default can never be upon my side. The law besides may have a farther view, to make the crime of homicide more odious, and to caution men how they venture to kill another upon their own private judgment; by ordaining, that he who slays his neighbour, without an express warrant from the law so to do, shall in no case be absolutely free from guilt. Nor is the law of England singular in

this respect. Even the slaughter of enemies required a solemn purgation among the Jews; which implies, that the death of a man, however it happens, will leave some stain behind it. And the Mosaical law appointed certain cities of refuge for him 'who killed his neighbour unawares; as if a man goeth into the wood with his neighbour to hew wood, and his hand fetcheth a stroke with the axe to cut down a tree, and the head slippeth from the helve, and lighteth upon his neighbour that he die, he shall flee into one of those cities and live.' But it seems he was not held wholly blameless, any more than in the English law; since the avenger of blood might slay him before he reached his asylum, or if he afterwards stirred out of it till the death of the high priest. In the imperial law likewise casual homicide was excused, by the indulgence of the emperor signed with his own sign-manual, annotatione principis; otherwise, the death of a man, however committed, was in some degree punishable. Among the Greeks homicide by misfortune was expiated by voluntary banishment for a year. In Saxony a fine is paid to the kindred of the slain; which also, among the western Goths, was little inferior to that of voluntary homicide: and in France, under the old government, no person was absolved in cases of this nature, without a largess to the poor, and the charge of certain masses for the soul of the party killed. The penalty inflicted by the English law is said by Sir Edward Coke to have been anciently no less than death; which, however, is with reason denied by later and more accurate writers. It seems rather to have consisted in a forfeiture, some say of all the goods and chattels, others of only a part of them, by way of fine or weregild: which was probably disposed of, as in France, in pios usus, according to the humane superstition of the times, for the benefit of his soul who was thus suddenly sent to his account with all his imperfections on his head. But that reason having long ceased, and the penalty, especially if a total forfeiture, growing more severe than was intended, in proportion as personal property has become more considerable, the delinquent has now, and has had as early as the English records will reach, a pardon and writ of restitution of his goods as a matter of course and right, only paying for suing out the same. And, indeed, to prevent this expense, in cases where the death has notoriously happened by misadventure or in self-defence, the judges usually permit, if not a direct, a general verdict of acquittal.

Homicide, Felonious, is an act of a very different nature from the former, being the killing of a human creature, of any age or sex, without justification or excuse. This may be done either by killing one's self, or another man: for the consideration of which see the articles Manslaughter, Murder, and Suicide.

Homicide, Justifiable, is of different kinds. 1. Such as is owing to some unavoidable necessity, without any will, intention, or desire, and without any inadvertence or negligence, in the party killing, and therefore without any shadow of blame; as, for instance, by virtue of such an office as obliges one, in the execution of public justice, to put a malefactor to death, who has forfeited his life by the laws and verdict of his country. This is an act of necessity, and even of civil duty: and therefore not only justifiable, but commendable, where the law requires it. But the law must require it, otherwise it is not justifiable: therefore wantonly to kill the greatest of malefactors, felon, or a traitor, attainted, or outlawed, deliberately, uncompelled, and extrajudicially, is murder. And farther, if judgment of death be given by a judge not authorised by lawful commission, and execution is done accordingly, the judge is guilty of murder. Also such judgment, when legal, must be executed by the proper officer, or his appointed deputy; for no one else is required by law to do it, which requisition it is that justifies the homicide. If another person doth it of his own head, it is held to be murder; even though it be the judge himself. It must farther be executed, servato juris ordine; it must pursue the sentence of the court. If an officer beheads one who is adjudged to be hanged, or vice versâ, it is murder; for he is merely ministerial, and therefore only justified when he acts under the authority and compulsion of the law. But, if a sheriff changes one kind of punishment for another, he then acts by his own authority, which extends not to the commission of homicide: and besides this license might occasion a very gross abuse of his power. The king indeed may remit part of a sentence, as in the case of treason, all but the beheading; but this is no change, no introduction of a new punishment; and in the case of felony, where the judgment is to be hanged, the king, it has been said, cannot legally order even a peer to be beheaded. Again, in some cases homicide is justifiable rather by the permission, than by the absolute command, of the law: either for the advancement of public justice, which without such indemnification would never be carried on with proper vigor; or in such instances where it is committed for the prevention of some atrocious crime, which cannot otherwise be avoided. 2. Homicides committed for the advancement of public justice are (1). Where an officer, in the execution of his office, either in a civil or criminal case, kills a person that assaults and resists him. (2). If an officer, or any private person, attempts to take a man charged with felony, and is resisted; and, in the endeavour to take him, kills him. (3). In case of a riot, or rebellious assembly, [the officers endeavouring to disperse the mob are justifiable in killing them, both at common law, and by the riot act, 1 Geo. I. c. 5. (4). Where the prisoners in a gaol, or going to a gaol, assault the gaoler or officer, and he in his defence kills any of them, it is justifiable, for the sake of preventing an escape. (5). If trespassers in forests, parks, chases, or warrens, will not surrender themselves to the keepers, they may be slain; by virtue of the statute 21 Edward I. stat. 2, de malefactoribus in parcis, and 3 & 4 W. & M. c. 10. But, in all these cases, there must be an apparent necessity on the officer's side; viz. that the party could not be arrested or apprehended, the riot could not be suppressed, the prisoners could not be kept in hold, the deer-stealers could not but

escape, unless such homicide were committed; otherwise, without such absolute necessity, it is not justifiable. (6.) If the champions, in a trial by battle, killed either of them the other, such homicide was justifiable, and was imputed to the just judgment of God, who was thereby presumed to have decided in favor of the truth. 3. In the next place, such homicide as is committed for the prevention of any forcible and atrocious crime, is justifiable by the law of nature; and also by the law of England, as it stood so early as the time of Bracton, and as it is since declared by stat. 24, H. VIII., c. 5. If any person attempts a robbery or murder of another, or attempts to break open a house in the night-time (which extends also to an attempt to burn it), and shall be killed in such attempt, the slayer shall be acquitted and discharged. This reaches not to any crime unaccompanied with force, as picking of pockets; or to the breaking open of any house in the day-time, unless it carries with it an attempt of robbery also. So the Jewish law, which punished no theft with death, makes homicide only justifiable in case of nocturnal housebreaking: 'if a thief be found breaking up, and he be smitten that he die, no blood shall be shed for him; but, if the sun be risen upon him, there shall blood be shed for him; for he should have made full restitution.' At Athens, if any theft was committed by night, it was lawful to kill the criminal, if taken in the fact; and, by the Roman law of the XII tables, a thief might be slain by night with impunity, or even by day, if he armed himself with any dangerous weapon: which amounts very nearly to the same as is permitted by our constitution. The Roman law also justifies homicide, when committed in defence of the chastity either of one's self or relations; and so also, according to Selden, stood the law in the Jewish republic. The English law likewise justifies a woman killing one who attempts to ravish her: and so too the husband or father may be justified in killing a man who attempts a rape upon his wife or daughter; but not if he takes them in adultery by consent; for the one is forcible and felonious, but not the other. And there is no doubt but the forcibly attempting a crime, of a still more detestable nature, may be equally resisted by the death of the unnatural aggressor. For the one uniform principle that runs through our own, and all other laws, seems to be this: That where a crime, in itself capital, is endeavoured to be committed by force, it is lawful to repel that force by the death of the party attempting. But we must not carry this doctrine to the same length that Mr. Locke does; who holds, 'that all manner of force without right upon a man's person, puts him in a state of war with the aggressor; and, of consequence, that, being in such a state of war, he may lawfully kill him that puts him under this unnatural restraint.' However just this conclusion may be in a state of uncivilised nature, yet the law of England, like that of every other well regulated community, is too tender of the public peace, too careful of the lives of the subject, to adopt so contentious a system; nor will it suffer with impunity any crime to be prevented by death, unless the same, if committed, would also be punished by death. In these instances of justifiable homicide, it may be observed, that the slayer is in no kind of fault whatsoever, not even in the minutest degree; and is therefore to be totally acquitted and discharged, with commendation rather than blame. But that is not quite the case in excusable homicide, the very name whereof imports some fault, some error, or omission; so trivial, however, that the law excuses it from the guilt of felony, though in strictness it judges it deserving of some little degree of punishment. See HOMICIDE, EXCUSABLE.

By stat. 39 Geo. III., c. 37, persons tried under the act 28 H. VIII., c. 15, for murder, and found guilty of manslaughter only, are declared entitled to the benefit of clergy, &c., as if it had been committed on land. And by stat. 46 Geo. III., c. 54, such offences may be tried in any of his majesty's islands or colonies by virtue of a commission under the great seal to commissioners, who shall have all such powers as are given by stat. 28 H. VIII., c. 15. And by stat. 57 Geo. III., c. 53, murders, &c., committed in the Bay of Honduras, New Zealand, Otaheite, or any islands or places, not within his majesty's dominions, by the master or crew of any British ship, or persons having been such, may be tried in any of his majesty's islands or colonies, under a commission issued by virtue of the act 46 Geo. III., c. 54. Now, at Honduras, such offences may be tried by commissioners specially appointed by virtue of a subsequent act. 59 Geo. III. c. 44. See also stat. 58 Geo. III., c. 98, as to offences relative to the slave-trade, title Slaves. Under stat. 10, 11, W. III., c. 25, sect. 13, murders committed in Newfoundland, &c., may be tried in any county in England; and it does not appear that this act is repealed by stat. 32 Geo. III., c. 46, or the acts creating courts of jurisdiction in that country.

On the whole, homicide is malicious, and of course amounts to murder, unless where, first, justified by the command or permission of the law: secondly, excused on the account of accident or self-preservation; or, thirdly, alleviated into manslaughter, by being either the involuntary consequence of some act, not strictly lawful, or (if voluntary) occasioned by some sudden and sufficiently violent provocation. And all these circumstances of justification, excuse, or alleviation, it is incumbent upon the prisoner to make out, to the satisfaction of the court and jury: the latter of whom are to decide whether the circumstances alleged are proved to have actually existed; the former, how far they extend to take away or mitigate the guilt. For all homicide is presumed to be malicious, until the contrary appeareth upon evidence.—*Fost.* 255.

HOMILE'TICAL, *adj.* Gr. ὁμιλητικος. Social; conversable.

His life was holy, and when he had leisure for retirements, severe: his virtues active chiefly, and *homiletical*; not those lazy sullen ones of the cloyster. *Atterbury.*

HOM'ILY, *n. s.* Fr. *homilie*; Gr. ὁμιλία. A discourse read to a congregation.

Homilies were a third kind of readings usual in former times; a most commendable institution, as well then to supply the casual, as now the necessary defect of sermons. *Hooker.*

What tedious *homily* of love have you wearied your parishioners withal, and never cried, Have patience, good people! *Shakspeare. As You Like It.*

If we survey the *homilies* of the ancient church, we shall discern that, upon festival days, the subject of the *homily* was constantly the business of the day.
Hammond's Fundamentals.

HOMILY, from ὁμιλος, an assembly, is a sermon upon some point of religion, delivered in a plain manner, so as to be easily understood by the people. The Greek homily, says M. Fleury, signifies a familiar discourse, like the Latin sermo; and discourses delivered in the church were so named, to intimate that they were not harangues or matters of ostentation and flourish, like those of profane orators, but familiar and useful discourses, as of a master to his disciples, or a father to his children. All the homilies of the Greek and Latin fathers were composed by bishops. The privilege was not ordinarily allowed to priests till towards the fifth century. St. Chrysostom was the first presbyter that preached statedly. Origen and St. Augustine also preached; but it was by a peculiar license. Photius distinguishes homily from sermon, in that the homily was performed in a more familiar manner; the prelate interrogating and talking to the people, and they in their turn answering and interrogating him, so that it was properly a conversation; whereas the sermon was delivered with more form, and in the pulpit, after the manner of the orators. The practice of compiling homilies, to be committed to memory, and recited by ignorant or indolent priests, commenced towards the close of the eighth century; when Charlemagne ordered Paul Deacon and Alcuin to form homilies or discourses upon the Gospels and Epistles, from the ancient doctors of the church. This gave rise to that famous collection entitled the Homiliarium of Charlemagne, which being followed as a model by many productions of the same kind, composed by private persons, from a principle of pious zeal, contributed much says Mosheim to nourish the indolence, and perpetuate the ignorance of a worthless clergy. There are still extant several fine homilies, composed by the ancient fathers, particularly St. Chrysostom and St. Gregory. The Clementine homilies are nineteen homilies in Greek, published by Cotelerius, with two letters prefixed; one of them written in the name of Peter, the other in the name of Clement, to James bishop of Jerusalem; in which last letter they are entitled Clement's Epitome of the Preaching and Travels of Peter. According to Le Clerc, these homilies were composed by an Ebionite in the second century; but Montfaucon supposes that they were forged long after the age of St. Athanasius. Dr. Lardner apprehends, that they were the original or first edition of the Recognitions; and that they are the same with the work censured by Eusebius under the title of Dialogues of Peter and Appion.

HOMILIES, TWO BOOKS OF, in the Church of England, are two books of plain sermons, set out by public authority, and ordered to be read in churches on Sundays and holidays, when there was no sermon. The first book was compiled and published in the beginning of Edward the VI's reign; and the second in queen Elizabeth's time, by order of convocation, 1563.

HOMINE Replegiando, a writ for the bailing of a man out of prison, when he is confined without commandment of the king or his judges, or from any cause that is repleviable. But this writ is now seldom used; a writ of habeas corpus being sued out on the necessary occasions.

HOMO, man, is ranked by Linnæus under the class of mammalia and order of primates, or chiefs; and characterised by having four parallel fore teeth both in the upper and lower jaw, and two mammæ on the breast. The only species is the

H. sapiens, or sapient man, so named as being endowed with wisdom far superior to, or rather exclusive of, all other animals. See MAN.

The following is the arrangement of the species offered by Dr. Gmelin as more convenient than that of Linnæus.

H. albus, white, formed by the rules of symmetrical elegance and beauty. This division includes almost all the inhabitants of Europe; those of Asia on this side of the Oby, the Caspian, Mount Imaus, and the Ganges; likewise the natives of the north of Africa, of Greenland, and the Esquimaux.

H. badius, brown, of a yellowish brown color; having scanty hairs, flat features, and small eyes. This variety takes in the whole inhabitants of Asia not included in the preceding division.

H. cupreus, copper-colored, the complexion of the skin resembling the color of copper not burnished. The whole inhabitants of America, except the Greenlanders and Esquimaux.

H. fuscus, tawny, chiefly of a dark blackish-brown color; having a broad nose, and harsh coarse straight hair. The inhabitants of the southern islands, and of most of the Indian islands.

H. niger, black, of black complexion, having frizzly hair, a flat nose, and thick lips. The whole inhabitants of Africa, excepting those of its more northern parts. This variety is ranked by Dr. Gmelin third in order, though in the gradation of color it certainly should be last.

HOMODROMUS VECTIS, or lever, in mechanics, is a lever in which the weight and power are both on the same side of the fulcrum as in the lever of the second and third kinds; being so called because here the weight and power move both in the same direction, whereas in the heterodromus they move in opposite directions.

HOMOGE'NEAL, *adj.* / HOMOGE'NEOUS, *adj.* / HOMOGE'NEALNESS, *n. s.* / HOMOGENE'ITY, *n. s.* / HOMOGE'NEOUSNESS, *n. s.* / HOMOG'ENY, *n. s.* — Fr. *homogene*; Gr. ομογενης. Showing the same nature or principles; similitude of kind: thus blood is said to be an homogeneous fluid. Homogeny, a word obsolete, signifies joint nature.

The means of reduction, by the fire, is but by congregation of *homogeneal* parts. *Bacon.*

By the driving back of the principal spirits, which preserve the consistence of the body, their government

is dissolved, and every part returneth to his nature or *homogeny*. *Id.*

Ice is a similary body, and *homogeneous* concretion, whose material property is water.

Browne's Vulgar Errours.

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.*

An *homogeneous* mass of one kind is easily distinguishable from any other; gold from iron, sulphur from allum, and so of the rest. *Woodward.*

The mixtures require a greater degree of fluidity and similarity, or *homogeneity* of parts. *Arbuthnot.*

Upon this supposition of only different diameters, it is impossible to account for the *homogeneity* or similarity of the secerned liquors. *Cheyne.*

HOMOLOGATION, from ὁμολογια, consent, in the civil law, the act of confirming or rendering a thing more valid and solemn, by publication, repetition, or recognition thereof.

HOMO'LOGOUS, *adj.* Fr. *homologue*; Gr. ομολογος. Having the same manner or proportions.

HOMO'NYMOUS, *adj.* Fr. *homonyme*; Gr. ομωνυμος. Denominating different things; equivocal; ambiguous.

As words signifying the same thing are called synonymous, so equivocal words, or those which signify several things, are called *homonymous*, or ambiguous; and when persons use such ambiguous words, with a design to deceive, it is called equivocation. *Watts.*

HONAN, a province of China, bounded on the north by that of Petcheli and Chansi, on the west by Chansi, on the south by Houquang, and on the east by Chantong. Every thing that can contribute to render a country delightful is said to be united in this province; the Chinese therefore call it Tong-hoa, or the middle flower; it is situated indeed almost in the centre of China. The ancient emperors, invited by the mildness of the climate and the beauty of the country, fixed their residence here for a time. But the abundance of its fruits, pastures, and corn, the effeminacy of its inhabitants who are accounted extremely voluptuous, and the cheapness of provisions, have prevented trade from being so flourishing here as in the other provinces. The whole country is flat, excepting towards the west, where there is a long chain of mountains, covered with thick forests; and the land is in such a high state of cultivation, that those who travel through it imagine they are walking in an immense garden. Besides the Hoangho, which runs through this province, it is watered by a great number of springs and fountains. It has also a valuable lake, which is frequented by a prodigious number of workmen, because its water is said to have the property of communicating a lustre to silk, which cannot be imitated. Exclusive of forts, castles, and places of strength, this province contains eight fou, or cities of the first class, and 102 of the second and third. In one of these cities, named Nanyang, is found a kind of serpent, the skin of which is marked with small white spots: the Chinese physicians steep it in wine, and use it as a remedy against the palsy.

HONDEKOETER (Melchior), a famous Dutch painter, born at Utrecht in 1637, who excelled in painting animals, and especially birds. His father and grandfather were of the same profession. He was trained up to the art by his father; but surpassed not only him, but even the best of his contemporaries in a very high degree. Till he was seventeen years of age he continued under the direction of his father, and accustomed himself to paint birds in an elegant variety of actions and attitudes: and after his father's death, in 1653, he received instruction from his uncle, John Baptist Weeninx. His pencil was wonderfully neat and delicate; his touch light; his coloring exceedingly natural, lively, and remarkably transparent; and the feathers of his fowls were expressed with such a swelling softness as might readily and agreeably deceive the eye of any spectator. It is reported that he had trained up a cock to stand in any attitude he wanted to describe, and that he used to place the creature near his easel; so that at the motion of his hand the bird would fix itself in the proper posture, and would continue in that particular position, without the smallest perceptible alteration, for several hours together. His pictures sell at a high price, and are much sought after. He died at Utrecht in 1695, aged fifty-nine.

HONDIUS (Jesse), an eminent letter-founder, and engraver on copper and ivory, born in Flanders in 1563. He was author of a work entitled Descriptio Geographica Orbis Terrarum, published in folio, in 1607. He died in 1611.

HONDURAS, a province of the former kingdom of Guatimala, New Spain, now a portion of the central United States of North America, is bounded on the north by the bay of this name, which separates it from Yutacan; east by the Caribbean Sea; south by the province of Nicaragua; and west by Vera Paz. Its length is about 390 miles; and its breadth, from north to south, about 150 miles. Here Columbus landed, 14th August, 1502, on his fourth voyage, and took formal possession of the country for the king of Spain.

What is properly called the coast of Honduras extends from the Gulf of Anatic to Cape Honduras, where commences the Mosquito shore. The Mosquito Indians, who inhabit it, entertain that implacable enmity to the Spaniards, which has always prevented the latter from attempting any establishments on the coast. The only place of any consideration on this coast is San Fernando de Omoa, a large fort on a convenient bay; a fine river runs close to it, but it is the most unhealthy part of the coast from the stagnant waters. Truxillo is a town a mile from the sea, between two rivers abounding in fish: its port is safe, and the most frequented of the coast of Honduras.

The soil here is of great fertility, producing three crops of maize a-year; but the climate is hot, moist, and unhealthy to Europeans. The pasturage, as may be supposed, is luxuriant in the highest degree; and the precious metals have been found in the mountains. The chief products are mahogany log, and various dye woods, dyeing drugs, wool, cotton, wax, and honey. The rivers, which are numerous, abound in fish.

The indigenous inhabitants are idle and profligate: when first found by the Spaniards they were wholly careless of any other food than roots

and insects, and soon became addicted to drunkenness.

Great Britain took possession of the Mosquito shore for eighty years, ending in 1788, and the Spaniards have always reckoned this a part of Honduras. Cape Gracios a Dios was the place where the British first established themselves, in the terrritory of Honduras Proper, in 1730. They then also fixed a colony about seventy-eight miles from Cape Honduras, or 162 miles from Cape Gracios a Dios. Farther south, at Bluefields River, 210 miles from the first colony, they afterwards found a fine harbour, an extensive river, and a natural situation for a fort, with spacious, beautiful, and fruitful plains. The Indians are largely employed by the British in striking the manati, or sea-cow, for the sake of the oil: they are much attached to the English; and being, after long and exterminating contests, driven into the mountains by their Spanish invaders, they never revisited the coast till the latter took possession of the shore. The same tribes inhabit nearly the whole coast of Honduras; but the most numerous tribe exists near Cape Gracios a Dios. The chief towns are Valladolid, or Comayaguas, Truxillo, Gracios a Dios, Omoa, or St. Francisco de Omoa.

Honduras Bay is that gulf of the Caribbean Sea between the peninsula of Yucatan and Cape Honduras. The English claim the right of cutting logwood on the coast of all this gulf, from Cape Catoche, on an island at the north-east point of Yucatan, to the river St. Juan in 12°, which has several times occasioned disputes with the Spanish government. The first adventurers in this business were persons of desperate fortunes and characters, who fled from the West India Islands; and who, during the season of inactivity on shore, pursued the business of piracy. In 1722 the Spaniards destroyed their establishments, and put to death all the persons they found in them; but, another settlement being formed, Spain at last was prevailed on to tolerate it within certain limits, and with the stipulation of building no forts. The former are, by treaty of 1783, the district between the Rio Hondo and the River Ballize, or Wallis of the English, the course of the rivers being the fixed boundaries: this district is a great plain full of lakes and swamps. The River Ballize has a course of 200 miles; and at its mouth is the grand establishment of the English for cutting mahogany, composed of wooden dwellings. See Ballize.

The trees are cut at the wet season of the year, and, after being dragged from the forests to the banks of the rivers, they are made into rafts and floated to the shore. These rafts frequently consist of 200 logs, and are floated as many miles; and, when the floods are unusually rapid, they sometimes break asunder, and the whole of the wood is hurried away to sea. But the mahogany obtained here is not equal in quality to that procured from the Spaniards. A few particulars of the mode of obtaining it will, however, be interesting.

The gangs of negroes employed in the work consist of from ten to fifty each; few exceed the latter number. The larger bodies are commonly divided into several small ones: a plan which, it is supposed, facilitates labor. Each gang has one belonging to it who is styled the huntsman. He is generally selected from the most intelligent of his fellows: and his chief occupation is to search the woods, or, as in this country it is termed, the bush, to find labor for the whole. A negro of this description is often valued at more than £500. About the beginning of August the huntsman is despatched on his errand; and, if his owner be working on his own ground, this is seldom an employment of much delay. He cuts his way through the thickest of the woods to the highest spots, and climbs the tallest tree he finds, from which he minutely surveys the surrounding forests. At this season the leaves of the mahogany tree are invariably of a yellow-reddish hue; and an eye accustomed to it can discover, at a great distance, the places where the wood is most abundant. He now descends, and to such places his steps are directed; when without compass, or other guide than what observation has imprinted on his recollection, he never fails to reach the exact point to which he aims.

It is common to cut the mahogany tree about twelve feet from the ground, and a stage is erected for the axe-man employed. This, to an observer, would appear a labor of much danger, but it is seldom that any accident happens to the person engaged in it. The body of the tree, from the dimensions of the wood it furnishes, is deemed the most valuable; but, for purposes of an ornamental kind, the branches or limbs are preferred, the grain of these being much closer, and the veins richer. The last day of cutting down the trees, if the negroes have not been disturbed in their labor, is always one of festivity and merriment.

In the short intervals of leisure which now succeed they are employed in the improvement of their dwellings or huts composed of a few sticks and leaves, or in search of game, in which they are generally successful. The more ingenious turn their attention to the manufacture of small articles from the less valuable mahogany. The growth of the logwood here is extremely rapid, so much so that it is said to attain maturity in five or six years, when it is cut and sent to Europe in logs of a few feet long.

Besides the mahogany and logwood tree, Honduras Bay produces two or three kinds of the mangrove, as the red, white, and black. The first is preferred for the firmness of its texture, and its extreme durability. Its bark is little inferior to oak bark, when applied to the purpose of tanning. Cedars are large and abundant, and are commonly used in ship-building. The palmetto, the sapadilla, and the sea-grape trees, are all also found very useful. Large pines of a superior quality abounded in many places. The bullet-tree, the iron-wood-tree, the calabash-tree, and the button-wood tree, are also valuable. The althea grows at a considerable distance from the coast, and is generally made into rafts for floating the log-wood to the sea. The bark is also woven into ropes, which are nearly equal in strength and durability to those made of hemp. The tree that exudes the resinous sub-

stance called caoutchouc, or elastic gum, from which Indian-rubber is made, grows plentifully in several provinces of Guatimala, particularly in various parts of Honduras. In addition to these may be enumerated the locust-tree, the fustic, the cocoa-nut-tree, the cabbage, and the silk-cotton-trees, besides which both trees and shrubs of a medicinal nature grow in great variety and profusion.

The banana-bird is much admired for the beauty of its plumage, and the rice-bird rivals the oriolan in flavor. The shores abound with aquatic birds of different kinds. But one of the most singular sights exhibited by the feathered race is in the myriads of swallows that are found in some parts during the periodical rains, particularly in Honduras. These birds rest for the night among the rushes of some watery savannah, and as soon as the dawn appears they quit their retreat in a body, and always rise to a certain height, in a spiral and compact form, which at a distance resembles an immense volume of smoke, after which they disperse for the day. Their descent to their resting places is at sunset, and is made much in the same way, but with almost inconceivable rapidity. The noise that accompanies it can only be compared to the falling of a vast torrent, or the rushing of a mighty wind. The humming-bird is seen in most of its splendid varieties, and the oxilis, one of the most minute and beautiful of this elegant tribe, is very common. The number of fish, insects, and reptiles, is also great.

The approach to this coast, and particularly to the Bay of Honduras, is attended with imminent danger; the difficulty of the navigation indeed is demonstrated by the numerous remains of vessels that have been wrecked on the different reefs and keys which are dispersed along it. During the continuance of north-winds, the danger becomes much increased. The weather at such seasons is usually hazy; and the currents, which in this part of the world are peculiarly governed by the influence of the winds, run with such extraordinary and unequal rapidity, as frequently disappoints all calculation. It is also worthy of remark, that so deceitful are the different keys found, from the general resemblance they bear to each other, that the most experienced seaman, when placed amongst them, often becomes fatally perplexed. Indeed, on making this coast, it is very unsafe to proceed without a pilot.

On taking a departure from Honduras, the hazard becomes, if possible, greater. The first object to attain in this instance is to make what are called the Northern Triangles, or three keys immediately close together, of a form analogous to that which their name imports, and distant in a N. N. E. direction about ten leagues from Ballize. A further stretch is then made for Cape Antonio, on the west side of Cuba. The making of this last place is considered as the most important object on the voyage homeward. Vessels who cannot do this are often driven into the gulf of Mexico, and not unfrequently remain becalmed there for many weeks, or have to beat up for the gulf of Florida.

HONE, *n. s.* This word Casaubon derives from Gr. *ακονη*; Junius from Welsh *hogsaen*; Skinner, who is always rational, from Saxon þæn, a stone; hænan to stone.—Johnson. There can be no question that Skinner is right as to the immediate origin of this word: the Goths had also *hein*, a whetstone. A whetstone for a razor.

A *hone* and a parer to pare away grass. *Tusser.*

To **HONE**, *v. n.* Sax. þonʒian. To pine; to long for any thing.

HONE (George Paul), a German lawyer, born at Nuremburg in 1662. He was bailiff of Cobourg, and counsellor to the duke of Meiningen. His chief works are, 1. Lexicon Topographicum Franconiæ. 2. History of the duchy of Saxe-Cobourg. He died at Cobourg in 1747.

HON'EST, *adj.* } Fr. *honeste*; Lat. *honestus*. Upright; just; sincere; candid; chaste; fair; open. Honest is the most familiar and universal term, applied alike to actions and principles.—*Crabb.*
HON'ESTLY, *adv.* }
HON'ESTY, *n. s.* }

Thus Walter lowly, nay but really,
Wedded with fortunat *honestetee*,—
In Goddes pees liveth ful esily
At home, and grace ynough outward had he:
And for he saw that under low degree
Was *honest* virtue hid, the people him held
A prudent man, and that is seen ful seld.
Chaucer. The Clerkes Tale.

Follow not, therefore, the common reputation of *honesty*. If you will seem *honest*, be *honest*; or else seem as you are. Seek not the name without the thing; nor let the name be the only mark you shoot at. *Wyatt's Letters to his Son.*

Thou shalt not have thy husband's lands.
—Why, then mine *honesty* shall be my dower.
Shakspeare.

What art thou?
A very *honest*-hearted fellow, and as poor as the king.
Id.

Wives may be merry, and yet *honest* too. *Id.*

It doth make me tremble,
There should those spirits yet breathe, that when they cannot
Live *honestly*, would rather perish basely. *Ben Jonson.*

An *honest* physician leaves his patient, when he can contribute no further to his health. *Temple.*

Goodness, as that which makes men prefer their duty and their promise before their passions or their interest, and is properly the object of trust, in our language goes rather by the name of *honesty*; though what we call an *honest* man, the Romans called a good man; and *honesty*, in their language, as well as in French, rather signifies a composition of those qualities which generally acquire honor and esteem.
Id.

Tate will subscribe, but fix no certain day,
He's *honest*, and as wit comes in, will pay. *Tate*

Heaven that made me *honest*, made me more
Than ever king did, when he made me love.
Rowe's Jane Shore.

For some time past all proposals from private persons to advance the public service, however *honestly* and innocently designed, have been called flying in the king's face. *Swift.*

The way to relieve ourselves from those sophisms, is an *honest* and diligent enquiry into the real nature and causes of things. *Watts.*

If you come for our thanks, take them and hence,
The dungeon gloom is deep enough without you,
And full of reptiles not less loathsome, though
Their sting is *honester*. *Byron.*

HON EY, *n. s.* & *v. n.*
HON'IED, *adj.*
HON'EY-BAG, *n. s.*
HON'EY-COMB, *n. s.*
HON'EY-COMBED, *adj.*
HON'EY-DEW, *n. s.*
HON'EY-FLOWER, *n. s.*
HON'EY-GNAT, *n. s.*
HON'EY-MOON, *n. s.*
HON'EY-SUCKLE, *n. s.*
HON'EYLESS, *adj.*
HON'EY-WORT, *n. s.*

Sax. þunig; Belg. *honig*; Germ. *honec*, *honag*. This word is found in all the Gothic and Teutonic dialects. A thick, viscous, fluid substance, produced by bees. See APIS. Honied, covered with honey: sweet; luscious. To honey is to talk fondly. Honeyless being without honey. The several compounds have specific meanings: Honey-bag, the stomach. Honey-comb, the cells of wax in which the bee stores her honey. Honey-combed is a term used respecting a piece of ordnance flawed with little cavities by being ill cast. Honey-dew, a sweet dew which rests on leaves and flowers at particular seasons. Honey-flower, a plant. Honey-gnat, an insect. Honey-moon, the first month after marriage, when there is nothing but tenderness and pleasure. Honey-suckle, Lat. *caprifolium*, woodbine. Honey-wort a plant. It hath a perennial root, and the appearance of a shrub. This plant produces large spikes of chocolate-coloured flowers in May, in each of which is contained a large quantity of black sweet liquor, from whence it is supposed to derive its name.—*Miller*.

The Swalowe, murderer of the beies smale,
That maken *honie* of floures freshe of hewe.
Chaucer. The Assemblie of Foules.

What do ye, *honeycombe*! swete Alisoun?
My faire bird! my swete sinamoune!
Id. The Milleres Tale.

Bid her steal into the pleached bower,
Where *honey-suckles*, ripened by the sun,
Forbid the sun to enter; like to favourites,
Made proud by princes, that advance the pride
Against the power that bred it. *Shakspeare.*

The king hath found
Matter against him, that for ever mars
The *honey* of his language. *Id.*

A *honey* tongue, a heart of gall,
Is fancy's spring, but sorrow's fall. *Id.*

Nay, but to live
In the rank sweat of an incestuous bed,
Stewed in corruption, *honeying* and making love
Over the nasty sty. *Id. Hamlet.*

So work the *honey* bees,
Creatures that by a ruling nature teach
The art of order to a peopled kingdom. *Id.*

Honey! you shall be well desired in Cyprus;
I've found great love amongst them. Oh, my sweet!
I prattle out of fashion, and I dote. *Id. Othello.*

But for your words, they rob the Hybla bees,
And leave them *honeyless*. *Shakspeare.*

And the mute wonder lurketh in men's ears,
To steal his sweet and *honied* sentences. *Id.*

Touching his education and first fostering, some affirm, that he was fed by *honey* bees.
Raleigh's History.

In ancient time there was a kind of *honey*, which, either of its own nature, or by art, would grow as hard as sugar, and was not so luscious as ours.
Bacon.

The bee with *honied* thigh.
That at her flow'ry work doth sing. *Milton.*

Watch upon a bank
With ivy canopied, and interwove
With flaunting *honey-suckle*. *Id.*

That even would cut their throats like selfish slaves whom
Now they fawn on;
Like deadly locusts eat the *honey up*
Which those industrious bees so hardly toiled for.
Otway's Orphan.

Why, *honey* bird, I bought him on purpose for thee.
Dryden.

Then melfoil beat and *honey-suckles* pound;
With these alluring savours strew the ground. *Id.*

When the patient is rich, there is no fear of physicians about him as thick as wasps to a *honey* pot.
L'Estrange.

There is a *honey-dew* which hangs upon their leaves, and breeds insects. *Mortimer.*

The *honey-bag* is the stomach, which bees always fill to satisfy, and to spare, vomiting up the greater part of the *honey* to be kept against winter. *Grew.*

How *honey-dews* embalm the fragrant morn,
And the fair oak with luscious sweets adorn.
Garth.

A man should keep his finery for the latter season of marriage, and not begin to dress till the *honey-moon* is over. *Addison.*

A mariner having discharged his gun which was *honey-combed*, and loading it suddenly again, the powder took fire. *Wiseman.*

Honey is the most elaborate production of the vegetable kind, being a most exquisite vegetable sope, resolvent of the bile, balsamick, and pectoral: *honey* contains no inflammable spirit, before it has felt the force of fermentation; for by distillation it affords nothing that will burn in the fire. *Arbuthnot.*

New wine, with *honey*-tempered milk, we bring;
Then living waters from the crystal spring. *Pope.*

The milliners who furnish drapery Misses,
Throughout the season, upon speculation
Of payment ere the *honey-moon's* last kisses
Have waned into a crescent's coruscation,
Thought such an opportunity as this is
Of a rich foreigner's inclination
Not to be overlooked:—and gave such credit
That future bridegrooms swore and sighed and paid it.
Byron.

HONEY, as a medicine, is a very useful detergent and aperient, powerfully dissolving viscid juices, and promoting the expectoration of tough phlegm. In some particular constitutions it has an inconvenience of griping, or of proving purgative; which is said to be in some measure prevented by previously boiling the honey. This, however, with all constitutions, is by no means effectual; and the circumstance has had so much weight with the Edinburgh College, that they do not now employ it in any preparation, and have entirely rejected the mella medicata, substituting syrups in their place: but honey is doubtless very useful in giving form to different articles, although there are some individuals with whom it may disagree. In order, however, to obtain the good effects of the honey itself, it must be used to a considerable extent, and as an article of diet. The following remarkable instances of the good effects of honey in some asthmatic cases are given by Dr. Monro, in his Medical and Pharmaceutical Chemistry:—'The late Dr. John Hume, one of the commissioners of the sick and hurt of the royal navy, was for many years violently afflicted with an asthma. Having taken many medicines, without receiving relief, he at last resolved to try the effects of honey, having long had a great opinion of its virtues as

a pectoral. For two or three years he ate some ounces of it daily, and got entirely free of his asthma, and likewise of a gravelly complaint with which he had been long afflicted. About two years after he had recovered his health, when he was sitting one day in the office for the sick and hurt, a person laboring under a great difficulty of breathing, who looked as if he could not live many days, came to him and asked him by what means he had been cured of his asthma. Dr. Hume told him the particulars of his own case, and mentioned to him the means by which he had found relief. For two years after he heard nothing of this person, who was a stranger to him, and had seemed so bad that he did not imagine that he could have lived many days, and therefore had not even asked him who he was; but, at the end of that period, a man seemingly in good health, and decently dressed, came to the sick and hurt office, and returned him thanks for his cure, which he assured him had been entirely brought about by the free use of honey.'

Honey-Dew, a term frequently applied to a clammy saccharine substance, which is often seen covering the leaves and other parts of different kinds of trees and plants, at some particular seasons of the year. It does not appear that the cause of this extraordinary appearance is yet fully understood, as it has not by any means been well ascertained whether it derives its origin from external circumstances, or some morbid affection of the vegetables themselves. It is generally, however, supposed to be the production of insects. See Aphis.

Honey-Suckle. See Lonicera.

Honey-Suckle, African Fly. See Halleria.

Honey-Suckle, American Upright. See Azalea.

Honey-Suckle, French. See Hedysarum.

Honey-Suckle Grass. See Trifolium.

Honey-Wort. See Cerinthe, and Sison.

HONFLEUR, a sea-port of France, in the department of Calvados (Normandy), the chief place of the canton and arrondissement of Pont-l'Eveque. It has a tribunal of commerce and of inferior causes, an exchange, several foreign vice-consulates, a school of navigation of the fourth class, and is a post-town containing 10,000 inhabitants. High water at nine o'clock, at the full and change.

This town is beautifully situated on the left bank of the Seine, near the spot where it empties itself into the channel; and has an excellent port, capable of containing from thirty to thirty-five vessels. The tide rises from twenty to twenty-two feet from the open sea to the basin of the port, which is furnished with flood-gates to retain the waters at every height. The two beacons on the moles have been replaced by two light-houses. There are regular passage-boats every day between this port and Havre. On the side of Grâce there are beautiful walks on the sea-shore, commanding extensive views of the ocean and of both banks of the Seine from its mouth. Honfleur was anciently well fortified and endured several sieges: in 1440 the generals of Charles VII. took it from the English, and in 1594 it was the last place that submitted to Henry IV.

It has manufactures of lace, and is celebrated for sea biscuits; sulphate of iron and sulphuric acid are made here: it has also sugar refineries, vinegar breweries, tan yards, oil mills, rope grounds, and yards for ship-building. Its commerce consists in corn, cider, melons, sea fish, salt provisions, red and salted herrings, and building wood: it is the mart for colonial produce. It fits out vessels for the cod and whale-fisheries, and for the colonies; and has an export and import trade with the different maritime powers of Europe and America. It is about thirty-six miles north-east of Caen, fifty-one west of Rouen, nine south-east of Havre, and 144 north-west of Paris.

HONIMOA, or Uliasser, one of the Molucca Islands; nine miles long, and three and a half broad. It is fertile in rice and cloves.

HONITON, a borough of Devonshire, with a market on Saturday, and a fair in July. A dreadful fire happened there in July 1747, which consumed three parts of the town: the damage was computed at £43,000. It has one church, half a mile from the town; and a large manufactory of bonelace. Just before the entrance into the town, from London, is a hill which commands one of the most beautiful prospects in the kingdom. Honiton has sent two members to parliament since the 28th of Edward I. It is seated on the Otter, 148 miles W. S. W. of London.

HON'OR, *n. s.* & *v. a.*
Hon'orary, *adj.*
Hon'orable, *adj.*
Hon'orableness, *n. s.*
Hon'orably, *adv.*
Hon'orer, *n. s.*

Fr. *honneur*, Latin *honor*. These terms respect the principle which actuates men in the adjustment of their rights, and are derived from the Heb. *hon*, substance or wealth. Honor extends to every thing estimable or entitled to esteem.—Crabb. Honor is dignity; reputation; magnanimity; reverence; chastity; dignity of mien; glory; public marks of respect; privileges and titles of rank or birth; civilities; decorations: on my honor is a form of protestation used by the lords in judicial decisions instead of an oath; hence a common pledge for the veracity of the speaker: to honor is to reverence; dignify; glorify, or make illustrious: honorable, free from taint or reproach; honest without intention of deceit; all the other acceptations of honor belong to it: honorary is often used as conferring honor without gain; as honorary secretary, &c.

He was called our father, and was continually *honored* of all men, as the next person unto the king. *Esth.* xvi. 11.

The poor man is *honoured* for his skill, and the rich man is *honoured* for his riches. *Ecclus.* x. 30.

He that is *honoured* in poverty, how much more in riches? *Id.* 31.

As he was *honourable* in all his acts, so in this that he took Joppe for an haven. 1 *Mac.* xiv. 5.

Honour honoureth him for his noblesse. *Chaucer. The Complaint of Venus.*

Also thou shalt not swere for envie, neyther for favour ne for nede,—but only for rightwisnesse, and for declaring of trouthe to the *honour* and worship of God. *Id. The Persones Tale.*

Not fer fro thilke paleis *honourable*,
Wher as this markis shope his marriage,
Ther stood a thorpe, of sight delitable. *Id.*
Sith this wretched woman overcome,
Of anguish, rather than of crime hath been,
Preserve her cause to her eternal doom;
And in the mean vouchsafe her *honourable* tomb.
Spenser.

They take thee for their mother,
And every day do *honour* to thy grave. *Shakspeare.*
His grace of Canterbury,
Who holds his state at door, 'mongst pursuivants.
—Ha! 'tis he, indeed!
Is this the *honour* they do one another? *Id.*
Be the *honour* flawed,
I have three daughters, the eldest is eleven;
If this prove true, they'll pay for it. *Id.*
She dwells so securely on the excellency of her *honour*, that the folly of my soul dares not present itself: she is too bright to be looked against. *Id.*
My hand to thee, my *honour* on my promise. *Id.*
Thinkest thou it *honourable* for a nobleman
Still to remember wrongs? *Id.*
Thou happy father,
Think that the clearest gods, who make them *honours*
Of man's impossibilities, have preserved thee. *Id.*
Return unto thy Lord,
Bid him not fear the separated councils:
His *honour* and myself are at the one;
And at the other is my good friend Catesby. *Id.*
Henry the seventh, truly pitying
My father's loss, like a most royal prince,
Restored to me my *honours*; and, from ruins,
Made my name once more noble. *Id.*
We nourish 'gainst our senate
The cockle of rebellion, insolence, sedition,
Which we ourselves have plowed for, sowed and scattered,
By mingling them with us, the *honoured* number. *Id.*
If that thy bent of love be *honourable*,
Thy purpose marriage, send me word to-morrow. *Id.*
Now shall I see thy love; what motive may
Be stronger with thee than the name of wife?
—That which upholdeth him, that thee upholds,
His *honour*. Oh, thine *honour*, Lewis, thine *honour*.
Id.

Methinks I could not die any where so contented as in the king's company, his cause being just and his quarrel *honourable*. *Id.*
Sir, I'll tell you,
Since I am charged in *honour*, and by him
That I think *honourable*. *Id.*
The reverend abbot,
With all his convent, *honourably* received him. *Id.*

Here's a Bohemian Tartar tarries the coming down of thy fat woman:—let her descend, my chambers are *honourable*. *Id.*

A man is an ill husband of his *honour*, that entereth into any action, the failing wherein may disgrace him more than the carrying of it through can *honour* him.
Bacon.

After some six weeks, which the king did *honourably* interpose, to give space to his brother's intercession, he was arraigned of high treason, and condemned.
Id.

The earl sent again to know if they would entertain their pardon, in case he should come in person, and assure it: they answered, they did conceive him to be so *honourable*, that from himself they would most thankfully embrace it. *Hayward.*

Close to him pleasing went with painted face,
And *honour* by some hidden cunning made;
Not *honour's* self, but *honour's* semblance base,
For soon it vanished like an empty shade.
Fletcher's Purple Island.

Two of far nobler shape, erect and tall,
Godlike erect! with native *honour* clad
In naked majesty, seemed lords of all. *Milton.*
Therefore with manlier objects we must try
His constancy, with such that have more show
Of worth, of *honour*, glory, and popular praise,
Rocks whereon greatest men have oftest wrecked.
Id.

Riches and *honour* they from laymen reap
And with dull crambo feed the silly sheep.
Marvell.

Then warlike kings, who for their country fought,
And *honourable* wounds from battle brought.
Dryden.

Many of those persons, who put this *honourable* task on me, were more able to perform it themselves.
Id.

He saw his friends, who whelmed beneath the waves,
Their funeral *honours* claimed, and asked their quiet graves. *Id.*
The sire then shook the *honours* of his head,
And from his brows damps of oblivion shed. *Id.*
'Tis just ye gods! and what I well deserve!
Why did I not more *honourably* starve? *Id.*

A late eminent person, the *honour* of his profession for integrity and learning. *Burnet's Theory.*

This monument is only *honorary*, for the ashes of the emperor lie elsewhere. *Addison on Italy.*

Honour's a sacred tie, the law of kings
The noble mind's distiguishing perfection,
That aids and strengthens virtue where it meets her,
And imitates her actions where she is not:
It is not to be sported with. *Id. Cato.*

Honours were conferred upon Antonine by Hadrian in his infancy. *Wotton's Roman History.*

If by *honour* is meant any thing distinct from conscience 'tis no more than a regard to the censure and esteem of the world. *Rogers.*

This is a duty in the fifth commandment, required towards our prince and our parent, under the name of *honour*; a respect, which, in the notion of it, implies a mixture of love and fear, and, in the object, equally supposes goodness and power. *Id.*

Such discourses, on such mournful occasions as these, were instituted not so much in *honour* of the dead, as for the use of the living. *Atterbury.*

Numbers engage their lives and labours, some to heap together a little dirt that shall bury them in the end; others to gain an *honour*, that at best can be celebrated but by an inconsiderable part of the world, and is envied and calumniated by more than 'tis truly given. *Wake's Preparation for Death.*

How loved, how *honoured* once, avails thee not.
Pope.

I must not omit Mr. Gay, whose zeal in your concern is worthy a friend and *honourer*. *Id.*
Then here a slave, or if you will a lord,
To do the *honours*, and to give the word. *Id.*
——— there is a woman
Worthy a brave man's liking. Were ye such
You would have *honoured* her.
Byron. Deformed Transformed.

Honor is used for a mark of esteem or submission, expressed by words, actions, and exterior behaviour, by which we make known the respect we entertain for a person on account of his dignity or merit. The word is used in general for the esteem due to virtue, glory, and reputation. It is also used for virtue and probity themselves, and for an exactness in performing whatever we have promised. Virtue and Honor were deified among the ancient Greeks and

Romans, and had a joint temple consecrated to them at Rome: but afterwards each of them had separate temples, which were so placed that no one could enter the temple of Honor without passing through that of Virtue; by which the Romans were continually put in mind that virtue is the only direct path to true glory. Plutarch tells us that the Romans, contrary to their usual custom, sacrificed to Honor uncovered; perhaps to denote, that, wherever honor is, it wants no covering, but shows itself openly to the world.

Honor, in the beau monde, has a meaning materially different from the above, and which it is easier to illustrate than define. It is however subject to a system of rules, called the laws of honor, constructed by people of fashion, calculated to facilitate their intercourse with one another, and for no other purpose. Consequently nothing is considered as inconsistent with honor, but what tends to incommode its intercourse. Hence, as Paley very properly states the matter, profaneness, neglect of public worship or private devotion, cruelty to servants, rigorous treatment of tenants or other dependents, want of charity to the poor, injuries done to tradesmen by insolvency or delay of payment, with numberless examples of the same kind, are accounted no breaches of honor; because a man is not a less agreeable companion for these vices, nor the worse to deal with in those concerns which are usually transacted between one gentleman and another. Again, the law of honor being constituted by men occupied in the pursuit of pleasure, and for the mutual convenience of such men, will be found, as might be expected from the character and design of the law-makers, to be, in most instances, favorable to the licentious indulgence of the natural passions. Thus it allows of fornication, adultery, drunkenness, prodigality, duelling, and revenge in the extreme; and lays no stress upon the opposite virtues.

The king is styled the fountain of honor, as being the source of honors, dignities, &c. See Prerogative. Although the origin of all sovereignty is in the people, yet it is absolutely impossible that government can be maintained without a due subordination of rank. The British constitution has therefore entrusted the king with the sole power of conferring dignities and honors, in confidence that he will bestow them only upon such as deserve them. Hence all degrees of nobility, of knighthood, and other titles, are received by immediate grant from the crown: either expressed in writing, by writs or letters patent, as in the creation of peers and baronets; or by corporeal investiture, as in the creation of a simple knight. From the same principle also arises the prerogative of erecting and disposing of offices; for honors are in their nature convertible and synonymous. All offices under the crown carry, in the eye of the law, an honor along with them; because they imply a superiority of abilities, being supposed to be always filled with those who are most able to execute them. In fact all honors, in their original, had duties or offices annexed to them; an earl, comes, was the conservator or governor of a county; and a knight, miles, was bound to attend the king in his wars. For the same reason, therefore, that honors are in the disposal of the king, offices ought to be so likewise; and, as the king may create new titles, so may he create new offices; but with this restriction, that he cannot create new offices with new fees annexed to them, nor annex new fees to old offices; for this would be a tax upon the subject, which cannot be imposed but by act of parliament. Wherefore, in 13 Hen. IV., a new office being created by the king's letters patent for measuring cloths, with a new fee for the same, the letters patent were, on account of the new fee, revoked and declared void in parliament. Upon the same or like ground the king has also the prerogative of conferring privileges upon private persons: such as granting places or precedence to any of his subjects, or converting aliens, or persons born out of the king's dominions, into denizens; whereby some very considerable privileges of natural born subjects are conferred upon them. Such also is the prerogative of erecting corporations; whereby a number of private persons are united together, and enjoy many liberties, powers, and immunities in their political capacity, which they were incapable of in their natural.

Honor, Maids of, are young ladies in the queen's household, whose office is to attend the queen when she goes abroad, &c. In Britain they are six in number, and their salary is £300 a year each.

Honor Point, in heraldry, is that next above the centre of the escutcheon, dividing the upper part into two equal portions.

Honors of War, in a siege, is when a governor, having made a long and vigorous defence, is at last obliged to surrender the place to the enemy for want of men and provisions, and makes it one of his principal articles to march out with the honors of war; that is, with shouldered arms, drums beating, colors flying, and all the baggage, &c.

Honors, Military. All armies salute crowned heads in the most respectful manner, drums beating a march, colors and standards dropping, and officers saluting. Their guards pay no compliment, except to the princes of the blood; and even that by courtesy, in the absence of the crowned head. To the commander in chief the whole line turns out without arms, and the camp-guards beat a march, and salute. To generals of horse and foot, they beat a march, and salute; lieutenant-generals of ditto, three ruffs, and salute; major-generals of ditto two ruffs, and salute; brigadiers of ditto one ruff and salute; colonels of ditto, rested arms, and no beating. Sentinels rest their arms to all field-officers, and shoulder to every officer. All governors that are not general officers, in all places where they are governors, have one ruff, with rested arms; but for those who have no commission as governors, no drum beats. Lieutenant-governors have the main-guard turned out to them with shouldered arms. The admiral or commander-in-chief of his majesty's fleet, is to rank with a field-martial of the army. The admirals, with their flags on the main-top-mast-head, are to have rank with generals. Vice-admirals are to have rank as lieutenant-generals

Rear-admirals are to have rank as major-generals. Commodores, with broad pendants, are to have rank as brigadier-generals.

Captains commanding post ships, after three years from the date of their first commission for a post ship, are to have rank as colonels. All other captains, commanding post ships, are to have rank as lieutenant-colonels. Captains of his majesty's ships or vessels, not taking post, are to have rank as majors. Lieutenants of his majesty's ships are to have rank as captains.

The rank and precedence of sea officers, in the classes above-mentioned, are to take place according to the seniority of their respective commissions.

No land officer is to command any of his majesty's squadrons or ships, nor any sea-officer to command at land; nor shall either have a right to demand military honors due to their respective ranks, unless they are upon actual service.

All guards and sentinels are to pay the same compliments to the officers of the royal navy as are directed to be paid to the officers of the army, according to their relative ranks.

The compliments above directed are to be paid by the troops to officers in the service of any power in alliance with his majesty according to their respective ranks.

The honors paid by sentinels to the officers when encamped, or in garrison, are—Field-marshals; two sentinels, with ordered firelocks, at their tent or quarters. Generals of horse or foot; two sentinels, one with his firelock shouldered, the other ordered. Lieutenant-generals; one, with firelock ordered. Major-generals; one, with firelock shouldered. The first battalion of guards go under arms to the king only; not to stand by, nor draw up in the rear of their arms to any other; nor to give sentinels to foreigners. Second and third battalions draw up behind their arms to the princes, and to field-marshals; but when on grenadier guards, or out-posts, they turn out, as other guards do, to the officers of the day. They give one sentinel with shouldered arms to the princes of the blood, and to field-marshals when they lie alone in garrison.

Honorable, a title conferred on the youngest sons of earls, the sons of viscounts and barons; as also on such persons as have the king's commission, and upon those who enjoy places of trust and honor. Members of the king's privy council are styled right honorable.

Honorary is often applied to persons who bear some title or office merely for the name's sake, without performing any of its functions, or receiving any advantage from it; such as honorary counsellors, honorary fellows, &c.

HONORIACI, in antiquity, an order of soldiery in the eastern empire, who introduced the Goths, Vandals, Alani, Suevi, &c., into Spain. Didymus and Verinianus, two brothers, had, with great vigilance and valor, defended the passages of the Pyreneans against the Barbarians for some time, at their own expense; but, being at length killed, the emperor Constantius appointed the honoriaci to defend those passages, who, after laying them open to all the nations of the north then ravaging the Gauls, joined those nations themselves.

HONORIUS, the second son of Theodosius the Great, was associated in the empire with his brother Arcadius, A. D. 395. See Rome. He died at Ravenna, A. D. 423, aged thirty-nine.

HONTHEIM (John Nicholas de), a learned author, born at Treves in 1700. He was made suffragan to the archbishop elector, and was a man of great taste and erudition. He wrote, 1. Historia Trevisensis Diplomatica et Pragmatica, 3 vols. folio. 2. A Supplement to it, in 2 vols. folio. 3. De Præsenti Statu Ecclesiæ Liber Singularis, 5 vols. 4to. He died in 1790.

HOOD, in composition, is derived from the Sax. þad; in Germ. *heit;* in Dut. *heid.* It denotes quality; character; condition; as, knighthood; childhood; fatherhood. Sometimes it is written after the Dutch, as maidenhead. Sometimes it is taken collectively: as, brotherhood, a confraternity; sisterhood, a company of sisters.

Hood, *n. s.* & *v. a.* } Sax. þod, probably
Hood'man-blind, *n. s.* } from hepod, head.
Hood'wink, *v. a.* } The upper covering of a woman's head; a monk's cowl; a covering put over the hawk's eyes when he is not to fly; an ornamental fold that hangs down the back of a graduate, to mark his degree: to hood, to dress in a hood; to blind; to cover: hoodman-blind a play in which the person hooded is to catch another, and tell the name; blindman's buff: hoodwink, to blind with something bound over the eyes; to cover; hide; deceive; impose upon.

A white cote and a blew *hode* wered he.
Chaucer. Prologue to Cant. Tales.

While grace is saying, I'll *hood* mine eyes
Thus with my hat, and sigh, and say, Amen.
Shakspeare.

What devil was't,
That thus hath cozened you at *hoodman blind?*
Id.

Be patient; for the prize I'll bring thee to,
Shall *hood-wink* this mischance. *Id.*

We will bind and *hood-wink* him so, that he shall suppose he is carried into the leaguer of the adversaries. *Id.*

So have I seen, at Christmas sports, one lost,
And *hood-winked,* for a man embrace a post.
Ben Jonson.

Then might ye see,
Cowls, *hoods,* and habits, with their wearers tost,
And fluttered into rags. *Milton's Paradise Lost.*

She delighted in infamy, which often she had used to her husband's shame, filling all men's ears, but his, with reproach; while he, *hood-winked* with kindness, least of all men knew who struck him. *Sidney.*

They willingly *hood-winking* themselves from seeing his faults, he often abused the virtue of courage to defend his foul vice of injustice. *Id.*

An hollow crystal pyramid he takes,
In firmamental waters dipt above;
Of it a broad extinguisher he makes,
And *hoods* the flames that to their quarry strove.
Dryden.

In velvet, white as snow, the troop was gowned:
Their *hoods* and sleeves the same. *Id.*

Prejudice so dexterously *hood-winks* men's minds as to keep them in the dark, with a belief that they are more in the light. *Locke.*

Must I wed Rodogune?
Fantastick cruelty of *hood-winked* chance!
Rowe.

Satan is fain to *hood-wink* those that start.
Decay of Piety.

The cobler aproned, and the parson gowned,
The friar *hooded*, and the monarch crowned.
Pope.

On high, where no hoarse winds or clouds resort,
The *hood-winked* goddess keeps her partial court.
Garth.

He undertook so to muffle up himself in his *hood*, that none should discern him. *Wotton.*

Let due civilities be paid,
The wall surrender to the *hooded* maid. *Gay.*

The lacerna came, from being a military habit, to be a common dress: it had a *hood*, which could be separated from and joined to it. *Arbuthnot.*

Then she who hath been *hood-winked* from her birth,
Doth first herself within death's mirrour see.
Davies.

Hood (Robert, or Robin), a famous outlaw and deer-stealer, who chiefly harbored in Sherwood forest, in Nottinghamshire. He was a man of family, which, by his pedigree, appears to have had some title to the earldom of Huntingdon; and lived about the end of the twelfth century. He was famous for archery, and for his treatment of all travellers who came in his way, levying contributions on the rich, and relieving the poor. Falling sick at last, and requiring to be blooded, he is said to have been betrayed, and bled to death. He died in 1247, and was buried at Kirklees in Yorkshire, then a Benedictine monastery, where his gravestone is still shown.

Hood (Samuel Lord Viscount), an English admiral, entered as a midshipman in the navy in 1740, and six years after was promoted to a lieutenancy; in 1754 he was made master and commander, and in 1759 post-captain. His father, we believe, was a clergyman in Devonshire. In 1778 he had the office of commissioner of Portsmouth dock-yard bestowed on him, but resigned it two years after, and was employed in the West Indies, where he preserved the isle of St. Christopher's from being taken by count de Grasse, and was a rear-admiral at the defeat of that officer by Rodney, April 12th 1782. His services were now rewarded with an Irish peerage. In 1784 he was M.P. for Westminster; but vacated his seat in 1788 on obtaining the appointment of a lord of the admiralty. In 1793 he signalised himself by the taking of Toulon, and afterwards Corsica; in reward for which he was made a viscount, and governor of Greenwich hospital. He died at Bath in 1816.

HOOF, *n. s.* } Sax. þoꝛ; Dut. *hoef*; Teutonic *huff*. The hard horny substance on the feet of graminivorous animals. Hoofed, furnished with hoofs. Hoof-bound, a disease to which horses are subject.
Hoof'ed *adj.*
Hoof'-bound, *adj.*

With the *hoofs* of his horses shall he tread down all thy streets. *Ezek.* xxvi. 11.

The bull and ran know the use of their horns, as well as the horse of his *hoofs*. *More.*

Among quadrupeds, the roe-deer is the swiftest; of all the *hoofed* the horse is the most beautiful; of all the clawed the lion is the strongest. *Grew.*

Now I behold the steed curvet and bound,
And paw with restless *hoof* the smoking ground.
Gay.

A horse is said to be *hoof-bound* when he has a pain in the fore-feet, occasioned by the dryness and contraction or narrowness of the horn of the quarters, which straitens the quarters of the heels, and oftentimes makes the horse lame. A *hoof-bound* horse has a narrow heel, the sides of which come too near one another, insomuch that the flesh is kept too tight, and has not its natural extent. *Farrier's Dictionary.*

And long upon my startled ear
Rung his dark courser's *hoofs* of fear.
Byron. The Giaour.

HOOFT (Peter Cornelius Van), an eminent historian and poet, born in Amsterdam in 1581. He was lord of Muyden, and judge of Goyland. He died at the Hague in 1647. He wrote, 1. History of the Netherlands, from the Abdication of Charles V. to the year 1588. 2. Several Comedies, and Poems. 3. Historia Henrici IV. for which Louis XIII. made him a knight of St. Michael. 4. A Translation of Tacitus into Dutch.

HOOGEVEEN (Henry), a learned Dutch author, born at Leyden in 1712. His parents, though poor, gave him a good education, and in 1732 he became assistant master in the academy of Gorcum, and in 1738 removed to Culemburg. In 1745 he settled at Breda; in 1761 at Dort; and in 1764 at Delft, where he died in 1794. His works are 1. An Edition of Vigerus de Idiotismis Linguæ Græcæ. 2. Doctrina Particularum Linguæ Græcæ, 2 vols. 4to. 3. Several Latin Poems, &c. 4. Dictionarium Analogicum Græcum. Cambridge 1800.

HOOGHLY, or Saatgong, a district of Bengal, situated between 21° and 23° of N. lat., and extending on both sides of the river Bhagarutty. The coast is swampy and overgrown with jungle; but the northern part is fertile. It is intersected by rivers, and contains two extensive salt manufactories, as well as all the principal towns of the European nations settled in Bengal, on the Bhagarutty.

Hooghly, or Golin, a town of Bengal, once the capital of the foregoing district. It is supposed to have been founded and fortified by the Portuguese in the year 1538, and soon drew away the trade from Saatgong. In the middle of the seventeenth century the emperor Shah Jehan, who was irritated against the Portuguese attacked this place, and after a siege of three months and a half it was taken. In this siege not less than 1000 men of the Portuguese were killed, and 4400 men, women, and children, taken prisoners. On its capture 500 of the best looking young persons were sent to Agra; the girls being distributed among the harems of the emperor and nobility, and the boys forcibly made Mahommedans. Hooghly now became an imperial port: and a special governor was appointed, who, in the course of time, became independent of the provincial authorities. A few years after the English and Dutch obtained permission to erect factories here; when the former imprudently built theirs in the town; but the Dutch made choice of a spot two miles down the river. Hooghly, under the name of Bukhshy Bunder, became at this period the emporium of the greatest part of the trade carried on between Europe, Persia, Arabia, and India. The duties were levied ad valorem at two per cent. from Mahommedans, and three and a half from all others

except the English, who only paid 3000 rupees annually on the whole amount of their trade. At last (1686) a dispute occurred between the imperial troops and the English soldiers, when both parties had recourse to arms. During the conflict, our admiral Nicholson opened a cannonade on the town, which burnt 500 houses, and the British factory, valued at £300,000 sterling. The nabob, who resided at Dacca, was so highly incensed at this, that he ordered all the English factories and property to be confiscated. He also sent a force to expel them from Hooghly; but the English in the mean time embarked all their property and dropt down the river to Chuttanutty, the present Calcutta. At the peace of the following year, the nabob wished the English to return to Hooghly; but they declined the offer, and established themselves at Chuttanutty. In 1696 Hooghly was taken and plundered by the rebels Soobhæ Sing and Rehim Khan, but was soon after recovered by the Dutch and restored to the Mogul government.

Hooghly was governed from this period to the middle of the last century by foujdars, under the nabob of Bengal; and, as it was a place of considerable importance and emolument, they always appointed one of their particular friends. On the 10th of January 1757 it was taken by the British; and after retaken by the nabob Serajead-dowleh: in the month of June it was again taken possession of by the British. They nevertheless afterwards permitted the nabobs Meer Jaffier and Cossim Aly to appoint the foujdars; but in 1765, when the East India Company was appointed by the emperor dewan or collector of the revenues of Bengal, Bahar, and Orissa, they transferred the port duties from Hooghly to Calcutta: since this period the former has declined. The site of the old English factory is occupied by a handsome jail. Long. 80° 28′ E., lat. 22° 24′ N.

Hooghly River, or the Bhagirutty is a river of Bengal, formed by the junction of the Ganges, the Dummooda, and Roopnarain rivers. The entrance is extremely dangerous and difficult, by reason of the sand-banks, frequently shifting; and which it would be the height of folly in the captain of any ship to attempt to pass without a pilot. The spring tides run up with great violence, advancing at the rate of fifteen miles an hour, and frequently overset boats. The effect is called by the natives Hooma. It gives notice of its approach by a rumbling noise: and the mode of escaping its fury is by getting into deep water, and facing it. The tide does not extend more than thirty miles above Calcutta. There are several kinds of good fish caught in this river; but it also abounds with crocodiles and sharks. At Calcutta it is about three quarters of a mile broad; but at the mouth eight or ten miles wide. Few rivers have a more extensive commerce than it carries on; but it is only navigable for ships as high as the tide reaches. It is esteemed by the Hindoos the most sacred branch of the Ganges: and those who cannot afford to burn their dead, throw their bodies into it.

HOOGSTRATTEN (David Van), professor of belles lettres at Amsterdam, was born at Rotterdam in 1658. He published, 1. Poems in Latin. 2. Poems in Flemish. 3. A Latin Flemish Dictionary. 4. Notes upon Nepos and Terence. 5. A fine edition of Phædrus, for the prince of Nassau, in the style of the classics in usum Delphini. In the evening of Nov. 13th, 1724, he fell into a canal, and, though immediately taken out, died within eight days after, from the cold and fright.

HOOK, *n. s.* & *v. a.* } Hook'ED, *adj.* } Hook'EDNESS, *n. s.* } Hook'NOSED, *adj.* } Sax. hoc; Bel. *hoeck*; Teutonic *hoeke*. Any thing bent so as to catch hold: as a shepherd's hook, and pot-hooks; the curvated wire on which the bait is hung for fishes; a snare; an iron to seize the meat in the caldron, called a flesh-hook; a sickle; an instrument to lop branches of trees; the part of the hinge fixed to the post: hence the saying 'off the hooks' for in disorder or out of temper. Hook, a field sown two years running: hook-or-crook, one way or other. To hook, to catch; entrap; fasten; draw out, whether by force or artifice. Hooked, bent; curvated. Hook-nosed, having the aquiline nose-rise in the middle.

Among the ropes, ran the shering *hokes*;
* * * * * * *
* * * * * * *
He sticketh him upon his speres ordes:
He rent the saile with *hokes* like a sithe:
He bringeth the cuppe and biddeth hem be blith.
Chaucer. Legende of Good Women.

Successours to Peter ben these
In that, that Peter Christe forsoke,
That leven had Gods love to lese
Than shepherde had to lese his *hoke*;
He culleth the shepe as doth the coke
Of hem seken the woll to rende,
And falsely glose the Gospell boke;
God for his mercy hem amende!
Chaucer. The Plowmannes Tale.

Then came to them a good old aged syre,
Whose silver lockes bedeckt his beard and hed,
With shepheard's *hooke* in hand in fit attyre.
Spenser's Faerie Queene.

About the caldron many cooks accoiled,
With *hooks* and ladles, as need did require;
The while the viands in the vessel boiled. *Id.*

Like unto golden *hooks*,
That from the foolish fish their baits do hide.
Spenser.

This falling not, for that they had not far enough undermined it, they assayed with great *hooks* and strong ropes to have pulled it down. *Knolles.*

My bended *hook* shall pierce
Their slimy jaws. *Shakspeare.*

I may justly say with the *hooknosed* fellow of Rome there, Cæsar, I came, saw, and overcame.
Id. Henry IV.

A shop of all the qualities that man
Loves woman for, besides that *hook* of wiving,
Fairness, which strikes the eye. *Shakspeare.*

But she
I can *hook* to me. *Id. Winter's Tale.*

Though divine Plato thus of pleasures thought,
They us with *hooks* and baits, like fishes caught.
Denham.

Which he by *hook* or *crook* had gathered,
And for his own inventions fathered. *Hudibras.*

Gryps signifies eagle or vulture; from whence the epithet grypus, for an *hooked* or aquiline nose.
Browne

Now thou threatenest, with unjust decree,
To seize the prize which I so dearly bought:
Mean match to thine; for still above the rest,
Thy *hooked* rapacious hands usurp the best.
Dryden.

He would bring him by *hook* or *crook* into his quarrel. *Id.*

She was horribly bold, meddling, and expensive, easily put *off the hooks*, and monstrous hard to be pleased again. *L'Estrange.*

Pease are commonly reaped with a *hook* at the end of a long stick. *Mortimer.*

Caterpillars have claws and feet: the claws are *hooked*, to take the better hold in climbing from twig to twig, and hanging on the backsides of leaves. *Grew.*

The huge jack he had caught was served up for the first dish: upon our sitting down to it, he gave us a long account how he had *hooked* it, played with it, foiled it, and at length drew it out upon the bank. *Addison.*

Let me less cruel cast the feathered *hook*
With pliant rod athwart the pebbled brook,
Silent along the mazy margin stray
And with the fine-wrought fly delude the prey.
Gay's Rural Sports.

Not that I'd lop the beauties from his book,
Like flashing Bentley with his desperate *hook*.
Pope.

While Sheridan is *off the hooks*,
And friend Delany at his books. *Swift.*

Hooks of a Ship are all those forked timbers which are placed directly upon the keel, as well in her run as in her rake. Can-hooks are those which being made fast to the end of a rope with a noose (like that which brewers use to sling or carry their barrels on), are made use of for slings. Loof-hooks are a tackle with two hooks; one to hitch into a cringle of the main or fore sail, in the bolt-rope at the leech of the sail by the clew; and the other is to hitch into a strap, which is spliced to the chess tree. Their use is to pull down the sail, and succour the tackles in a large sail and stiff gale, that all the stress may not bear upon the tack. It is also used when the tack is to be seized more secure, and to take off or put on a bonnet or drabbler.

Hook (James), a musician of Norwich, was born 1746, and studied the science which he afterwards professed under Garland, organist to the cathedral of that city. His musical productions amount to more than 140 complete works. Of these the principal are The Ascension, an oratorio, 1776: Cupid's Revenge, a pastoral, 1772; Lady of the Manor, 1778; Jack of Newbury, 1795; Wilmore Castle, 1800; Soldier's Return, 1805; Operas. Tekeli, a melodrame; The Siege of St Quentin; Music Mad; and several other dramatic pieces, besides upwards of 2000 songs.

HOOKAH, in eastern customs, a pipe of peculiar construction, through which tobacco is smoked. Out of a small vessel, of a bell or globular form, and nearly full of water, issue two tubes, one perpendicularly, on which is placed the tobacco; the other obliquely to which the person who smokes applies his mouth; the smoke by this means, being drawn through water, is cooled in its passage and rendered more grateful. The hookah is known and used throughout the East; and it is frequently an implement of a very costly nature, being of silver, and set with precious stones: in the better kind, that tube which is applied to the mouth is very long and pliant, and is termed the snake; people who use it in a luxurious manner, fill the vessel through which the smoke is drawn with rose-water, and it thereby receives some of the fragrant quality of that fluid. They are now becoming common in this country, and may be had at every tobacconist's.

HOOKE (Nathaniel), author of a well known Roman History, was a Roman Catholic by profession, and much attached to the doctrines of quietism and mysticism taught by Fenelon. The only particulars of his early life now known are furnished in the following letter to the earl of Oxford, dated October 7, 1722: 'My lord, the first time I had the honor to wait upon your lordship since your coming to London, your lordship had the goodness to ask me, what way of life I was then engaged in; a certain mauvaise honte hindered me at that time from giving a direct answer. The truth is, my lord, I cannot be said at present to be in any form of life, but rather to live extempore. The late epidemical distemper seized me' (alluding to the unfortunate adventure of the South Sea Scheme); 'I endeavoured to be rich; imagined for a while that I was, and am in some measure happy to find myself at this instant but just worth nothing. If your lordship, or any of your numerous friends, have need of a servant, with the bare qualifications of being able to read and write, and to be honest, I shall gladly undertake any employments your lordship shall not think me unworthy of. I have been taught, my lord, that neither a man's natural pride, nor his self-love, is an equal judge of what is fit for him; and I shall endeavour to remember, that it is not the short part we act, but the manner of our performance, which gains or loses us the applause of Him who is finally to decide of all human actions. My lord, I am just now employed in translating from the French a History of the Life of the late archbishop of Cambray; and I was thinking to beg the honor of your lordship's name to protect a work which will have so much need of it. The original is not yet published. It is written by the author of the Discourse upon Epic Poetry, in the new edition of Telemaque. As there are some passages in the book of a particular nature, I dare not solicit your lordship to grant me the favor I have mentioned, till you first have perused it. The whole is short, and pretty fairly transcribed. If your lordship could find a spare hour to look it over, I would wait upon your lordship with it, as it may possibly be no unpleasing entertainment. I should humbly ask your lordship's pardon for so long an address in a season of so much business. But when should I be able to find a time in which your lordship's goodness is not employed? I am, with perfect respect and duty, my lord, your lordship's most obliged, most faithful, and most obedient humble servant, Nathaniel Hooke.' The translation here spoken of was afterwards printed in 13mo, 1723. From this period till his death Mr. Hooke enjoyed the confidence and patronage of men not less distinguished by virtue than by titles. He published

a Translation of Ramsay's Travels of Cyrus, in 4to.; in 1733 he revised a translation of The History of the Conquest of Mexico by the Spaniards, by Thomas Townsend, esq.; printed in 2 vols. 8vo.; and in the same year he published, in 4to., the first volume of The Roman History, from the building of Rome to the ruin of the Commonwealth; illustrated with maps and other plates. In the dedication to this volume, Mr. Hooke took the opportunity of telling Pope, that the displaying his name at the head of those sheets was 'like the hanging out a splendid sign, to catch the traveller's eye, and entice him to make trial of the entertainment the place affords.' The volume is introduced by Remarks on the History of the Seven Roman Kings, occasioned by Sir Isaac Newton's objections to the supposed 244 years duration of the royal state of Rome. His nervous pen was next employed in digesting An Account of the conduct of the Dowager duchess of Marlborough, from her first coming to Court to the year 1710, in a letter from herself to lord ——, in 1742, 8vo.; her grace was so well pleased with this performance, that she complimented the author with a present of £5000, a sum which far exceeded his expectations. The second volume of his Roman History appeared in 1745; to which Mr. Hooke added The Capitoline Marbles, or Consular Calendars, an ancient Monument accidentally discovered at Rome in the year 1545, during the Pontificate of Paul III. In 1758 he published Observations on, 1. The Answer of M. l'Abbé de Vertot to the late earl of Stanhope's Enquiry concerning the Senate of ancient Rome: dated December 1719. 2. A Dissertation upon the Constitution of the Roman Senate, by a Gentleman: published in 1743. 3. A Treatise on the Roman Senate, by Dr. Conyers Middleton: published in 1747. 4. An Essay on the Roman Senate, by Dr. Thomas Chapman: published in 1750; which he inscribed to Mr. Speaker Onslow. The third volume of Mr. Hooke's Roman History, to the end of the Gallic war, was printed under his inspection before his last illness; but did not appear till after his death, which happened in 1764. The fourth and last volume was published in 1771. Mr. Hooke left two sons; of whom one was a divine of the church of England; the other a doctor of the Sorbonne, and professor of astronomy in that formerly illustrious seminary.

Hooke (Robert), an eminent English mathematician and philosopher, was born in the Isle of Wight, in 1635. He very early discovered a genius for mechanics, by making curious toys with great art and dexterity. He was educated under Dr. Busby in Westminster school; where he acquired Greek and Latin, with Hebrew and some other oriental languages; and made himself master of a great part of Euclid's Elements. About 1653 he went to Christ Church in Oxford, and in 1655 was introduced to the Philosophical Society there; who first employed him to assist Dr. Wallis in his operations in chemistry, and afterwards recommended him to the honorable Robert Boyle, whom he served several years in the same capacity. He was also instructed in astronomy about this time by Dr. Seth Ward, and henceforward distinguished himself by many mechanical inventions and improvements. He invented several astronomical instruments for making observations both at sea and land; and was particularly serviceable to Mr. Boyle in completing the invention of the air-pump. Sir John Cutler having founded a mechanical school, in 1664, he settled an annual stipend on Mr. Hooke for life, entrusting the president, council, and fellows of the Royal Society, to direct him with respect to the number and subject of his lectures; and on the 11th of January, 1664, 1665, he was elected by that society curator of experiments for life, with an additional salary. The rebuilding of the city of London after the dreadful fire in 1666 requiring an able person to set out the ground to the proprietors, Mr. Hooke was appointed one of the surveyors. Mr. Oldenburgh, secretary to the Royal Society, dying in 1677, Mr. Hooke was appointed to supply his place, and began to take minutes at the meeting in October, but did not publish the Transactions. In 1691 he was employed in forming the plan of the hospital near Hoxton, founded by Robert Aske, alderman of London, who appointed archbishop Tillotson one of his executors; and in December, the same year, Hooke was created M. D. by a warrant from that prelate. In 1696 an order was granted to him for repeating most of his experiments at the expense of the Royal Society, upon a promise of his finishing the observations, and deductions from them, and of perfecting the description of all the instruments contrived by him; but his increasing illness and general decay rendered him unable to perform it. He continued some years in this wasting condition, till he was quite emaciated. He died March 3rd, 1702, at his lodgings in Gresham College, and was buried in St. Helen's church, Bishopsgate Street, his funeral being attended by all the members of the Royal Society, then in London. He wrote, 1. Lectiones Cutlerianæ. 2. Micrographia, or Descriptions of minute bodies made by magnifying glasses. 3. A Description of Helioscopes. 4. A Description of some Mechanical Improvements of Lamps and Water Poises. 4to. 5. Philosophical Collections. After his death were published, 6. Posthumous works collected from his papers by Richard Waller, secretary to the Royal Society.

HOOKER (John), was born in Exeter, about 1524. He was instructed in grammar by Dr. Moreman, vicar of Menhiniot in Cornwall, and thence removed to Oxford. He next travelled to Germany, and resided some time at Cologne, where he kept exercises in law, and graduated. Thence he went to Strasburg, where he studied divinity under the famous Peter Martyr. He now returned to England, and soon after visited France, intending to proceed to Spain and Italy; but was prevented by a declaration of war. Returning therefore again to England, he fixed his residence in his native city, where, having married, he was in 1554 elected chamberlain, being the first person who held that office, and in 1571 represented his fellow-citizens in parliament. He died in 1601, and was buried in the cathedral at Exeter. He wrote, among other works, 1. Order and Usage of keeping of Parliaments in Ireland. 2. The events of Comets or Blazing

Stars, made upon the sight of the Comet Pagonia, which appeared in November and December, 1577. 3. An addition to the Chronicles of Ireland from 1546 to 1568; in the second volume of Holinshed's Chronicles. 4. A Description of the city of Exeter, and of the Sondrie Assaults given to the same; Holinshed's Chronicle, vol. III. 5. A Book of Ensigns. 6. Translation of the History of the Conquest of Ireland, from the Latin of Giraldus Cambrensis; in Holinshed's Chronicle, vol. ii. 7. Synopsis Chorographica, or an Historical record of the province of Devon; never printed.

Hooker (Richard), a learned divine, nephew to the preceding, born at Heavytree, near Exeter, in 1553. By his uncle he was first supported at the University of Oxford, with the addition of a small pension from Dr. Jewel, bishop of Salisbury, who in 1561 got him admitted one of the clerks of Corpus Christi College. In 1573 he was elected scholar. In 1577 he took the degree of M. A. and was admitted fellow. In July, 1579, he was appointed deputy professor of the Hebrew language. In 1581 he took orders; and, being appointed to preach at St. Paul's cross, he came to London, where he was unfortunately drawn into a marriage with Joan Churchman, the termagant daughter of his hostess. Having thus lost his fellowship he continued in the utmost distress till 1584, when he was presented by John Cheny, esq. to the rectory of Drayton-Beauchamp, in Buckinghamshire. In this retirement he was visited by Mr. Edwin Sandys, and Mr. George Cranmer, his former pupils. They found him, with a Horace in his hand, tending some sheep in the common, his servant having been ordered home by his Xantippe. They attended him to his house; but were soon deprived of his company by an order from his wife for him to come and rock the cradle. Mr. Sandys's representation to his father of his tutor's situation, procured him the mastership of the Temple. Here he met with considerable molestation from one Travers, lecturer of the Temple, and a bigoted Puritan, who in the afternoon endeavoured to confute the doctrine he had delivered in the morning. From this disagreeable situation he solicited archbishop Whitgift to remove him to some country retirement, where he might prosecute his studies in tranquillity. Accordingly, in 1591 he obtained the rectory of Boscomb in Wiltshire, together with a prebend in the church of Salisbury, of which he was also made sub-dean. In 1594 he was presented to the rectory of Bishops-Bourne in Kent, where he died in 1600. He was buried in his parish church, and a monument erected to his memory by William Cooper, Esq. He wrote, 1. Ecclesiastical Polity, in eight books. 2. A Discourse of Justification, &c., with two sermons, Oxford, 1612, 4to. 3. Several other sermons printed with the Ecclesiastical Polity.

Hooker, in naval architecture, a vessel much used by the Dutch, built like a pink, but rigged and masted like a hoy. Hookers will lie nearer a wind than vessels with cross sails can do. They are from fifty to 200 tons burden, and with a few hands will sail to the East Indies.

HOOLE (John), a poet and translator of some celebrity, was born in London, December 1727, and was the son of a watchmaker. He acquired at a private boarding school an accurate knowledge of the Latin and French languages, and at the age of seventeen entered as a clerk at the East India House, where he closely studied the Italian language. He commenced the translation of the Jerusalem Delivered of Tasso in 1758, and published it in 1763. The dedication to the queen was composed by Dr. Johnson. In 1767 he published a translation of six dramas of Metastasio, in 2 vols.; and the next year brought out his tragedy of Cyrus; Timanthes in 1770, and Cleone in 1775, all equally unsuccessful dramatic efforts. In 1773 he published the first volume of his Orlando Furioso, the farther progress of which was impeded by his advancement to the auditorship of the Indian accounts; he however concluded it in 1783, in 5 vols. 8vo. In 1785 he wrote the life of his friend, Mr. Scott, of Amwell, and having retired from the India House, after a service of forty-two years, he took up his abode, with his wife and son, at the parsonage-house of Abinger, near Dorking. Here he connected the narrative of his Orlando in twenty-four books, and disposed the stories in a regular series. In 1792 he translated Tasso's Rinaldo, and ended his litarary labors with a Collection of dramas from Metastasio: but his translations are considered meagre and spiritless. He died respected in 1803.

HOOP, *n. s.* & *v. a.* } Sax. þop; Swed. *hop*;
Hoop'er, *n. s.* } Belg. *hoep*. Any thing circular by which something else is bound, particularly casks or barrels; the whalebone with which women extend their petticoats; a farthingale; any thing circular. Hooper, a cooper, one that hoops tubs. Hoop, to encircle; clasp; surround; bind or enclose with hoops.

Thou shalt prove a shelter to thy friends,
A *hoop* of gold to bind thy brothers in,
That the united vessel of their blood
Shall never leak. *Shakspeare. Henry IV.*

If I knew
What *hoop* would hold us staunch, from edge to edge
O' the' world, I would pursue it. *Shakspeare.*

A quarrel, ho, already! what's the matter?
— About a *hoop* of gold, a paltry ring. *Id.*

If ever henceforth thou
Shalt *hoop* his body more with thy embraces,
I will devise a death. *Id. Winter's Tale.*

The three-*hooped* pot shall have ten *hoops*, and I will make it felony to drink small beer. *Shakspeare.*

The casks for his majesty's shipping were *hooped* as a wine-cask, or *hooped* with iron. *Raleigh.*

I *hoop* the firmament, and make
This my embrace the zodiack. *Cleaveland.*

To view so lewd a town, and to refrain,
What *hoops* of iron could my spleen contain!
Dryden.

That shelly guard, which *hoops* in the eye, and hides the greater part of it, might occasion his mistake. *Grew.*

I have seen at Rome an antique statue of Time, with a wheel or *hoop* of marble in his hand.
Addison.

And learned Athens to our art must stoop,
Could she behold us tumbling through a *hoop*.
Pope.

At coming in you saw her stoop:
The entry brushed against her *hoop*. *Swift.*
All that *hoops* are good for is to clean dirty shoes, and to keep fellows at a distance. *Clarissa.*

HOOP, *v. n.* & *v. a.* } Goth. *wopgan* or
HOOP'ING-COUGH, *n. s.* } *wopyan*, or French *houpper*, derived from the Gothic. This word is often written whoop, which is more proper if we deduce it from the Gothic; and hoop if we derive it from the French.—Johnson. To shout; to make an outcry by way of call or pursuit. Hooping-cough, or whooping-cough, from hoop to shout. A convulsive cough, so called from its noise; the chincough.

And, therwithal, they shriked and they *houped*;
It semed as that the heven shulde falle.
Chaucer. The Nonnes Preestes Tale.

Dastard nobles
Suffered me, by the voice of slaves, to be
Hooped out of Rome. *Shakspeare. Coriolanus.*

HOOPER (George), a learned author, born at Grimeley in Worcestershire, about 1640. He was educated at Westminster, studied at Oxford, and was well skilled in mathematics, and the eastern languages. In 1672 he became chaplain to the bishop of Winchester; and soon after to archbishop Sheldon; and in 1677 almoner to the princess of Orange, whom he accompanied to Holland. In 1691 he was made dean of Canterbury; and in 1702 bishop of Bath and Wells. He wrote, 1. The Church of England free from the imputation of Popery; 2. A Discourse concerning Lent; 3. New danger of Presbytery; 4. An Enquiry into the state of the Ancient Measures; 5. De Valentinianorum hæresi conjecturæ; 6. Several sermons; and 7. An Enquiry into the state of the Ancient Measures; the Attic, Roman, and Jewish; with an appendix, concerning our old English money and measures; 1721, 8vo. He died in 1727. All his works were printed in 1 vol. folio, at Oxford, 1757.

HOOPER (John), bishop of Worcester, was born in Somersetshire, and educated at Oxford. In 1518 he took the degree of A. B., and afterwards became a Cistercian monk; but, disliking his fraternity, returned to Oxford, and became somewhat of a Lutheran. In 1539 he was made chaplain and steward to Sir John Arundel, who afterwards suffered with the protector in the reign of Edward VI. But that very Catholic knight, as Wood calls him, discovering him to be a heretic, he was obliged to leave the kingdom. After continuing some time in France he returned to England, and lived with a gentleman named Seintlow; but, being again discovered, he escaped in the habit of a sailor to Ireland; thence embarked for the continent, and fixed his abode in Switzerland. Upon Edward's accession, Mr. Hooper returned once more to his native country. In 1550, by his old patron Sir John Arundel's interest with the earl of Warwick, he was consecrated bishop of Gloucester; and in 1552 was nominated to the see of Worcester, which he held in commendam with the former. But Mary had scarce ascended the throne, before he was imprisoned, tried, and condemned to the flames. He suffered at Gloucester on the 9th of February, 1554, being then near sixty years of age. He was an avowed enemy to the church of Rome, and in the former reign had been one of Bonner's accusers.

HOORN, a sea-port town of the Netherlands, in North Holland; in the department of the Texel, and late province of West Friesland. Its name is derived from the curving shape of the port; and it is the capital of an extensive district of North Holland. In 1426 it was surrounded with the walls, and, in 1508, greatly enlarged; but in 1557 it was almost destroyed by a storm and inundation which broke down the dams. In 1577 the harbour was built, which is reckoned the best on the Zuider Zee. The adjacent lands are fertile, and famed for fattening cattle. The town is still fortified, and has five gates, several churches and hospitals. Hence also commences a canal, which leads through Alcmaer to Petten, and connects the Zuider Zee with the North Sea.

The manufactures are of carpets and woollen cloths; ship-building is also extensively carried on. Its trade is in cattle, butter, cheese, and herrings, and is very extensive. This town was entered by a strong body of British (12,000), on the 19th of September, 1799, while the Russians and the remainder of our troops were engaged at Alcmaer in an action which terminated unfavorably; these troops bore a part next day in the second battle of Alcmaer. Hoorn was the birth-place of Schouten the navigator. Population about 9000: fourteen miles east of Alcmaer, and twenty N. N. E. of Amsterdam.

HOORN, or HORN, a town of France in the department of the Lower Meuse, and late bishopric of Liege; three miles west of Ruremond, and twelve south of Venlo. Long. 5° 55′ E., lat. 51° 12′ N.

HOORN, or HORN ISLANDS, two islands in the South Pacific Ocean, on the north of the Friendly Isles, discovered in the year 1616 by Le Maire and Schouten, who landed and staid here some days; their ship lying at anchor at the mouth of a river called, after the name of the vessel, the Gulf of Concord. They are supposed to be the same islands which are called Hamoa by the natives. Long. 171° 30′ E., lat. 15° S.

HOORNBECK (John), professor of divinity in the universities of Leyden and Utrecht, was born at Haerlem in 1617. He was well acquainted with the classical, oriental, and European languages, and published many works; among which are, 1. A refutation of Socinianism, in 3 vols. 4to.; 2. A Treatise for the conviction of the Jews; 3. Of the Conversion of the Heathen; 4. Institutiones Theologicæ, &c. Bayle represents him as a complete model of a divinity professor.

HOOT, *v. n.*, *v. a.*, & *n. s.* Fr. *huer*, *huec*; Welsh *hut*; Swed. *hut*. To shout in contempt; to cry as an owl; to drive with noise and shout. Clamor; noise; shouting.

We loved him; but, like beasts,
Our coward nobles gave way to your clusters,
Who did *hoot* him out o' the' city. *Shakspeare.*

Some keep back
The clamorous owl, that nightly *hoots*, and wonders
At our queint sports. *Id.*

The owl of Rome, whom boys and girls will *hoot!*
That were I set up for that wooden god
That keeps our gardens, could not fright the crows,
Or the least bird, from muting on my head.
Ben Jonson.

Its assertion would be entertained with the *hoot* of the rabble. *Glanville's Scepsis.*

A number of country folks happened to pass thereby, who hollowed and *hooted* after me as at the arrantest coward. *Sidney.*

Matrons and girls shall *hoot* at thee no more.
Dryden.

Partridge and his clan may *hoot* me for a cheat and impostor, if I fail in any particular of moment.
Swift.

When the falling stars are shooting,
And the answered owls are *hooting.*
Byron. Manfred.

HOP, *v. n.* & *n. s.* } Sax. ƿoppan; Teut.
HOP'PERS, *n. s.* } *hoppen*; Swedish, *hoppa.*
HOP'PER, *n. s.* } To jump or skip lightly; to leap on one leg; to walk lamely or halt. A hop is a jump; also a place where meaner people dance. Hopper, he who hops or jumps on one leg; the box or open frame of wood into which the corn is put to be ground, so called because it is always hopping, or in agitation, and which is called in French, for the same reason, tremie or tremue; a basket for carrying seed. 'In Saxon to hoppe signifies exactly the same as to dance, though with us it hath acquired a ludicrous sense; and hopster is a female dancer.'—Notes to Chaucer. Hoppers, commonly called Scotch hoppers, a kind of play in which the actor hops on one leg.

Right by the *hopper* wol I stand
Quod John and seen how that the corn gas in;
Yet, saw I never (by my fader kin)!
How that the *hopper* wagges til and fra.
Chaucer. The Reves Tale.

Yet, saw I brent the shippes *hoppesteres.*
Id. The Knightes Tale.

Softly feel
Her feeble pulse, to prove if any drop
Of living blood yet in her veins did *hop.*
Faerie Queene.

I would have thee gone,
And yet no further than a wanton's bird,
That lets it *hop* a little from her hand,
And with a silk thread plucks it back again.
Shakspeare.

Go, *hop* me over every kennel home;
For you shall *hop* without my custom, sir. *Id.*

Be kind and courteous to this gentleman,
Hop in his walks, and gambol in his eyes. *Id.*

Men with heads like dogs, and others with one huge foot alone, whereupon they did *hop* from place to place. *Abbot.*

I'd sooner trust my fortune with a daw,
That *hops* at every butterfly it sees,
Than have to do in honour with a man
That sells his virtues for a woman's smiles.
Otway.

The painted birds, companions of the spring,
Hopping from spray to spray were heard. *Dryden.*

Your Ben and Fletcher, in their first young flight,
Did no Volpone, nor no Arbaces write;
But *hopped* about, and short excursions made
From bough to bough, as if they were afaid. *Id.*

The limping smith observed the saddened feast,
And *hopping* here and there, himself a jest,
Put in his word. *Id. Homer.*

Just at the *hopper* will I stand,
In my whole life I never saw grist ground,
And mark the clack how justly it will sound.
Betterton.

The salt of the lake Asphaltites shooteth into perfect cubes. Sometimes they are pyramidal and plain, like the *hopper* of a mill. *Grew.*

When my wings are on, I can go above a hundred yards at a *hop*, step, and jump. *Addison.*

I am highly delighted to see the jay or the thrush *hopping* about my walks. *Id. Spectator.*

Why don't we vindicate ourselves by trial or deal, and *hop* over heated ploughshares blindfold?
Collier.

Graminivorous birds have the mechanism of a mill: their maw is the *hopper* which holds and softens the grain, letting it drop by degrees into the stomach.
Arbuthnot on Aliments.

HOP, *n. s.* & *v. a.* Belg. *hop*; Lat. *lupulus*, or perhaps from *hoop*, to bind round. A plant used in the composition of beer: hop to impregnate with hops.

If *hop* yard or orchard ye mind for to have,
For *hop* poles and crotches in lopping to save.
Tusser.

The planting of *hop* yards is profitable for the planters, and consequently for the kingdom. *Bacon.*

Beer hath malt first infused in the liquor, and is afterwards boiled with the *hop.* *Id.*

Next to thistles are *hop* strings, cut after the flowers are gathered. *Derham.*

Brew in October, and *hop* it for long keeping.
Mortimer.

Have the poles without forks, otherwise it will be troublesome to part the *hop* vines and the poles.
Id.

When you water *hops*, on the top of every hill put dissolved dung, which will enrich your *hop* hills.
Id.

In Kent they plant their *hop* gardens with apple-trees and cherry-trees between. *Id.*

The price of hoeing of *hop* ground is forty shillings an acre. *Id.*

Hop holes, the largest sort, should be about twenty foot long, and about nine inches in compass. *Id.*

To increase the milk, diminished by flesh meat, take malt-drink not much *hopped.* *Arbuthnot.*

HOP, in botany, see HUMULUS. Hops were first brought into England from the Netherlands in the year 1524. They are first mentioned in the English statute-book in 1552, viz. in the 5 and 6 of Edw. VI. cap. 5. And by an act of parliament of the first year of king James I. anno 1603, cap. 18, it appears that hops were then produced in abundance in England. The hop being a plant of great importance, we shall consider what relates to the culture and management of it, under distinct heads.

The hop-planters esteem the richest and strongest ground the most proper; and, if it be rocky within two or three feet of the surface, the hops will prosper well; but they will not thrive on a stiff clay or spongy wet land. The Kentish planters esteem new land best for hops; they plant their hop-gardens with apple trees at a large distance, and with cherry trees between; and when the land has done its best for hops, which they reckon it will in about ten years, the trees may begin to bear. The cherry trees last about thirty years, and, by the time the apple trees are large, they cut down the cherries. The Essex planters reckon a moory land the

most proper for hops. As to the situation of a hop-ground, one that inclines to the south or west is the most eligible; but, if it be exposed to the north-east or south-west winds, there should be a shelter of some trees at a distance, because the north-east winds are apt to nip the tender shoots in the spring; and the south-west winds frequently break and blow down the poles at the end of summer, and very much endanger the hops. In winter provide soil and manure for the hop-ground against the following spring. If the dung be rotten mix it with two or three parts of earth, and let it incorporate together till you have occasion to use it in making your hop hills; but, if it be new dung, then let it be mixed as before till the spring in the next year, for new dung is very injurious to hops. Dung of all sorts was formerly more commonly used than it is now, especially when rotted and turned to mould, and they who have no other manure must use it: which if they do, cows' or hogs' dung, or human ordure mixed with mud, may be a proper compost, because hops delight most in manure that is cool and moist.

Hops require to be *planted* in a situation so open as that the air may freely pass round and between them, to dry up and dissipate the moisture, whereby they will not be so subject to fire-blasts, which often destroy the middle of large plantations, while the outsides remain unhurt. As for the preparation of the ground for planting, it should in the preceding winter be ploughed and harrowed even; and then lay upon it in heaps a good quantity of fresh rich earth, or well rotted dung and earth mixed together, sufficient to put half a bushel in every hole to plant the hops in, unless the natural ground be very fresh and good. The hills where the hops are to be planted should be eight or nine feet asunder, that the air may freely pass between them; for in close plantations they are very subject to what the hop-planters call the fire-blast. If the ground is intended to be ploughed with horses between the hills, it will be best to plant them in squares chequerwise; but if it be so small that it may be done with the breast-plough or spade, the holes should be ranged in a quincunx form. Which way soever is adopted, a stake should be stuck down at all the places where the hills are to be made. Great caution should be observed in the choice of the plants, as to the kind of hop; for if the hop-garden be planted with a mixture of several sorts of hops that ripen at different times, it will cause a great deal of trouble, and be a great detriment to the owner. The two best sorts are the white and the gray bind; the latter is a large square hop, more hardy, and is a more plentiful bearer, and ripens later than the former. There is another sort of the white bind, which ripens a week or ten days before the common; but this is tenderer, and a less plentiful bearer; but it has this advantage, that it comes first to market. But if three grounds, or three distant parts of one ground, be planted with these three sorts, there will be this convenience, that they may be picked successively as they become ripe. The sets should be five or six inches long, with three or more joints or buds on them. If there be a sort of hop you value, and would increase plants and sets from, the superfluous binds may be laid down when the hops are tied, cutting off the tops, and burying them in the hill; or, when the hops are dressed, all the cuttings may be saved; for almost every part will grow, and become a good set the next spring. As to the seasons of planting hops, the Kentish planters prefer October and March, both which sometimes succeed very well; but the sets are not to be had in October, unless from some ground that is to be destroyed; and likewise there is some danger that the sets may be rotted, if the winter prove very wet; therefore the most usual time of procuring them is in March, when the hops are cut and dressed. As to the manner of planting the sets, there should be five good sets planted in every hill, one in the middle and the rest round about sloping, the tops meeting at the centre; they must stand even with the surface of the ground; let them be pressed close with the hand, and covered with fine earth, and a stick should be placed on each side the hill to secure it. The ground being thus planted, all that is to be done more during that summer, is to keep the hills clear from weeds, and to dig up the ground in May, and to raise a small hill round about the plants. In June you must twist the young binds or branches together into a bunch or knot; for if they are tied up to small poles the first year, in order to have a few hops from them, it will not countervail the weakening of the plants. A mixture of compost or dung being prepared for hop-ground, the best time for laying it on, if the weather prove dry, is about Michelmas, that the wheels of the dung-cart may not injure the hops, nor furrow the ground: if this be not done then, you must wait till the frost has hardened the ground, so as to bear the dung-cart; and this is also the time to carry on your new poles, to recruit those that are decayed and to be cast out every year. If you have good store of dung, the best way will be to spread it in the alleys all over the ground, and to dig it in the winter following. The quantity they will require will be forty loads to an acre, reckoning about thirty bushels to the load. If you have not dung enough to cover all the ground in one year, you may lay it on one part one year, and on the rest in another, or a third; for there is no occasion to dung the ground after this manner oftener than once in three years. Those who have but a small quantity of dung, usually content themselves with laying on about twenty loads upon an acre every year; this they lay only on the hills, either about November, or in the spring; which last some account the best time, when the hops are dressed, to cover them after they are cut; but, if it be done at this time, the compost or dung ought to be very well rotted and fine. As to the dressing of the hops, when the hop-ground is dug in January or February, the earth about the hills and very near them, ought to be taken away with a spade, that you may come the more conveniently at the stock to cut it. About the end of February, if the hops were planted the spring before, or if the ground be weak, they ought to be dressed in dry weather; but else, if the ground be strong and in perfection, the

middle of March will be a good time; and the latter end of March, if it be apt to produce over rank binds, or the beginning of April may be soon enough. Then having with an iron picker cleared away all the earth out of the hills, so as to clear the stock to the roots, with a sharp knife you must cut off all the shoots which grew up with the binds the last year; and also all the young suckers, that none be left to run in the alley, and weaken the hill. It will be proper to cut one part of the stock lower than the other, and also to cut that part low that was left highest the preceding year. By pursuing this, method you may expect to have stronger buds and also keep the hill in good order. In dressing those hops that have been planted the year before, you ought to cut off both the dead tops and the young suckers which have sprung up from the sets, and also to cover the stocks with fine earth a finger's length in thickness.

About the middle of April the hops are to be *poled*, when the shoots begin to sprout up; the poles must be set to the hills deep into the ground, with a square iron picker or crow, that they may the better endure the winds; three poles are sufficient for one hill. These should be placed as near the hill as may be, with their bending tops turned outwards from the hill, to prevent the binds from entangling; and a space between two poles ought to be left open to the south to admit the sun-beams. The poles ought to be in length sixteen or twenty feet, more or less, according as the ground is in strength; and great care must be taken not to overpole a young or weak ground, for that will draw the stock too much, and weaken it. If a ground be overpoled, you are not to expect a good crop from it; for the branches which bear the hops will grow very little till the binds have over-reached the poles, which they cannot do when the poles are too long. Two small poles are sufficient for a ground that is young. If you wait till the sprouts or young binds are grown to the length of a foot, you will be able to make a better judgment where to place the largest poles; but, if you stay till they are so long as to fall into the alleys, it will be injurious to them, because they will entangle one with another, and will not clasp about the pole readily. Maple or aspen poles are accounted the best for hops, on which they are thought to prosper best, because of their warmth; or else, because the climbing of the hop is promoted by means of the roughness of the bark. But, for durability, ashen or willow poles are preferable; but chestnut poles are the most durable of all. If, after the hops are grown up, you find any of them have been underpoled, taller poles may be placed near those that are too short to receive the binds from them.

As to the *tying* of hops, the buds that do not clasp of themselves to the nearest pole, when they are grown to three or four feet high, must be guided to it by the hand, turning them to the sun, whose course they always follow. They must be bound with withered rushes, but not so close as to hinder them from climbing up the pole. Continue to do this till all the poles are furnished with binds, of which two or three are enough for a pole; and all the sprouts and binds that you have no occasion for are plucked up; but, if the ground be young, then none of these useless binds should be plucked up, but should be wrapped up together in the middle of the hill. When the binds are grown beyond the reach of your hands, if they forsake the poles, you should make use of a stand ladder in tying them up. Towards the end of May, when you have made an end of tying them, the ground must have the summer dressing: this is done by casting up with the spade some fine earth into every hill. A month after this hoe the alleys with a Dutch hoe, and make the hills up to a convenient bigness. About the middle of July hops begin to blow, and will be ready to gather about Bartholomew-tide. A judgment may be made of their ripeness by their strong scent, their hardness, and the brownish color of their seed. When by these tokens they appear to be ripe, they must be picked with all the expedition possible; for if at this time a storm of wind should come, it would do them great damage by breaking the branches, and bruising and discoloring the hops; and it is very well known, that hops picked green and bright will sell for a third more than those which were discolored and brown. The most convenient way of picking them is into a long square frame of wood, called a bin, with a cloth hanging on tenter hooks within it, to receive the hops as they are picked. The frame is composed of four pieces of wood joined together, supported by four legs, with a prop at each end to bear up another long piece of wood, placed at a convenient height over the middle of the bin; this serves to lay the poles upon, which are to be picked. This bin is commonly eight feet long, and three feet broad; two poles may be laid on it at a time, and six or eight persons may work at it, three or four on each side. It will be best to begin to pick the hops on the east or north side of the ground, if you can do it conveniently; this will prevent the south-west wind from breaking into the garden. Having made choice of a plot of ground, containing eleven hills square, place the bin upon the hill which is in the centre, having five hills on each side; and, when these hills are picked, remove the bin into another piece of ground of the same extent, and so proceed till the whole hop-ground is finished. When the poles are drawn up to be picked, take care not to cut the binds too near the hills, especially when the hops are green, because it will make the sap to flow excessively. The hops must be picked very clean, i. e. free from leaves and stalks; and, as there shall be occasion, two or three times in a day the bin must be emptied into a hop-bag made of coarse linen cloth, and carried immediately to the oast or kiln to be dried; for, if they should be long in the bin or bag, they will be apt to heat and be discolored If the weather be hot there should no more poles be drawn than can be picked in an hour, and they should be gathered in fair weather if it can be, and when the hops are dry; this will save some expense in firing, and preserve their color better when they are dried. The crops of hops being thus bestowed, take care of

the poles against another year, which are best to be laid up in a shed, having first stripped off the haulm from them; but if you have not that conveniency, set up three poles in the form of a triangle, or six poles as you please, wide at bottom; and having set them into the ground with an iron picker, and bound them together at the top, set the rest of your poles about them; and, being thus disposed, none but those on the outside will be subject to the injuries of the weather, for all the inner poles will be kept dry, unless at the top; whereas, if they were on the ground, they would receive more damage in a fortnight then by standing all the rest of the year. The best method of drying hops is with charcoal on an oast or kiln, covered with hair-cloth, of the same form and fashion as that used for drying malt. There is no need of particular directions for making these, as every carpenter and bricklayer in those countries where hops grow, or malt is made, knows how to build them. The kiln ought to be square, and may be of ten, twelve, fourteen, or sixteen feet over at the top, where the hops are laid, as the plantation requires, and room will allow. There ought to be a due proportion between the height and breadth of the kiln and the beguels of the steddle where the fire is kept, viz. if the kiln be twelve feet square on the top, it ought to be nine feet high from the fire, and the steddle ought to be six feet and a half square, and so proportionably in other dimensions. The hops must be spread even upon the oast a foot thick or more, if the depth of the curb will allow it; but care must be taken not to overload the oast if the hops be green or wet. The oast ought to be first warmed with a fire before the hops are laid on, and then an even steady fire must be kept under them; it must not be too fierce at first, lest it scorch the hops, nor must it be suffered to sink or slacken, but rather be increased, till the hops be nearly dried, lest the moisture or sweat which the fire has raised fall back and discolor them. When they have lain about nine hours they must be turned, and in two or three hours more they may be taken off the oast. It may be known when they are well dried by the brittleness of the stalks and the easy falling off of the hop leaves. It is found by experience that the turning of hops, though it be after the most easy and best manner, is not only an injury to the hops, but also a waste of fuel and time, because they require as much fuel and as long a time to dry a small quantity, by turning them, as a large one. Now this may be prevented by having a cover to be let down and raised at pleasure to the upper bed whereon the hops lie. This cover may also be tinned, by nailing single tin plates over the face of it; so that when the hops begin to dry, and are ready to burn, i. e. when the greatest part of their moisture is evaporated, then the cover may be let down within a foot or less of the hops like a reverberatory, which will reflect the heat upon them, so that the top will soon be as dry as the lowermost, and every hop be equally dried. As soon as the hops are taken off the kiln lay them in a room for three or four weeks to cool, give, and toughen; for if they are bagged immediately they will powder, but if they lie a while (and the longer they lie the better, provided they be covered close with blankets to secure them from the air) they may be bagged with more safety, not being liable to be broken to powder in treading; and this will make them bear treading the better, and the harder they are trodden the better they will keep. The common method of bagging is as follows: they have a hole made in an upper floor, either round or square, large enough to receive a hop-bag, which consists of four ells and a half of ell-wide cloth, and also contains ordinarily 2½ cwt. of hops; they tie a handful of hops in each lower corner of the bag to serve as handles to it; and they fasten the mouth of the bag, so placed that the hoop may rest upon the edges of the hole. Then he that is to tread the hops down into the bag, treads the hops on every side, another person continually putting them in as he treads them till the bag is full; which being well filled and trodden, they unrip the fastening of the bag to the hoops, let it down, and close up the mouth of the bag, tying up a handful of hops in each corner, as was done in the lower part. Hops being thus packed, if they have been well dried, and laid up in a dry place, will keep good several years; but care must be taken that they be not spoiled by the mice making their nests in them.

In spring, while the bud is yet tender, the tops of the plant being cut off and boiled are eaten like asparagus, and found very wholesome, and of service to loosen the body. The heads and tendrils are good to purify the blood in the scurvy, and most cutaneous diseases; decoctions of the flowers, and syrups thereof, are of use against pestilential fevers; juleps and apozems were formerly made with hops for hypochrondriacal and hysterical affections, and to promote the menses. A pillow stuffed with hops, and laid under the head, is said to procure sleep in fevers attended with a delirium. His late majesty George III. had a pillow of this kind presented for his use in 1787. But the principal use of hops is in the brewery, for the preservation of malt liquors; which, by the superaddition of this balsamic, aperient, and diuretic bitter, become less viscid, less apt to turn sour, more palatable, more disposed to pass off by urine, and in general more salubrious. They are said to contain an agreeable odoriferous principle, which promotes the vinous fermentation. When slightly boiled, or infused in warm water, they increase its spirituosity.

To judge of the quality of hops, observe how far a yellow clamminess, peculiar to this plant, abounds in the sample: the brightest colored hops are not always the best flavored; but purchasers dwell much on the color, which should therefore be preserved as bright as possible. A hop plantation, on a good soil, may be continued from fifteen to thirty years. They in general, however, begin to decline about the tenth year. Some advise that the plantation should then be destroyed, and a fresh one made; others consider it the best plan to break up and plant a portion of new ground every two years, letting an equal quantity of the old be destroyed, as in

this way a regular succession of good plantation will be kept up, and the expense be gradually incurred. For this is a serious consideration; being estimated, in some districts, at from not less than £70 to £100 the acre. The produce is uncertain; often very considerable; but some seasons nothing, after all the labor of culture, except picking, has been incurred. Where the lands are of the proper sort, and there are hop-poles on the farm, and the farmer has a sufficient capital, it is probably a sort of husbandry that may be had recourse to with advantage; but, under the contrary circumstances, hops will seldom answer. 'In growing them in connexion with a farm,' says Mr. Loudon, 'regard should be had to the extent that can be manured without detriment to the other tillage lands. On the whole, hops are an expensive and precarious crop, the culture of which should be well considered before it is entered upon.'

From this useful writer we abstract the following account of the *diseases* of hops. 'It is apt,' he observes, 'in the very early stage of its growth, to be devoured, as it rises above the surface of the ground, by the ravages of an insect of the flea kind. At a more advanced age it is subject to the still more injurious effects of the green or long-winged fly, red spider, and otter moth; the former, by the depositing of their ova, afford the means of producing lice in great abundance; by which the plants are often very greatly, if not wholly destroyed, and the larvæ of the latter prey upon the roots, and thus render the plants weak and subject to disease. The honey-dew is another disease to which the hop is exposed about the same time, and by which it is often much injured. The mould occurs in general at a somewhat later period, being equally injurious. Hop-crops are also exposed to other injuries, as the blight and fire-blast, but which take place at different times, though mostly towards the latter periods of the growth of the plants. The flea, which is said to be an insect of the same kind as that which is so prejudicial to the young turnip, is observed to make the greatest havock in seasons where the nights are cold and frosty, and the days hot and inclined to be dry; eating off the sweet tender tops of the young plants; and which, though not wholly destroyed, shoot forth afterwards in a far less vigorous manner, and of course become more exposed to diseases. It has been found to commit its depredations most frequently on the plants in grounds that have been dunged the same year; on which account it has been suggested that the manure employed for the purpose of covering the hills should be previously well mixed and incorporated as we have directed; and that it should be applied either over the whole of the land, or only the hills, as soon as possible after the plants have been cut over; but the former practice is probably the best. It makes its greatest depredations in the more early cold spring months, at the latter end of April and beginning of the succeeding month, disappearing as the season becomes more mild and warm. In these cases, the principal remedy is that of having the land in a sufficient state of fertility, to enable the young plants to shoot up with such vigor and rapidity as to become quickly incapable of being fed upon and devoured by the insect. And the frequent stirring of the mould about the roots of the plants by the hoe may be of utility in the same view.

'With respect to the green or long-winged fly, it mostly makes its appearance about the latter end of May, and in the two succeeding months; being supposed to be produced by the prevalence of north-easterly winds about that period. It is highly destructive to the young leaves of the plants. They are said, under such a state of the wind, to scarcely ever fail covering the leaves: and, by dropping their ova, producing an abundance of lice, by which the crops are often much injured; as, when they have once obtained complete possession of the plants, they seldom or ever leave them before they are wholly destroyed. The forwardest and most luxuriant hop-vines, are in general the most disposed to be attacked by insects of this sort. Their removal chiefly depends upon a change taking place in the wind more to the south, and the setting in of more mild, warm, and temperate weather.' It has been found that the otter moth, by depositing its eggs upon the roots of the plants, renders them liable to be attacked by the larvæ, and the healthy growth of the hops to be thereby greatly impaired, the crops being of course much injured in their produce. Stirring the earth well about the roots of the plants may probably sometimes be serviceable in cases of this kind.

'The honey-dew mostly occurs after the crops have been attacked by some of these kinds of insects, and when the weather is close, moist, and foggy. In these cases, a sweet clammy substance is produced upon the leaves of the plants, which has the taste of honey, and they have at first a shining appearance, but afterwards soon become black. It is a disease that mostly happens in the more forward crops; and the chief dependence of the planter for its removal, according to Bannister, is that of heavy thunder showers taking place; as by this means, when the destruction of the hops has not proceeded too far, they are often much restored, the insects that devour the leaves and vines being greatly destroyed, the growth of fresh shoots promoted, and a favorable bloom brought on the plants. The fen, mould, or mildew, is a disease to which the hop-crop is exposed at a later period of its growth, and which chiefly attacks the part where the hop is attached to the stem. It is said that its production is greatly promoted by moist damp weather, and a low situation; those hop-crops, that grow in low, close, rich, grounds, being the most liable to be attacked by it: and it is found to soon spread itself over the whole crop, after it has once seized upon any part of it. The nature of this vegetable disease has not been yet sufficiently investigated; it has been suggested by Darwin and Willdenow to be a plant of the fungus kind, that is capable of growing without light or change of air, attaching itself to plants already in a morbid condition, and by its roots penetrating their vessels. And, on this supposition, the best remedy is believed to be that of thinning the plants, in order to afford a more free circulation of air, and admit the light more

extensively; by which the vigor of the hop-plants may be restored, and the disease be of course removed. In this view, it is probable, by planting the hills more thinly, and making them at greater distances from each other, the disease might in some measure be prevented from taking place.

'Diseases termed blights are frequently met with in hop-crops, at different periods of the growth of the plants, but mostly in the more early stages of their rising from the hills, while the nights are cold and frosty in the spring months, and the days have much sun and heat; by which the living powers of the plants are greatly exhausted in the day-time by the stimulus of heat, and of course much injured, or wholly destroyed in the nights, from being exposed to a freezing air, which is incapable of exciting the actions which are necessary for the preservation of vegetable life. As the presence of this disease is supposed to be greatly connected with the prevalence of winds from the northern or easterly quarters, there is often a flea produced of a similar kind to that which attacks the shoots in their early growth. It is highly injurious, by preying upon the nutriment of the blossoms, and thereby diminishing their weight and changing them to a brown color, which is very prejudicial in their sale at the market. The fire-blast is also a disease that hop-crops are exposed to, in the later periods of their growth, and generally supposed to proceed from the particular state of the air or weather. It has been conjectured to be the effect of lightning, as it takes place, for the most part, at those seasons when it is the most prevalent, and in a very sudden manner: and besides, the most forward and most luxuriant vines are the most subject to be affected. It has been suggested, that in exposures that are particularly liable to have the crops thus injured, it may be advisable to plant thinner, to keep back the growth of the plants as much as possible, by extirpating all the most forward shoots, and to employ a less proportion of the earthy compost in their culture.'

The hop-grower has the annoyance of being placed under the excise laws. Every grower of hops in Britain being legally obliged to give notice to the excise, on or before the first day of September, of the number of acres he has in cultivation; the situation and number of his oasts; the place or places of bagging, which, with the store-rooms, or warehouses, in which the packages are intended to be lodged, are entered by the revenue officer. No hops can be removed from the rooms thus entered before they have been weighed and marked by a revenue officer; who marks, or ought to mark, not only the weight, but the name and residence of the grower, upon each package. There is a penalty on importing or using corrupt hops, imposed by stat. 1 Jac. I. c. 18. No bitter is to be used in brewing but hops, by 9 Ann. c. 12, sec. 24; and no hops are to be imported into Ireland from other parts but Great Britain, 5 Geo. II. c. 9. Landing foreign hops, before the duty is paid, incurs the penalty of having the hops burnt, and ship forfeited, 7 Geo. II. c. 19. There is also a penalty on sophisticating hops, 7 Geo. II. c. 19 sec. 2; on cutting hop-binds, 10 Geo. II. c. 32, sec. 4; and by 6 Geo. II. c. 37, sec. 6, this is made a felony, without benefit of clergy. For the duty upon hops see stats. 39 & 40 Geo. III. c. 81; and 48 Geo. III. c. 134 for preventing frauds in the trade of hops: these acts regulate the mode of packing, bagging, and weighing them.

HOPE, *n. s.* & *v. n.* | HOPE'FUL, *adj.* | HOPE'FULLY, *adv.* | HOPE'FULNESS, *n. s.* | HOPE'LESS, *adj.* | HO'PER, *n. s.* | HO'PINGLY, *adv.* } Sax. hopa; Dut. *hope*; Germ. *hoffen*; Gr. οπευω. Expectation of future good attended with pleasure; confidence in a future event, or the future conduct of any person: that which gives hope; the object of hope: to live in expectation or confidence as to the future: hopeful, likely to gratify desire, obtain success, or answer expectation; full of hope: this sense is almost confined to Scotland, though found in good writers: hopeless, without hope; desperate: hoper, one that has pleasing expectations: hopingly, with encouragement: hope, a sloping plain between the ridges of mountains.

There is *hope* of a tree, if cut down, that it will sprout out again. *Job* xiv. 7.

He shall strengthen your heart, all ye that *hope* in the Lord. *Psalm* xxxi. 24.

It is good being put to death by men, to look for *hope* from God, to be raised up again by them. 2 *Mac.* vii. 14.

Blessed is he who is not fallen from his *hope* in the Lord. *Ecclus.* xiv. 2.

If *hope* me faile, than alle am I
Ungracious and unworthy;
In *hope* I woll comforted be;
For love, whan he betaught hire me,
Sayed that *hope* where so I go
Should aie be relese to my wo.
Chaucer. Romaunt of the Rose.

With him went *Hope* in rancke, a handsome mayd,
Of chearefull looke and lovely to behold;
In silken samite she was light arayd,
And her fayre locks were woven up in gold.
Spenser. Faerie Queene.

Are they indifferent, being used as signs of immoderate and *hopeless* lamentation for the dead? *Hooker.*

Men of their own natural inclination *hopeful* and strongly conceited, whatsoever they took in hand. *Id.*

Alas! I am a woman, friendless, *hopeless*.
Shakspeare.

Thy mother felt more than a mother's pain,
And yet brought forth less than a mother's *hope*;
To wit, an indigested deformed lump. *Id.*

The sun shines hot; and, if we use delay,
Cold-biting winter mars our *hoped* for hay. *Id.*

He will advance thee:
I know his noble nature, not to let
Thy *hopeful* service perish. *Id.*

When in heaven she shall his essence see,
This is her sovereign good, and perfect bliss;
Her longing, wishings, *hopes*, all finished be;
Her joys are full, her motions rest in this. *Davies.*

Sweet *hope!* kind cheat! fair fallacy! by thee
We are not where or what we be;
But what and where we would be; thus art thou
Our absent presence, and our future now. *Crashaw.*

One sign of despair is the peremptory contempt of the condition which is the ground of *hope*; the going on not only in terrours and amazement of conscience, but also boldly, *hopingly*, and confidently in wilful habits of sin. *Hammond.*

Hope! of all ills that men endure
The only cheap and universal cure!
Thou captive's freedom, and thou sick man's health!
Thou loser's victory, and thou beggar's wealth!
Cowley.

Faith is opposed to infidelity, and *hope* to despair. *Taylor.*

Hope for good success, according to the efficacy of the causes and the instrument, and let the husbandman *hope* for a good harvest. *Id.*

What to the old can greater pleasure be,
Than *hopeful* and ingenious youth to see? *Denham.*

They were ready to renew the war, and to prosecute it *hopefully*, to the reduction or suppression of the Irish. *Clarendon.*

He watches with greedy *hope* to find
His wish, and best advantage, us asunder;
Hopeless to circumvent us joined, where each
To other, speedy aid might lend at need. *Milton.*

He sought them both, but wished his hap might find
Eve separate: he wished, but not with *hope*
Of what so seldom chanced: when to his wish,
Beyond his *hope*, Eve separate he spies. *Id.*

But physick yet could never reach
The maladies thou me dost teach;
Whom first the cramp of *hope* does tear,
And then the palsy shakes of fear. *Marvell.*

From your promising and generous endeavours we may *hopefully* expect a considerable enlargement of the history of nature. *Glanville.*

I was *hopeful* the success of your first attempts would encourage you to make trial also of more nice and difficult experiments. *Boyle.*

To encourage our *hopes*, it gives us the highest assurance of most lasting happiness, in case of obedience. *Tillotson.*

The Trojan dames
To Pallas' fane in long procession go,
In *hopes* to reconcile their heavenly foe. *Dryden.*

Hopeless of ransom, and condemned to lie
In durance, doomed a lingering death to die. *Id.*

She was his care, his *hope*, and his delight,
Most in his thought, and ever in his sight. *Id.*

Who knows what adverse fortune may befall!
Arm well your mind, *hope* little, and fear all. *Id.*

So stands the Thracian herdsman with his spear
Full in the gap, and *hopes* the hunted bear. *Id.*

Why not comfort myself with the *hope* of what may be, as torment myself with the fear on't? *L'Estrange.*

Hope is that pleasure in the mind which every one finds in himself, upon the thought of a profitable future enjoyment of a thing, which is apt to delight him. *Locke.*

May sorrow shame and sickness overtake her,
And all her beauties like my *hopes* be blasted. *Rowe's Royal Convert.*

They take up a book in their declining years, and grow very *hopeful* scholars by that time they are threescore. *Addison.*

Set down beforehand certain signatures of *hopefulness*, or characters, whereby may be timely described what the child will prove in probability. *Wotton.*

He left all his female kindred either matched with peers of the realm actually, or *hopefully* with earls' sons and heirs. *Id.*

Whatever ills the friendless orphan bears,
Bereaved of parents in his infant years,
Still must the wronged Telemachus sustain,
If *hopeful* of your aid, he hopes in vain. *Pope.*

With looks unmoved, he *hopes* the scaly breed,
And eyes the dancing cork and bending reed. *Id.*

I except all *hopers*, who turn the scale, because the strong expectation of a good certain salary will outweigh the loss by bad rents. *Swift.*

Hope, of all passions, most befriends us here;
Passions of prouder name befriend us less.
Joy has her tears; and transport has her death;
Hope like a cordial, innocent though strong,
Man's heart at once inspirits and serenes. *Young's Night Thoughts.*

But to the generous still improving mind
That gives the *hopeless* heart to sing for joy,
Diffusing kind beneficence around
Boastless as now descends the silent dew. *Thomson's Seasons.*

The wretch condemned with life to part,
Still still on *hope* relies
And every pang that rends the heart
Bids expectation rise. *Goldsmith.*

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, bears serene
Its brilliant hues with all their beams unshorn;
Resembling, 'mid the torture of the scene,
Love watching Madness with unalterable mien. *Byron. Childe Harold.*

Hope, in ethics, is the desire of some good, attended with a belief of the possibility, at least, of obtaining it; and enlivened with joy, greater or less, according to the greater or less probability of our possessing the object of our hope. Alexander, preparing for his Asian expedition, distributed his hereditary dominions among his friends; allotting to some villages, to others boroughs, to others cities; and, being asked what he had reserved for himself, replied, Hope.

Hope (Dr. John), professor of botany in the university of Edinburgh, was born in Edinburgh on the 10th of May 1725. After finishing the usual course of education, he studied medicine at the university of Edinburgh. Having finished his academical education, he visited other medical schools, and upon his return obtained the degree of M. D. from the university of Glasgow in 1750. A few months after he was admitted a member of the royal college of physicians in Edinburgh, and entered upon the practice of medicine in that city. In 1761 Dr. Hope, by a commission from his majesty, was appointed king's botanist for Scotland, and superintendant of the royal garden at Edinburgh; and a few weeks after was elected, by the town council of Edinburgh, successor to Dr. Alston in the professorships of botany and materia medica. In 1777 he was nominated regius professor of medicine and botany in the university, and had the offices of king's botanist and superintendant of the royal garden conferred upon him for life, which till that time had been granted during pleasure only. Dr. Hope married the daughter of Dr. Stevenson, an eminent physician in Edinburgh; by whom he had four sons and one daughter. He died in November 1786. He was a member not only of the Royal Society of London, but also of several foreign societies; and at the time of his death he held the distinguished office of president of the royal college of physicians.

Hope Land, an island of the South Pacific Ocean, discovered in 1772 by Mr. Marson. It is intersected by mountains, rising above each

other in a triple range, which are covered with snow, and so high as to be visible at the distance of twelve leagues. It is not far from Ceram Island, in long. 32° 11′ E., and lat. 46° 45′ N.

HOPEA, in botany, a genus of the polyandria order, and polyadelphia class of plants: CAL. quinquefid, superior: COR. pentapetalous; the stamina are many, and coalited into five pencils; there is one style; the fruit is a plum, with a trilocular kernel. There is only one species, viz. a native of Carolina.

HOPE, GOOD, CAPE OF. See GOOD HOPE.

HOPKINS (Ezekiel), bishop of Derry in Ireland, was the son of a clergyman in Devonshire; and was for some time chorister of Magdalen College, Oxford, and usher of the adjoining school. He was afterwards a presbyterian minister, and was extolled as an excellent preacher. Lord Roberts, happening to hear him preach, was so pleased with his discourse and his manner, that he retained him as his chaplain, when he was sent as lord lieutenant into Ireland, and preferred him to the deanery of Raphoe; and, on his being recalled, so strongly recommended him to his successor that he was soon preferred to the bishopric of Raphoe, whence he was translated to Derry. During the war under the earl of Tyrconnel, at the revolution, he withdrew into England; and was chosen minister of St. Mary, Aldermanbury, in London, where he died in 1690. His Sermons, his Exposition of the ten Commandments, and that of the Lord's prayer, are much esteemed. His works were printed together, folio, in 1710.

HOPLITÆ, or HOPLITES, from ὁπλον, armour, in antiquity, were such of the candidates at the Olympic and other sacred games as ran races in armour. One of the finest pieces of the famous Parrhasius was a painting which represented two hoplites; the one running, in a violent perspiration, the other laying his arms down, as quite spent and out of breath.

HOPLITODROMOS, from ὁπλον, armour, and δρεμω, I run, in the ancient gymnastic sports, a term applied to such persons as went through those toilsome and robust exercises in complete armour; by which the exercise became much more violent, and the wearing of armour in the time of battle much more easy.

HOPLOMACHI, Ὁπλομαχοι, of ὁπλον, and μαχομαι, I fight, in antiquity, a species of gladiators who fought in armour, either completely armed from head to foot, or only with a casque and cuirass.

HOR, a mountain, or mountainous tract of Arabia Petræa, situated in that circuit which the Israelites took to the south and south-east of Edom in their way to the borders of Moab. Aaron died on it. It was also called Seir.

HORÆ, Ὧραι, the Hours, in ancient mythology, were esteemed goddesses, the daughters of Jupiter and Themis; at first only three in number, Eunomia, Dice, and Irene; to whom were afterwards added two more, Carpo and Thallote. Homer makes them the door-keepers of heaven. Ovid allots them the employment of harnessing the sun's horses;

Jungere equos Titan velocibus imperat Horis;

and speaks of them as standing at equal distances about the throne of Sol;

——— et positæ spatiis æqualibus, Horæ.

The poets represent them as dressed in fine colored or embroidered robes, and gliding on with a quick and easy motion. They presided over the seasons, and were worshipped at Athens.

HORÆA, in antiquity, solemn sacrifices, consisting of fruits, &c., offered in spring, summer, autumn, and winter; that heaven might grant mild and temperate weather. These, according to Meursius, were offered to the goddesses called Horæ.

HORAL, *adj.* } Fr. *horaire*; Lat. *hora*. Re-
HORARY, *adj.* } lating to the hour; continuing for an hour. See HOUR.

I'll draw a figure that shall tell you
What you perhaps forgot befell you,
By way of *horary* inspection,
Which some account our worst erection.
Hudibras.

When, from a basket of summer-fruit, God by Amos foretold the destruction of his people, thereby was declared the propinquity of their desolation, and that their tranquillity was of no longer duration than those *horary* or soon decaying fruits of summer.
Browne's Vulgar Errours.

In his answer to an *horary* question, as what hour of the night to set a fox-trap, he has discussed, under the character of Reynard, the manner of surprising all sharpers. *Tatler.*

Howe'er reduced and plain,
The watch would still a watch remain;
But, if the *horal* orbit ceases,
The whole stands still, or breaks to pieces.
Prior.

HORAPOLLO, or HORUS APOLLO, a grammarian of Panaplus in Egypt, according to Suidas, who first taught at Alexandria, and then at Constantinople under Theodosius. There are extant, under his name, two books on the hieroglyphics of the Egyptians; which Aldus first published in Greek in 1505, in folio; and they have often been published since, with a Latin version and notes. It is not certain, however, that the grammarian of Alexandria was the author of these books; they being rather thought to belong to another Horapollo of more ancient date: on which head, see Fabricius's Bibliotheca Græca.

HORATII, three Roman brothers, who, in the reign of Tullus Hostilius, fought against the three Curiatii, who belonged to the army of the Albans. The two armies being equal, three brothers on each side were chosen to decide the contest of superiority. Two of the Horatii were first killed; but the third, by his address, successively slew the three Curiatii, and by this victory rendered the city of Alba subject to the Romans. See ROME.

HORATIUS, surnamed Cocles from his losing an eye in combat, was nephew to the consul Horatius Pulvillus, and descended from the surviving brother who killed the Curiatii. Porsenna, laying siege to Rome, drove the Romans from Janiculum; and pursued them to the wooden bridge over the Tiber which joined the city to Janiculum. Largius, Herminius, and Horatius Cocles, sustained the shock of the

enemy on the bridge, and prevented their entering the city with the Romans; but, Largius and Herminius having passed the bridge, Horatius Cocles was left alone, and repulsed the enemy till the bridge was broken under him: he then threw himself armed into the Tyber, swam across the river, and entered Rome in triumph.

Horatius Flaccus (Quintus), a celebrated lyric Roman poet, was the grandson of a freed man, and was born at Venusium, 64 B. C. He had the best masters in Rome, after which he completed his education at Athens. Having taken up arms, he embraced the party of Brutus and Cassius, but threw away his shield at the battle of Philippi. Some time after he gave himself up entirely to the study of poetry. His talents soon made him known to Augustus and Mecænas, who had a particular esteem for him, and loaded him with favors. Horace also contracted a strict friendship with Agrippa, Pollio, Virgil, and all the other great men of his time. He lived without ambition, and led a tranquil and agreeable life with his friends, but was subject to a defluxion in his eyes. He died at the age of fifty-seven. There are still extant his Odes, Epistles, Satires, and Art of Poetry; of which there have been a great number of editions. The best are those of the Louvre, in 1642, folio; of Paris, 1691, 4to.; of Cambridge, 1699; that with Bentley's emendations, printed at Cambridge in 1711; Fowlis' edition, Glasgow, 1744; and, we may add, the edition printed at St. Andrews, in 1796, under the care of the learned Dr. Hunter, who, in correcting it, compared the text with those of above forty other copies.

HORDE, *n. s.* A clan; a migratory crew of people. It is applied only to the Tartars.

Of lost mankind, in polished slavery sunk,
Drove martial *horde* on *horde* with dreadful sweep,
And gave the vanquished world another form.
Thomson.

——— Nor would the hostile *horde*
Of many-nationed spoilers from the Po
Quaff blood and water. *Byron. Childe Harold.*

HORDEUM, barley, in botany, a genus of the digynia order, and triandria class of plants; natural order fourth, gramina: cal. lateral, bivalved, uniflorous, and triple. The involucrum consists of six leaves, and contains three flowers. Common receptacle toothed and excavated. There are ten species; only one of which, viz:—

1. H. murinum, or wall barley grass, is a native of Britain.

2. H. vulgare, or common barley, cultivated in our fields. Its native place is said to be Sicily. For the culture &c. of common barley, see Rural Economy.

HORDICALIA, or Hordicidia, in antiquity, a religious feast held among the Romans on the 15th of April, wherein they sacrificed cattle big with young. A great part of the offerings were made in the temple of Jupiter. They consisted of thirty cows big with calf, and were offered to Tellus, the earth. The calves taken out of their bellies were burnt at first by the pontifices, afterwards by the eldest vestal virgin.

HOREB, or Oreb, a mountain of Arabia Petræa, contiguous to and on the south side of mount Sinai; the scene of many miraculous appearances.

Horehound. See Marrubium.

Horehound, Base. See Stachys.

Horehound, Bastard. See Sideritis.

Horehound, Water. See Lycopus.

HORESTI, an ancient nation of North Britain, beyond Solway Frith, mentioned by Tacitus. Their country, according to Camden, is now called Eskdale.

HORITES, an ancient people, who at first dwelt in the mountains of Seir beyond Jordan (Gen. xiv. 6.) They had princes, and were powerful, even before Esau made a conquest of their country. (Gen. xxxvi. 20—30.) The Horites, the descendants of Seir, and the Edomites, seem afterwards to have been confounded, and to have composed but one people. (Deut. ii. 2, xxxiii. 2, and Judg. v. 4.) They dwelt in Arabia Petræa and Arabia Deserta, to the south-east of the promised land. We find the Hebrew word חורים Chorim, which in the book of Genesis is translated Horites, used in an appellative sense in several other passages of Scripture, and to signify nobles, or great and powerful men (1 Kings xxi. 8, 11, and Neh. ii. 16, iv. 14, v. 7, vi. 17, vii. 5, xii. 17, Eccl. x. 17, Isa. xxxiv. 12, Jer. xxvii. 20, xxxix. 6); and it has been supposed, that the Greeks might derive hence their heroes, in like manner as they derived Anax, a king, from the sons of Anak, the famous giant.

HORI'ZON, *n. s.* } Gr. οριζων. The line
Horizon'tal, *adj.* } that terminates the
Horizon'tally, *adv.* } view, distinguished into sensible and real: the sensible horizon is the circular line which limits the view; the real is that which would bound it, if it could take in the hemisphere. Near the horizon; parallel to the horizon; on a level.

When the morning sun shall raise his car
Above the border of this *horizon*,
We'll forward towards Warwick and his mates.
Shakspeare.

She began to cast with herself from what coast this blazing star should first appear, and at what time it must be upon the *horizon* of Ireland. *Bacon.*

As when the sun, new risen,
Looks through the *horizontal* misty air,
Shorn of his beams; or from behind the moon,
In dim eclipse, disastrous twilight sheds
On half the nations. *Milton.*

In his East the glorious lamp was seen,
Regent of day; and all the *horizon* round
Invested with bright rays. *Id.*

As it will not sink into the bottom, so will it neither float above, like lighter bodies; but, being near in weight, lie superficially, or almost *horizontally* unto it. *Browne.*

An obelisk erected, and golden figures placed *horizontal* about it, was brought out of Egypt by Augustus. *Id.*

The morning lark, the messenger of day,
Saluted in her song the morning gray;
And soon the sun arose with beams so bright,
That all the *horizon* laughed to see the joyous sight.
Dryden.

When the sea is worked up in a tempest, so that the *horizon* on every side is nothing but foaming billows and floating mountains, it is impossible to describe the agreeable horrour that rises from such a prospect. *Addison*

The problem is reduced to this: what perpendicular height is necessary to place several ranks of rowers in a plane inclined to a *horizontal* line in a given angle? *Arbuthnot on Coins.*

Fields, woods, and streams,
Each towering hill, each humble vale below,
Shall hear my cheering voice; my hounds shall wake
The lazy morn, and glad the *horizon* round.
Somerville's Chase.

Hail to the joyous day! with purple clouds
The whole *horizon* glows. *Thomson.*

She who was named Eternal, and arrayed
Her warriors but to conquer—she who veiled
Earth with her haughty shadow, and displayed,
Until the o'er-canopied *horizon* failed,
Her rushing wings—Oh she was Almighty hailed!
Byron. Childe Harold.

The HORIZON, in geography and astronomy, is a great circle of the sphere, dividing the world into two parts or hemispheres; the one upper and visible, the other lower and hid. The word literally signifies bounding the sight; being formed of ὁρίζω, I bound. See ASTRONOMY and GEOGRAPHY.

HORIZON, RATIONAL, TRUE, or ASTRONOMICAL, also called simply and absolutely the horizon, is a great circle, whose plane passes through the centre of the earth, and whose poles are the zenith and nadir.

HORIZON, SENSIBLE, VISIBLE, or APPARENT, is a less circle of the sphere, which divides the visible part of the sphere from the invisible. Its poles, too, are the zenith and nadir: and consequently the sensible horizon is parallel to the rational; and it is cut at right angles, and into two equal parts, by the verticals. The sensible horizon is divided into eastern and western.

A HORIZONTAL DIAL is that drawn on a parallel to the horizon: having its gnomon or style elevated according to the altitude of the pole of the place it is designed for. Horizontal dials are, of all others, the most simple and easy.

HORIZONTAL LINE, in perspective, is a right line drawn through the principal point, parallel to the horizon: or it is the intersection of the horizontal and perspective planes. See PERSPECTIVE.

HORIZONTAL PLANE is that which is parallel to the horizon of the place, or nothing inclined thereto. The business of levelling is to find whether two points be in the horizontal plane; or how much is the deviation. See LEVELLING.

HORMINUM, clary, in botany, a genus of the gymnospermia order, and didynamia class of plants: natural order forty-second, verticillatæ; CAL. campanulated, with four segments nearly equal; the fourth larger, and emarginated: COR. upper lip concave. There are several species; the most remarkable of which is the

H. verbenaceum, or common wild clary. It grows naturally on sandy and gravelly ground in many parts of Britain. It has sometimes been called oculus Christi, from the supposed virtues of its seeds in clearing the sight, which it does by its viscous covering; for when any thing happens to fall into the eye, if one of the seeds is put in at one corner, and the eyelid kept close over it, moving the seed gently along the eye, whatever happens to be there will stick to it, and so be brought out.

HORN, *n. s.*
HORN'-BEAK, *n. s.*
HORN'FISH, *n. s.*
HORN'-BEAM, *n. s.*
HORN'BOOK, *n. s.*
HORN'ED, *adj.*
HORN'ER, *n. s.*
HOR'NET, *n. s.*
HORN'-FOOT, *n. s.*
HORN'-OWL, *n. s.*
HORN'-PIPE, *n. s.*
HORN'-STONE, *n. s.*
HORN'-WORK, *n. s.*
HORN'Y, *adj.*

Saxon, þonn; Gothic, *haurn*; Belg. *horn, hoorn.* The hard bodies which grow on the heads of some graminivorous quadrupeds, and serve them for weapons. An instrument of wind music: the extremity of the moon, when waxing or waning; the feelers of a snail: this gives rise to the proverb, to 'pull in your horns;' to repress one's ardor: a drinking-cup: antler of a cuckold: figuratively horn-mad, mad as a cuckold. Horn-beak, horn-fish, a kind of fish. Horn-beam, a species of tree. Horn-book, the first book used by children, and covered with horn. Horner, one that works in, or sells horn. Hornet, Sax. þỳnnette, from its horns: a very large strong stinging fly, which makes its nest in hollow trees. Horn-foot, hoofed. Horn-owl, a species of owl with horns. Hornpipe, a country dance. Horn-stone, a kind of blue stone. Horn-work, a kind of angular fortification: horned, horny, made of, or resembling horn.

He shewed him, or they went to soupere,
Forestes, parkes, ful of wilde dere;—
Ther saw he hartes with hir *hornes* hie
The gretest that were ever seen with eie.
Chaucer. The Frankeleines Tale.

Janus sit by the fire with double berd
And drinketh, of his bugle *horn*, the wine. *Id.*

A lusty tabrere,
That to thee many a *hornpipe* played,
Whereto they dauncen each one with his maid.
Spenser.

The squire 'gan nigher to approach,
And wind his *horn* under the castle wall,
That with the noise it shook as it would fall.
Id. Faerie Queene.

As when two rams, stirred with ambitious pride,
Fight for the rule of the rich fleeced flock,
Their *horned* fronts so fierce on either side
Do meet, that, with the terrour of the shock,
Astonished both stand senseless as a block. *Id.*

There's a post come from my master, with his *horn* full of good news. *Shakspeare.*

I am glad he went not in himself: if he had, he would have been *horn*-mad. *Id.*

He teaches boys the *hornbook*. *Id.*

Love's feeling is more soft and sensible,
Than are the tender *horns* of cockled snails. *Id.*

Aufidius,
Hearing of our Marcius's banishment,
Thrust forth his *horns* again into the world,
Which were inshelled when Marcius stood for Rome,
And durst not once peep out. *Id.*

If I have *horns* to make one mad,
Let the proverb go with me, I'll be *horn*-mad. *Id.*

There many a *hornpipe* he tuned to his Phyllis.
Raleigh.

No beast that hath *horns* hath upper teeth.
Bacon.

Let all the quicksilver i' the mine
Run to the feet veins, and refine
Your firkhum jerkhum to a dance,
Shall fetch the fiddlers out of France,

To wonder at the *hornpipes* here
Of Nottingham and Derbyshire. *Ben Jonson.*

Yes I have brought (to help our vows)
Horned poppy, cypress boughs. *Id.*

Mad frantick men, that did not inly quake!
With *hornfoot* horses, and brass wheels, Jove's storms
to emulate. *Hakewill on Providence.*

Thither all the *horned* host resorts,
To graze the ranker mead. *Denham.*

He thought he by the brook of Cherith stood,
And saw the ravens with their *horny* beaks
Food to Elijah bringing even and morn. *Milton.*

Retiring from the popular noise I seek
This unfrequented place to find some ease,
Ease to the body some, none to the mind,
From restless thoughts, that like a deadly swarm
Of *hornets* armed, no sooner found alone,
But rush upon me thronging, and present
Time past, what once I was, and what am now.
Id. Samson Agonistes.

Merchants, venturing through the main,
Slight pyrates, rocks, and *horns* for gain.
Hudibras.

The goddess to her crooked *horn*
Adds all her breath: the rocks and woods around,
And mountains, tremble at the infernal sound.
Dryden.

Fair Ascanius, and his youthful train,
With *horns* and hounds a hunting match ordain.
Id.

Tyrrheus, the foster-father of the beast,
Then clenched a hatchet in his *horny* fist. *Id.*

She blessed the bed, such fruitfulness conveyed,
That ere ten moons had sharpened either *horn*,
To crown their bliss, a lovely boy was born. *Id.*

Thou king of *horned* floods, whose plenteous urn
Suffices fatness to the fruitful corn. *Id.*

Silence, in times of suffering, is the best;
'Tis dangerous to disturb a *hornet's* nest. *Id.*

Nothing has been considered of this kind out of the ordinary road of the *hornbook* and primer. *Locke.*

The *horny* or pellucid coat of the eye doth not lie in the same superficies with the white of the eye, but riseth up above its convexity, and is of an hyperbolical figure. *Ray on the Creation.*

Hornets do mischief to trees by breeding in them. *Mortimer.*

The skin of a bull's forehead is the part of the hide made use of by *horners*, whereupon they shave their horns. *Grew.*

Florinda danced the Derbyshire *hornpipe* in the presence of several friends. *Tatler.*

Bending the bull's tough neck with pain,
That tosses back his *horns* in vain. *Addison.*

The pineal gland was encompassed with a kind of *horny* substance. *Id.*

To master John the English maid
A *hornbook* gives of gingerbread;
And, that the child may learn the better,
As he can name, he eats the letter. *Prior.*

As the serum of the blood is resolvable by a small heat, a greater heat coagulates it so as to turn it *horny*, like parchment; but when it is thoroughly putrified, it will no longer concrete. *Arbuthnot.*

All that process is no more surprising than the eruption of *horns* in some brutes, or of teeth and beard in men at certain periods of age. *Bentley.*

The moon
Wears a wan circle round her blunted *horns*.
Thomson.

Unhappy confiding in the length
Of *horny* beak, or talons crooked strength,
Who durst abide his rage; the blade descends,
And from the panting trunk the pinion rends.
Beattie.

This moon, which rose last night round as my shield,
Had not yet filled her *horn*, when by her light
A band of fierce barbarians from the hills
Rushed like a torrent down upon the vale,
Sweeping our flocks and herds. *Home's Douglas.*

I'll call him
Who bears the golden *horn*, and bears such bright
And blooming aspect, Huon; for he looks
Like to the lovely boy lost in the forest
And never found till now.
Byron. Deformed Transformed.

Horn, in physiology, is of the same nature as the gelatinous matter of animals, and is only that matter charged with a less quantity of water, and a larger quantity of earth, and sufficiently condensed to have a firm and solid consistence. By digesting horn with water, in Papin's digester, it may be entirely converted into jelly. Horn is a perfectly animalised matter, and furnishes in distillation the same principles as all animal matters; that is, at first a pure phleghm, with a degree of heat not exceeding that of boiling water; then a volatile alkaline spirit, which becomes more and more penetrating and strong; a fetid, light, and thin oil; a concrete volatile salt, which forms ramifications upon the sides of the receiver; much air; fetid oil, which becomes more and more black and thick; and, lastly, it leaves in the retort a considerable quantity of almost incombustible coal, from which, after its incineration, scarcely any fixed alkali can be obtained. Animal oil, and particularly that which is drawn first in the distillation of horn, is susceptible of acquiring great thinness and volatility by repeated distillations. The horns of stags, contain a larger quantity of the same kind of earth which is in bones; hence they seem to possess an intermediate nature betwixt horns and bones. Horns make a considerable article in the arts and manufactures. Bullocks' horns, softened by the fire, serve to make lanterns, combs, knives, ink-horns, tobacco-boxes, &c.

In the staining or dyeing of horn the black dye is given by steeping brass in aqua-fortis till it be returned green: with this the horn is washed once or twice, and then put into a warmed decoction of logwood and water. Green is begun by boiling it, &c., in alum water; then with verdigris, ammoniac, and white wine vinegar; keeping it hot therein till sufficiently green. Red is begun by boiling it in alum water, and finished by decoction in a liquor compounded of quicklime steeped in rain water, strained, and to every pint an ounce of Brasil-wood added. In this decoction the bone, &c., is to be boiled till sufficiently red.

In order to imitate tortoise-shell, the horn to be dyed must be first pressed into proper plates, scales, or other flat form; then take of quicklime two parts, and of litharge one part: temper them together to the consistence of a soft paste with soap lie. Put this paste over all the parts of the horn, except such as are proper to be left transparent, in order to give it a nearer resemblance of the tortoise shell. The horn must remain in this manner covered with the paste till it be thoroughly dry; when, the paste being brushed off, the horn will be found partly opaque and partly transparent, in the manner of tortoise-shell: and when put over a foil, of th[illegible] of

aten called assidue, will be scarcely distinguishable from it. It requires some degree of fancy and judgment to dispose of the paste in such a manner as to form a variety of transparent parts of different magnitudes and figures; and it will be an improvement to add semitransparent parts; which may be done by mixing whiting with some of the paste to weaken its operation in particular places; by which spots of a reddish-brown will be produced, which, if properly interspersed, especially on the edges of the dark parts, will greatly increase both the beauty of the work, and its similitude with the real tortoise-shell.

Horn, in geography. See Hoorn.

Horn, a musical instrument of the wind kind, is chiefly used in hunting, to animate and bring together the dogs and the hunters. The term was anciently, wind a horn, all horns being in those times of a winding shape; but, since straight horns were made, we say blow a horn, and sometimes sound a horn. See Music. The Hebrews made use of horns formed of ram's horns to proclaim the Jubilee.

Horn, French, is a wreathed or contorted trumpet. It labors under the same defects as the trumpet itself; but these have of late been so palliated as to require no particular selection of keys for this instrument.

Horn, an island on the coast of Florida, between Ship and Massacre Islands. It is nearly seventeen miles long, and about half a mile wide, having many trees on the middle of it.

Horn, Cape, is the most southern extremity of South America, and the south point of a group of islands, of unequal extent, lying before Nassau Bay, known by the name of the Hermit Islands. North-west of the cape are two peaked rocks, like sugar-loaves. Some other straggling rocks lie west, and one south of it; but they are all near the shore. It is cold, lofty, and covered with wood. It was discovered by Jacob le Maire, a Dutchman, in 1616; and Anson and others have encountered, in passing this cape, the most dreadful tempests; but of late years it has been the common course of all vessels, being found much preferable to the tedious passage through the straits of Magellan. The shore is inhabited by savages, of whom little is known. Long. 67° 46′ W., lat. 55° 58′ S.

Horn, False, Cape, a cape of South America, nine miles north-east of Cape Horn.

HORNBACH, a town of Germany in the late duchy of Deux Ponts, now annexed to the French republic, and included in the department of Savre and Moselle. It is seated on the river Horn, with a Benedictine abbey, five miles south-east of Deux Ponts. Long. 7° 36′ E., lat. 49° 10′ N.

Horn-beam, in botany. See Carpinus.

HORNBERG, an ancient town of Germany, in the Black Forest, and duchy of Wirtemberg, with a fortress upon a mountain. It is seated on the river Gutlash, twenty-one miles north-east of Friburg. Long. 8° 27′ E., lat. 48° 12′ N.

HORN-BILL. See Buceros.

HORNBLEND is a black or green indurated bole of clay, consisting of scaly particles, which are distinguishable from those of mica, by being less shining, thicker, and rectangular. It is generally found amongst iron ores, and sometimes intermixed with mica, forming a compact stone.

HORNCASTLE, a market town of Lincolnshire. It had a castle, from the architecture of which, and the coins sometimes dug up, it is thought to have been a station of the Romans. The town is well built and tolerably healthy. It is a signiory of thirteen lordships. It has a market on Saturday, and fairs in June and August. It is twenty miles east of Lincoln, and 136 north of London.

HORN-DISTEMPER, a disease incident to horned cattle, affecting the internal substance of the horn, commonly called the pith, which it insensibly wastes, and leaves the horn hollow. The pith is a spongy bone, the cells of which are filled with an unctuous matter. It is furnished with a great number of small blood-vessels, is overspread with a thin membrane, and appears to be united by sutures with the bones of the head. According to an account of this distemper published by Dr. Tufts in the Memoirs of the American Academy, vol. i., the spongy bone is sometimes partly, and sometimes entirely wasted. The horn loses its natural heat, and a degree of coldness is felt upon handling it. The distemper, however, is seldom suspected without a particular acquaintance with the other symptoms, which are a dulness in the countenance of the beast, a sluggishness in moving, a failure of appetite, an inclination to lie down, and, when accompanied with an inflammation of the brain, a giddiness and frequent tossing of the head. The limbs are sometimes affected with stiffness, as in a rheumatism; in cows the milk often fails, the udder is hard, and in almost all cases there is a sudden wasting of the flesh. As soon as the distemper is discovered, an opening into the diseased horn should be immediately made; which may be done with a gimlet of a moderate size, in such a part of the horn as is most favorable for the discharge. It is recommended as most prudent to bore at first two or three inches above the head. If it is found hollow, and the gimlet passes through to the opposite side, and no blood discharges from the aperture, it may be best to bore still lower, and as near the head as it shall be judged that the hollowness extends. This opening is affirmed to be a necessary measure, and often gives immediate relief. Care must be taken to keep it clear, as it is apt to be clogged by a thin fluid that gradually oozes out and fills up the passage. Some saw off the horn; but, according to the best information, it does not succeed better than boring. From the cases Dr. Tufts has seen, he is led to conclude that injections are in general unnecessary; that, when the distemper is early discovered, no more is required than a proper opening into the horn, keeping it sufficiently clear for the admission of fresh air, the removal of the compression, and the discharge of floating matter. But when the distemper has communicated its effects to the brain, so as to produce a high degree of inflammation, it is doubted whether any method of cure will succeed.

Horne (George), D.D., bishop of Norwich, was born at Otham in Kent, in 1730. He was

educated at Maidstone, and took his degrees of M.A. and D.D. at Oxford. In 1753 he entered into orders, and was soon distinguished as a preacher. In 1776 he was elected vice-chancellor; and, in 1781, bishop of Norwich. Having early adopted the principles of Hutchinson, he displayed his abilities in defending them. He wrote, 1. An impartial state of the case between Sir Isaac Newton and Mr. Hutchinson; 2. The Theology and Philosophy in Cicero's Somnium Scipionis explained, 8vo.; 3. Spicilegium Shuckfordianum, or A Nosegay for the Critics, 8vo.; 4. A View of Mr. Kennicott's Method of Correcting the Hebrew Text, 8vo.; 5. Considerations on the Life and Death of John the Baptist, 8vo., 1769; 6. A Commentary on the Psalms, 2 vols. 4to.; 7. A Letter to Adam Smith, LL.D., on the Life, Death, and Philosophy of David Hume, 12mo.; 8. Letters on Infidelity, 12mo. 9. A Letter to Dr. Priestley, 8vo.; 10. Sermons, 5 vols.; and several other works. He died at Bath in 1792; and was much esteemed for his learning and piety.

HORNECK (Dr. Anthony), a learned divine, born at Baccharach, in the Lower Palatinate, in 1641. He studied divinity under Dr. Spanheim at Heidelberg; afterwards completed his studies at Oxford, and became vicar of Allhallows in that city. In 1665 he became tutor to lord Torrington, son of the duke of Albemarle, who presented him to the rectory of Doulton in Devonshire, and a prebend in Exeter. He was afterwards chosen preacher of the Savoy. In 1693 he was collated to a prebend in Westminster, and to another in the cathedral of Wells. He published, 1. The Great Law of Consideration; 2. The Happy Ascetic; 3. Delight and Judgment; 4. The Fire of the Altar; 5. The Exercise of Prayer; 6. The Crucified Jesus; Several Sermons, and other works. He died in 1696, and was interred in Westminster Abbey, where a monument is erected to his memory.

HORNER (Francis), esq., M.P. and barrister-at-law, was born at Edinburgh in the year 1778. He was educated at the high school, and finished his studies at the university of that place, where he formed an intimacy with lord Henry Petty, subsequently marquis of Lansdowne, Mr. Brougham, and the early conductors of the Edinburgh Review. He himself was one of its ablest writers. He first came into parliament in the year 1806. In 1810 he was chairman to the Bullion Committee, and the author of the then excellent report on that intricate subject. His application to business, however, so much impaired his constitution, that he was obliged to seek the climate of Italy, and died, greatly lamented, at Pisa, 8th February, 1817.

HORNET, in zoology. See VESPA.

HORN-FISH, or GAR-FISH. See ESOX.

HORNING, in Scots law, a writing issuing from the signet, in his majesty's name, at the instance of a creditor against his debtor, commanding him to pay or perform within a certain time, on pain of being declared rebel, and by a caption put in prison.

HORNIUS (George), professor of history at Leyden, was born in the Palatinate, and died at Leyden in 1670. He went mad at the latter part of his life; which was supposed to be occasioned by the loss of 6000 florins he had entrusted with an alchymist at the Hague. His works are, 1. Historia Ecclesiastica, ad ann. 1666, which is esteemed; 2. De Originibus Americanis, 1652, 8vo.; 3. Geographia Vetus et Nova; 4. Orbis Politicus.

HORNPIPE, a common instrument of music in Wales, consisting of a wooden pipe, with holes at stated distances, and a horn at each end; the one to collect the wind blown into it by the mouth, and the other to carry off the sounds as modulated by the performer.

HORNPIPE is also the name of an English air, probably derived from the above instrument. The measure is triple time, with six crotchets in a bar; four beats with the hand down and two up.

HORNSEA, a town of Yorkshire, 188 miles from London. It is almost surrounded by a small arm of the sea; and the church, having a high steeple, is a noted sea-mark.

HORNSBY (Thomas), D.D., an English mathematician and astronomer, was born 1734, and became Savilian professor of astronomy, profesor of natural philosophy, lecturer on experimental philosophy, and keeper of the Ratcliffe library, Oxford. He had taken the degrees of M.A. and D.D., and was a fellow of the Royal Society. He published the following papers in their Transactions:—On the Parallax of the Sun, 1763; Observations on the Solar Eclipse, April 1st, 1764, at Oxford; Account of the Improvements to be made by Observations of the Transit of Venus, in 1769; Observations on the Transit of Venus, and Eclipse of the Sun, June 3d, 1769; The Quantity of the Sun's Parallax, as deduced from Observations of the Transit of Venus, on June 3d, 1769; Enquiry into the Quantity and Direction of the proper Motion of Arcturus; with some Remarks on the Diminution of the Obliquity of the Ecliptic. Dr. Hornsby also distinguished himself as the editor of the Astronomical Observations of Dr. Bradley, at Greenwich, which were published in 2 vols. folio, 1798.

HOROG'RAPHY, *n.s.* Fr. *horographie*; Gr. ωρα and γραφω. An account of the hours.

HOR'OLOGE, *n.s.* } Latin *horologium*;
HOROL'OGY. } Greek ωρα and λεγω.
Any instrument that tells the hour: as a clock; a watch; an hour-glass.

> He'll watch the *horologe* a double set,
> If drink rock not his cradle *Shakspeare.*

> Before the days of Jerome there were *horologies*, that measured the hours not only by drops of water in glasses, called clepsydra, but also by sand in glasses, called clepsammia. *Browne.*

HOROLOGE, HOROLOGIUM, Ωρολογιον, of ωρα, an hour, and λεγπ, I read or speak, a common name among the ancient writers for any instrument or machine for measuring the hours; such are our clocks, watches, sun-dials, &c. Modern inventions, and gradual improvements, have given birth to some new terms that come properly under this head, and annexed new meanings to others totally different from what they had originally. All chronometers that announced the hour by striking on a bell were called clocks: thus, we read of pocket-clocks. In like manner,

all clocks that did not strike the hour, were called watches or time-pieces. In Sir Isaac Newton's report to the house of commons, in 1713, relative to the longitude act, he states the difficulties of ascertaining the longitude by means of a watch: yet it is obvious, from several circumstances, that his remarks were to be understood of a time-piece regulated by a pendulum; for his objections are founded on the known properties of the pendulum, some of which differ essentially from the properties of the balance and spring. At this time, such machines for measuring time as are fixed in their place are called clocks, if they strike the hour: if they do not strike the hour, they are called time-pieces; and when constructed with more care, for a more accurate measure of time, they are called regulators. Mr. John Harrison first gave the name of time-keeper to his watch, for which he received £20,000.

HOROM'ETRY, *n. s.* Fr. *horometrie;* Gr. ὡρα and μετρεω. The art of measuring hours.

It is no easy wonder how the *horometry* of antiquity discovered not this artifice. *Browne.*

HOR'OSCOPE, *n. s.* Fr. *horoscope;* Greek ωροσκοπος. The configuration of the planets at the hour of birth.

The Greek names this the *horoscope;*
This governs life, and this marks out our parts,
Our humours, manners, qualities and arts.
Creech.

A proportion of the *horoscope* unto the seventh house, or opposite signs every seventh year, oppresseth living creatures. *Browne.*

Him born beneath a boding *horoscope,*
His sire, the blear-eyed Vulcan of a shop,
From Mars his forge sent to Minerva's school.
Dryden.

How unlikely is it, that the many, almost numberless conjunctions of stars, which occur in the progress of a man's life, should not match and countervail that one *horoscope* or conjunction which is found at his birth. *Drummond.*

They understood the planets and the zodiack by instinct, and fell to drawing schemes of their own *horoscopes* in the same dust they sprung out of.
Bentley.

HOROSCOPE, from ὡρα, an hour, and σκεπτομαι, I consider, in astrology, is the degree or point of the heavens rising above the eastern point of the horizon at any given time, when a prediction is to be made.

HOROSCOPE is also used for a scheme or figure of the twelve houses or twelve signs of the zodiac, wherein is marked the disposition of the heavens for any given time.

HORREA, in Roman antiquity, were public magazines of corn and salt meat, out of which the soldiers were furnished on their march in the military roads of the empire. Horrea was also the name which they gave to their granaries.

HOR'RENT, *adj.* HOR'RIBLE, *adj.* HOR'RIBLENESS, *n. s.* HOR'RIBLY, *adj.* HOR'RID, *adj.* HOR'RIDNESS, *n. s.* HORRIF'IC, *adj.* HORRIS'ONOUS, *adj,* HOR'ROR, *n. s.* } Fr. *horreur;* Lat. *horreo, horror, horridus, horrificus, horrisonus.* Words severally expressive of feelings which affect the senses more than the mind. Horrid and horrible, derivatives of horror, signify the extreme of those sensations, which, through the eye for the most part produce corresponding feelings. The order is thus: fearful; dreadful; frightful; tremendous; terrible; terrific; horrible; horrid. Crabb says, 'shrieks may be frightful, thunder and lightning tremendous, the roaring of a lion terrible, the glare of his eye terrific, the actual spectacle of killing horrible or horrid.' Horrisonous, sounding dreadfully. Horrent, pointed outwards; bristled with points. Horror is extreme terror, mixed with detestation; dreadful thoughts; gloom; dreariness: a term used in medicine to describe the first stage of an ague fit.

Horrour is always drede of harme that is to come.
Chaucer. The Persones Tale.

Certes, ther is non so *horrible* sinne of man that ne may in his lif, be destroyed by penitence, thurgh vertue of the passion and of the death of Crist. *Id.*

Over them sad *horrour,* with grim hue,
Did always soar, beating his iron wings;
And after him owls and night-ravens flew,
The hateful messengers of heavy things.
Faerie Queene.

Give colour to my pale cheek with thy blood,
That we the *horrider* may seem to those
Which chance to find us. *Shakspeare. Cymbeline.*

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

I have supt full with *horrours;*
Direness, familiar to my slaughterous thoughts,
Cannot once start me. *Id.*

No colour affecteth the eye much with displeasure: there be sights that are *horrible,* because they excite thn memory of things that are odious or fearful.
Bacon.

All objects of the senses, which are very offensive, do cause the spirits to retire; and, upon their flight, the parts are in some degree destitute, and so there is induced in them a trepidation and *horrour.*
Id. Natural History.

A dungeon *horrible* on all sides round,
As one great furnace flamed. *Milton.*
Horror on them fell,
And *horrid* sympathy. *Id.*
Him a globe
Of fiery seraphim incircled round
With bright emblazonry and *horrent* arms. *Id.*
Me damp *horrour* chilled
At such bold words, vouched with a deed so bold
Id.
Death
Grinned *horrible* a ghastly smile to hear,
His famine should be filled; and blest his maw,
Destined to that good hour. *Id. Paradise Lost.*
O conscience into what abyss of tears
And *horrors* hast thou driven me. *Milton.*
Deep *horrour* seizes every human breast;
Their pride is humbled, and their fear confest.
Dryden.
I can forgive
A foe, but not a mistress, and a friend!
Treason is there in its most *horrid* shape
Where trust is greatest! and the soul resigned
Is stabb'd by her own guards. *Id*

The contagion of these ill precedents, both in civility and virtue, *horribly* infects children. *Locke.*

Eternal happiness and eternal misery, meeting with a persuasion that the soul is immortal, are of all others, the first the most desirable, and the latter the most *horrible* to human apprehension. *South.*

A bloody designer suborns his instrument to take away such a man's life, and the confessor represents the *horridness* of the fact, and brings him to repentance. *Hammond.*

Her gloomy presence saddens all the scene,
Shades every flower, and darkens every green;
Deepens the murmur of the falling floods,
And breathes a browner *horrour* on the woods.
Pope.

Already I your tears survey,
Already hear the *horrid* things they say. *Id.*

His jaws *horrifick*, armed with three-fold fate,
Here dwells the direful shark. *Thomson.*

But hence ye thoughts! that rise in *Horror's* shape,
This hour bestows or ever bars escape.
Byron. The Bride of Abydos.

HORROR strictly signifies such an excess of fear as makes a person tremble. See FEAR, FRIGHT, and TERROR. In medicine it denotes a shivering and shaking of the whole body, coming by fits. It is common at the beginning of all fevers, but is particularly remarkable in those of the intermittent kind.

HORROR OF A VACUUM was an imaginary principle among the ancient philosophers, to which they ascribed the ascent of water in pumps, and other similar phenomena, which are now known to be occasioned by the weight of the air.

HORROX (Jeremiah), a celebrated English mathematician and astronomer of the seventeenth century, was born at Toxteth, near Liverpool, about 1619, and educated at Emanuel College, Cambridge. He began, about 1633, to study astronomy; but made little proficiency in the science for about three years, after which we find him in correspondence with the Gresham College professor. He accurately observed the transit of Venus over the sun's disk, November 24th, 1639; but was unfortunately cut off by death January 3d, 1640-1; only a few days after he had finished his treatise, entitled Venus in Sole visa. Other productions of his pen, left in an imperfect state, were collected and published by Dr. Wallis, in 1673, under the title of Opera Posthuma. Horrox seems to have been the first who ever predicted or observed the passage of Venus over the sun's disk; and his theory of lunar motions afforded assistance to Newton, who spoke of him as a genius of the highest order.

HORSE, *n. s.* & *v. a.* } Sax. þoꞃꞃ. A neigh-
HORSE'BACK, *n. s.* } ing quadruped, used in war, and draught, and carriage; a constellation: to take a horse to set out to ride: used in a plural sense for horses, horsemen; cavalry; something on which linen is hung to dry; a wooden machine which soldiers ride by way of punishment: joined to another substantive, it signifies something large or coarse, as horse-face. Horse, to mount; to carry on the back; to ride; to cover a mare. Horseback, riding posture.

And, after that, within a while, I sie
* * * * * * *
* * * * such a rout
As all men on erth had ben assembled,
On that place, well *horsed* for the nones,
Stering so fast that all the erth trembled.
But for to speke of riches and stones,
And men and *horse*, I trow the large wones
Of Preter John ne all his tresory,
Might not unneth have bought the tenth party.
Chaucer. The Floure and the Leafe.

I've seen the French,
And they can well on *horseback*. *Shakspeare.*

Stalls, bulks, windows
Are smothered, leads are filled, and ridges *horsed*
With variable complexions; all agreeing
In earnestness to see him. *Id.*

A *horse!* a *horse!* my kingdom for a *horse!* *Id.*

I did hear
The galloping of *horse*: who was't came by?
Id.

The armies were appointed, consisting of twenty-five thousand *horse* and foot, for the repulsing of the enemy at their landing. *Bacon's War with Spain.*

If they had known that all the king's *horse* were quartered behind them, their foot might very well have marched away with their *horse*. *Clarendon.*

Then came the thrifty troop of privateers
Whose *horses* each with other interferes,
Before them Higgins rides with brow compact,
Mourning his countess anxious for his act.
Marvell.

Alexander fought but one remarkable battle, wherein there were any elephants, and that was with Porus, king of India; in which notwithstanding he was on *horseback*. *Browne.*

He came out with all his clowns, *horsed* upon such cart-jades, and so furnished, as I thought with myself, if that were thrift, I wisht none of my friends ever to thrive. *Sidney.*

When mannish Mevia, that two-handed whore,
Astride on *horseback* hunts the Tuscan boar.
Dryden's Juvenal.

The' Arcadian *horse*
With ill success engage the Latin force.
Id. Æneid.

We call a little *horse*, such a one as comes not up to the size of that idea which we have in our minds to belong ordinarily to *horses*. *Locke.*

If you let him out to *horse* more mares than your own, you must feed him well. *Mortimer.*

I took *horse* to the lake of Constance, which is formed by the entry of the Rhine. *Addison on Italy.*

If your ramble was on *horseback*, I am glad of it on account of your health. *Swift to Gay.*

Stern Hassan only from his *horse*
Disdains to light, and keeps his course.
Byron. The Giaour.

HORSE, in zoology. See EQUUS. Horses were very rare in Judea till Solomon's time. Before him we find no horsemen mentioned in the armies of Israel. David, having defeated Hadadezer king of Shobah (2 Sam. viii. 4, 5), took 1700 horses, and lamed all belonging to the chariots of war, reserving only 100 chariots. The judges and princes of Israel rode on mules or asses. After David's time horses were more common in Judea. Solomon had a great number of horses; but he kept them rather for pomp than for war, for he had no military expeditions. Moses had forbidden the king of the Hebrews to keep a great number of horses (Deut. xvii. 16), lest at any time he should be inclined to carry the people into Egypt. Josiah took away the horses which his predecessors had consecrated to the sun (2 Kings xxiii. 17). We know the sun was worshipped over all the east, and that the horse, the swiftest of tame beasts, was consecrated to this deity, who was represented as riding in a chariot drawn by the most beautiful

and swiftest horses in the world, and performing every day his journey from east to west, in order to communicate his light to mankind.

Xenophon describes a solemn sacrifice of horses to the sun: they were all the finest steeds, and were led with a white chariot, crowned, and consecrated to the god. The horses which Josiah removed out of the court of the temple were probably appointed for similar sacrifices. The rabbins say that these horses were every morning put to the chariots dedicated to the sun, whereof there is mention made in the same book; and that the king, or some of his officers, got up and rode to meet the sun in its rising, as far as from the eastern gate of the temple to the suburbs of Jerusalem. Others are of opinion that the horses mentioned in the book of Kings were of wood, stone, or metal, erected in the temple in honor of the sun. Horses were used both among the Greeks and Romans in war, but were not originally very numerous; for, as each horseman provided his own horse, few would be able to bear the expense. Horses, for a considerable time, were managed by the voice alone, or by a switch, without bridle, saddle, or stirrups. Their harness was skins of beasts, and sometimes cloth. Both horses and men, amongst the Greeks, underwent a severe probation before their admission into the cavalry.

In the management of a horse, upon a journey, see that his shoes be not too strait, or press his feet, but be exactly shaped; and let him be shod some days before you begin a journey, that they may be settled to his feet. Observe that he is furnished with a bit proper for him, and by no means too heavy, which may incline him to carry low, or to rest upon the hand when he grows weary, which horsemen call making use of his fifth leg. The mouth of the bit should rest upon his bars about half a finger's breadth from his tushes, so as not to make him frumble from his lips; the curb should rest in the hollow of his beard a little above the chin; and, if it gall him, you must defend the place with a piece of buff or other soft leather. Observe that the saddle do not rest upon his withers, reins, or back bone, and that one part of it do not press his back more than another. Some riders gall a horse's sides below the saddle with their stirrup-leathers, especially if he be lean; to prevent this, you should fix a leather strap between the points of the fore and hind bows of the saddle, and make the stirrup leather pass over them. Begin your journey with short marches, especially if your horse has not been exercised for a long time; suffer him to stale as often as you find him inclined; and even invite him to it; but do not excite mares to stale, as their vigor is thereby diminished. Ride softly for a quarter or half an hour before you arrive at an inn, that the horse, not being too warm, nor out of breath, when put into the stable, you may unbridle him; but, if business obliges you to ride fast, you must then (the weather being warm) let him be walked, that he may cool by degrees; if it be very cold, let him be covered with cloths; but, in case you have not the conveniency of a sheltered walk, stable him forthwith, and let his whole body be rubbed and dried with straw. As soon as the horse is partly dried, and ceases to heat in the flanks, let him be unbridled, his bit washed, cleansed, and wiped, and let him eat his hay at pleasure. If he be very dry, and has not got water on the road, give him oats washed in good mild ale. The dust and sand will sometimes so dry the tongues and mouths of horses, that they lose their appetites. In such case, give him bran well moistened with water to cool and refresh his mouth; or wash his mouth and tongue with a wet sponge, to oblige him to eat. These directions are to be observed after moderate riding; but, if you have rode excessively hard, unsaddle your horse, and scrape off the sweat with a knife, or scraper, holding it with both hands, and scraping always with the hair; then rub his head and ears with a large hair-cloth, wipe him also between the fore and hind legs; in the mean time, his body should be rubbed all over with straw, especially under his belly and beneath the saddle, till he is thoroughly dry. That done, set on the saddle again, cover him; and if you have a warm place, let him be gently led up and down in it, for a quarter of an hour; but if you have not, let him dry where he stands. Or you may unsaddle him immediately; scrape off the sweat; let the hostler take a little vinegar and squirt it into the horse's mouth; then rub his head between the fore and hind legs, and his whole body, till he is pretty dry: let him not drink till he be thoroughly cool, and has eaten a few oats; for many, by drinking too soon, have been spoiled. Set the saddle in the sun or by a fire, in order to dry the pannels.

When horses are arrived in an inn, a man should, before they are unbridled, lift up their feet, to see whether they want any of their shoes, or if those they have do not rest upon their sides; afterwards he should pick and clear them of the earth and gravel, which may be between their shoes and soles. If you water them abroad, upon their return from the river cause their feet to be stopped with cow-dung, which will ease their pain; and, if it be in the evening, let the dung continue in their feet all night, to keep them soft and in good condition: but, if your horse have brittle feet, it will be requisite to anoint the fore feet, at the onsetting of the hoofs, with butter, oil, or hog's grease, before you water him in the morning, and in dry weather they should also be greased at noon. Many horses, as soon as unbridled, instead of eating, lay themselves down to rest, because of the pain they feel in their feet, so that one is apt to think them unwell: but, if their eyes are lively and good and if they will eat lying, they are in good health; yet if you handle the feet perhaps they will feel extremely hot, which discovers their suffering in that part. Examine, therefore, if their shoes do not rest upon their soles, which is somewhat difficult to be certainly known without unshoeing them; but if you take off their shoes, and look to the inside of them, you may perceive that those parts which rest upon the soles are more smooth and shining than the others: in this case, pare the feet in those parts, and fix on their shoes again, anointing the hoofs, and stopping the soles with hog's-lard.

After a long day's journey, at night feel your

horse's back: if he be pinched, galled, or swelled (if you do not immediately discover it, perhaps you may after supper), there is nothing better than to rub it with good brandy, or with lead water. If the galls are between the legs, use the same remedy; but if the hostler rubs him well between the legs, he will seldom be galled in that part. To preserve horses after travel, as soon as you arrive from a journey, immediately draw the two heel-nails of the fore feet; and, if it be a large shoe, then four: two or three days after, you may blood him in the neck, and feed him for ten or twelve days only with wet bran, without giving him any oats; but keep him well littered. The reason of drawing the heel-nails is because the heels are apt to swell, and, if they are not thus eased, the shoes would press and straiten them too much; it is also advisable to stop them with cow-dung for a while; but do not take the shoes off nor pare the feet.

The following bath will be very serviceable for preserving a horse's leg. Take the dung of a cow or ox, and make it thin with vinegar, so as to be of the consistence of thick broth; and, having added a handful of small salt, rub his fore legs from the knees, and the hind legs from the gambrels, chafing them well with and against the hair, that the remedy may sink in and stick to those parts. Thus leave the horse till morning, not wetting his legs, but giving him his water that evening in a pail; next morning lead him to the river, or wash his legs in soft water, which will keep them from swelling. Those persons who, to recover their horse's feet, make a hole in them, which they fill with moistened cow-dung, and keep it in their fore feet during the space of a month, act very injudiciously; because, though the continual moisture that issues from the dung occasions the growing of the hoof, yet it dries and shrinks it so excessively when out of that place, that it splits and breaks like glass, and the foot immediately straightens. It is certain that cow-dung, contrary to the opinion of many people, spoils a horse's hoof; it does indeed moisten the sole; but it dries up the hoof, which is of a different nature from it. In order, therefore, to recover a horse's feet, instead of cow-dung, fill a hole with blue wet clay, and make him keep his fore feet in it for a month. Most horses that are fatigued, or over-ridden, and made lean by long journeys, have their flanks altered without being pursy, especially vigorous horses that have worked too violently. To recover them, give each of them in the morning half a pound of honey very well mingled with scalded bran; and, when they readily eat the half pound, give them the next time a whole one, and afterwards two pounds, every day continuing this course till your horses are empty, and purge kindly with it; but, as soon as you perceive that their purging ceases, give them no more honey. Administer powder of liquorice in the scalded bran for a considerable time; and, to cool their blood, it will not be improper to let them have three or four glisters. If the horse be very lean, give him some wet bran, over and above his proportion of oats; and grass is also beneficial, if he be not pursy. Sometimes excessive feeding may do horses more harm than good, by rendering them subject to the farcy. Be cautious, therefore, in giving them too great a quantity at a time. When a horse begins to drink water heartily, it is a certain sign that he will recover in a short time. All the time you are upon a journey, let your horse drink of the first good water you come to, after seven o'clock in the morning if it be in summer, and after nine or ten in winter. That is accounted good water which is neither too quick and piercing, nor too muddy. This is to be done, unless you would have him gallop a long time after drinking; for if so, you must forbear. Though it is the custom in England to run and gallop horses after drinking; yet, says M. de Sollysel, it is the most pernicious practice that can be imagined for horses. Although a horse be warm, and sweat very much, yet if he is not quite out of breath, and you have still four or five miles to ride, he will be better after drinking a little, than if he had drunk none at all. But if the horse be very warm, you should at coming out of the water, redouble your pace, to warm the water in his belly. If when you bait he be hot or sweaty, you must not let him drink, as it would endanger his life; and, when his bridle is taken off, his excessive thirst will hinder him from eating, so that he will not offer to touch his meat for an hour or two; therefore he should have his oats given him washed in ale or beer, or only a part of them, if you intend to feed him again after he has drunk. Some think that horses are often spoiled by giving them oats before their water; because they say the water makes the oats pass too soon, and out of the stomach undigested. But M. de Sollysel affirms, that though it be the common custom not to do it till after, yet it is proper to feed with oats both before and after, especially if the horse be warm, and has been hard rode.

HORSE, STONE. See STALLION.

The count de Buffon gives the following directions for *breeding horses*:—When the stallion is chosen, and all the mares intended for him are collected together, there must be another stone-horse, to discover which of the mares are in heat; and, at the same time, contribute to inflame them. All the mares are to be brought successively to this stone-horse; which should also be inflamed, and suffered frequently to neigh. As he is for leaping every one, such as are not in heat keep him off, while those which are so suffer him to approach them. But, instead of being allowed to satisfy his impulse, he must be led away, and the real stallion substituted in his stead. This trial is necessary for ascertaining the true time of the mare's heat, especially of those which have not yet had a colt; for, with regard to such as have recently foaled, the heat usually begins nine days after their delivery; and on that very day they may be led to the stallion to be covered; and nine days after, by the experiment above-mentioned, it may be known whether they are still in heat. If they are, they must be covered a second time; and thus successively every ninth day while their heat continues: for when they are impregnated their heat abates, and in a few days ceases entirely. The stud must be fixed in a good soil,

and in a suitable place, proportioned to the numbers of mares and stallions intended to be used. This spot must be divided into several parts, enclosed with rails or ditches well fenced; in the part where the pasture is the richest, the mares in fold, and those with colts by their sides, are to be kept. Those which are not impregnated, or have not yet been covered, are to be separated, and kept with the fillies in another close, where the pasture is less rich, that they may not grow too fat. Lastly, the young stone colts, or geldings, are to be kept in the driest part of the fields, and where the ground is most unequal; that, by running over the uneven surface, they may acquire a freedom in the motion of their legs and shoulders. This close, where the stone colts are kept, must be very carefully separated from the others, lest the young horses break their bounds, and enervate themselves with the mares. If the tract be so large as to allow of dividing each of these closes into two parts, for putting oxen and horses into them alternately, the pasture will last much longer than if continually eaten by horses; the ox improving the fertility, whereas the horse lessens it. In each of these closes should be a pond; standing water being better than running, which often gripes them; and, if there are any trees in the ground, they should be left standing, their shade being very agreeable to the horses in great heats; but all stems or stumps should be grubbed up, and all holes levelled, to prevent accidents. In these pastures the horses should feed during the summer; but in the winter the mares should be kept in the stable and fed with hay. The colts also must be housed, and never suffered to feed abroad in winter, except in very fine weather. Stallions that stand in the stable should be fed more with straw than hay; and moderately exercised till covering time, which generally lasts from the beginning of April to the end of June. But during this season they should have no other exercise, and be plentifully fed, but with the same food as usual. Before the stallion is brought to the mare he should be dressed, as that will greatly increase his ardor. The mare must also be curried, and have no shoes on her hind feet, some of them being ticklish, and apt to kick the stallion. During the first seven days, let four different mares be successively brought to him; and the ninth day let the first be again brought, and so successively while they continue in heat: but, as soon as the heat of any one is over, a fresh mare is to be put in her place, and covered in her turn every nine days; and as several retain even at first, second, or third time, it is computed that a stallion, by such management, during the three months, may cover fifteen or eighteen mares, and beget ten or thirteen colts. After being covered, nothing more is requisite than to lead her away to the field.

The first foal of a mare is never so strongly formed as the succeeding; so that care should be taken to procure for her, the first time, a larger stallion, that the defect of the growth may be compensated by the largeness of the size. Particular regard should also be had to the difference or congruity of the fashion of the stallion and the mare, in order to correct the faults of the one by the perfections of the other; especially never to make any disproportionate copulations, as of a small horse with a large mare, or a large horse with a small mare; as the produce of such copulation would be small, or badly proportioned. It is by gradation that we must endeavour to arrive at natural beauty. It has been observed, that horses fed in dry and light grounds produce temperate, swift, and vigorous foals, with muscular legs and a hard hoof; while the same bred in marshes and moist pastures have produced foals with a large heavy head, a thick carcass, clumsy legs, bad hoofs, and broad feet. These differences proceed from the air and food; but what is more difficult to be accounted for, and still more essential than what we have hitherto observed, is, to be continually crossing the breed to prevent a degeneracy. In coupling of horses, the color and size should be suited to each other, the shape contrasted, and the breed crossed by an opposition of climates: but horses and mares foaled in the same stud should never be joined. These are essential articles; but there are others which should by no means be neglected; as, that no short-docked mares be suffered in a stud, because, from their being unable to keep off the flies, they are much more tormented by them than others which have a long sweeping tail; and their continual agitation from the stings of these insects, occasions a diminution in the quantity of their milk, and has a great influence on the constitution and size of the colt, which will be vigorous in proportion as its dam is a good nurse. Care must also be taken that the stud mares be such as have been brought up in pastures, and never over-worked. Mares which have always been brought up in the stable on dry food, and afterwards turned to grass, do not breed at first; some time is required for accustoming them to this new aliment. Though the usual season for the heat of mares be from the beginning of April to the end of June, yet it is not uncommon to find some among a large number that are in heat before that time; but it is advisable to let this heat pass over without giving them to the stallion, because they would foal in winter; and the colts, besides the inclemency of the season, would have bad milk for their nourishment. Again, if the mares are not in heat till after the end of June, they should not be covered that season; because the colts, being foaled in summer, have not time for acquiring strength sufficient to repel the injuries of the following winter. Many, instead of bringing the stallion to the mare, turn him loose into the close, where all the mares are brought together; and there leave him to choose such as will stand to him. This is a very advantageous method for the mares; they will always take horse more certainly than in the other; but the stallion, in six weeks, will do himself more damage than in a number of years by moderate exercise, conducted in the manner already mentioned. When the mares are pregnant, and their belly begins to swell, they must be separated from those that are not, lest they hurt them. They usually go eleven months and some days; and foal standing, whereas most other quadrupeds lie down. Those

that cannot foal without great difficulty, must be assisted; the foal must be placed in a proper situation; and sometimes, if dead, drawn out with cords. The head of the colt usually presents itself first, as in all other animals: at its coming out of the matrix, it breaks the secundines or integuments that enclose it, which is accompanied with a great flux of the lymph contained in them; and at the same time one or more solid lumps are discharged, formed by the sediment of the inspissated liquor of the allantoides. This lump, which the ancients called the hippomanes of the colt, is so far from being, as they imagined, a mass of flesh adhering to the head of the colt, that it is separated from it by a membrane called amnois. As soon as the colt is fallen, the mare licks it, but without touching the hippomanes; which points out another error of the ancients, who affirmed that she instantly devours it. The general custom is to have a mare covered nine days after her foaling, that no time may be lost; but it is certain, that the mare having, by this means, both her present and future foal to nourish, her ability is divided, and she cannot supply both so largely as she might one only. It would therefore be better, in order to have excellent horses, to let the mares be covered only every other year; they would last the longer, and bring foals more certainly: for, in common studs, it is so far from being true that all mares which have been covered bring colts every year, that it is considered as a fortunate circumstance if half, or at most two-thirds of them foal. Mares, when pregnant, will admit of copulation; but it is never attended with any superfœtation. They usually breed till they are fourteen or fifteen years of age; and the most vigorous till they are about eighteen. Stallions, when well managed, will engender till the age of twenty, and even beyond; but it must be observed, that such horses as are soonest made stallions are also the soonest incapable of generation: thus the large horses, which acquire strength sooner than the slender, and are therefore often used as stallions as soon as they are four years old, are incapable of generation before they are sixteen.

The breed of horses in Great Britain is as mixed as that of its inhabitants: the frequent introduction of foreign horses has given us a variety that no other single country can boast: most other countries producing only one kind; while ours, by a judicious mixture of the several species, by the happy difference of our soils, and by our superior skill in management, has brought each quality of this noble animal to the highest perfection. In the annals of Newmarket may be found instances of horses that have literally outstripped the wind, as the celebrated M. Condamine has shown in his remarks on those of Great Britain. Childers is an amazing instance of rapidity; his speed having been more than once exerted equal to eighty-two feet and a half in a second, or nearly a mile in a minute. The species used in hunting is a happy combination of the former with others superior in strength, but inferior in point of speed and lineage: a union of both is necessary; for the fatigues of the chase must be supported by the spirit of the one, as well as by the vigor of the other. No country can bring a parallel to the strength and size of our horses destined for the draught; or to the activity and strength united of those that form our cavalry. In London there are instances of single horses that are able to draw on a plain, for a small space, the weight of three tons; but could with ease, and for a continuance, draw half that weight. But the most remarkable proof of the strength of our British horses is to be drawn from that of our mill horses: some of these will carry at one load thirteen measures; which, at a moderate computation of seventy pounds each, will amount to 916 pounds; a weight superior to that which the less sort of camels will bear: this will appear less surprising as these horses are by degrees accustomed to the weight; and the distance they travel no greater than to and from the adjacent hamlets. Our cavalry, in the late campaigns (when they had opportunity), showed, over those of our allies, as well as the French, a great superiority both of strength and activity: the enemy was broken through by the impetuous charge of our squadrons; when the German horses, from their great weight and inactive make, were unable to second our efforts.

The present cavalry of this island only supports its ancient glory. It was eminent in the earliest times; our scythed chariots, and the activity and good discipline of our horses, struck terror even into Cæsar's legions: and the Britons, as soon as they became civilised enough to coin, took care to represent on their money the animal for which they were so celebrated. It is now impossible to trace out this species; for those which exist among the indigenæ of Great Britain, such as the little horses of Wales and Cornwall, the hobbies of Ireland, and the shelties of Scotland, though admirably well adapted to the uses of those countries, could never have been equal to the work of war: but probably we had even then a larger and stronger breed in the more fertile and luxuriant parts of the island. Those we employ for that purpose, or for the draught, are an offspring of the German or Flemish breed, meliorated by our soil and a judicious culture. The English were ever attentive to an exact culture of these animals. The esteem that our horses were held in by foreigners, so long ago as the reign of Athelstan, may be collected from a law of that monarch, prohibiting their exportation, except they were designed as presents. These must have been the native kind, or the prohibition would have been needless; for our commerce was at that time too limited to receive improvement from any but the German kind, to which country their own breed could be of no value. But, when our intercourse with the other parts of Europe was enlarged, we soon laid hold of the advantages this gave of improving our breed. Roger de Belesme, earl of Shrewsbury, first introduced the Spanish stallions into his estate in Pow Island, from which that part of Wales was for many ages celebrated for a swift and generous race of horses. Giraldus Cambrensis, who lived in the reign of Henry II., takes notice of it; and Michael Drayton, contemporary with Shakspeare, alludes to their excellence in

the sixth part of his Polyolbion. This kind was probably destined to mount our gallant nobility or courteous knights for feats of chivalry. From these sprung, to speak the language of the times, the flower of coursers, whose elegant form added charms to the rider, and whose activity and managed dexterity gained him the palm in that field of gallantry and honor. The increase of our inhabitants, and the extent of our manufactures, together with the former neglect of internal navigation to convey those manufactures, multiplied the number of horses: an excess of wealth, before unknown in these islands, increased the luxury of carriages, and added to the necessity of a culture of these animals: their high reputation abroad has also made them a branch of commerce, and proved another cause of their vast increase.

In France, horses of the Bretagne breed are strongly made, and have generally black hair, or brown-bay; and good legs and feet, with a hardy mouth, and a head short and fleshy; but in general they are clumsy. The horses of Franche Comté are said to have the legs of tigers, and the belly of a hind; but they are short and thick, and of a middle size; being much more proper for drawing than riding. The horses of Gascony are not unlike those of Spain; but they are not so handsome nor so active, and therefore they are more proper to draw carriages. The Limosin horses are very vicious, and are good for little till they are six years old. Their color is generally bay, or a bay-brown. The horses of Normandy are much like those of Bretagne; and those of Poitou have good bodies, legs, feet, and eyes; but they are far from being handsome. The horses of Germany are more handsome than those of Belgium and are of great use for carriages, and the army, especially for drawing artillery. They have a great deal of hair about the legs; are not large, but are well set; and yet have tender feet. The Hungarian horses are excellent for the coach, as well as for riding; but they are large, though well proportioned; are of all colors, and in general very swift. The Danish horses are low, short, and square; but they have a fine head and short hair. The horses of the Low Countries are very fit for the coach, and they are often known by the name of Flanders mares. The Polish horses are like the Danish; only they have not so fine a forehand; their color is generally a bright bay, and that of the outward peel of an onion; and they are fiery and vicious. The horses of Switzerland are pretty much like those of Germany. Those of Piedmont are fiery, of a middle size, and of all sorts of colors; their legs are good and handsome, their eyes fine, their ears small, and their mouths good; but they do not carry their heads well. The horses of Naples and Italy are generally ill made and lean; they never do well in a colder climate. The Spanish horses are well made and handsome, as well as very active and nimble; they have good eyes, handsome legs and heads, and are easily managed; The Turkish horses are of different shapes; but are generally swift, though their mouths are bad. Most of them are white, though there are other colors; and they are in general large, hardy, strong, and fit for the road. The horses of Barbary, commonly called barbs, have strong hoofs and are fine racers: they preserve their vigor to the last; some of them are used as stallions in Britain. The horses of China are very vigorous, though low in height. Those of the Eluth Tartars are good and full of fire, and their size is much the same as the Polish horses; they are afraid of nothing, not even of the lions and tigers. In various parts of Hindostan they are numerous, and of all colors; but generally of the middle size, though there are some as large and as handsome as those in Europe. The wild horses of Tartary differ little from the tame; but are so swift, that they will avoid the arrows of the most skilful hunters.

Horses, Draught, in farming, are a sort of coarse-made horses destined for the service of the cart or plough. These, for what is called the show draught, are to be chosen of an equal height; for otherwise, when put into the cart, one draws unequally with the other. The draught horse should be large bodied and strong loined, and of such a disposition as rather to be too dull than too brisk, and rather to crave the whip than to draw more than is needful. Mares are the fittest for this use for the farmer, as they will be kept cheap, and not only do the work, but give a yearly increase of a foal. They should have a good head, neck, breast, and shoulders; for the rest of the shape, it is not of much consequence. Draught horses should be always kept to that employ. Some put them to the saddle on occasion, but it does them harm, alters their pace, and spoils them for labor. The draught horse ought to have a large broad head, because horses of this shaped head are less subject than others to diseases of the eyes. The ears should be small, straight, and upright; the nostrils large and open, that he may breathe with the more freedom. A horse with a full and bold eye always promises well. On the other hand a sunk eye and an elevated brow are bad signs The horse is esteemed fittest for this purpose, also, that has a large and round buttock, which neither sinks down nor cuts. He must have a firm and strong tail, and the dock must be thick and well furnished with hair, and placed neither very high nor very low. The legs should be rather flat and broad than round; the roundness of the leg being a fault in a horse destined to labor that will soon ruin him. As to the hinder legs, the thighs should be fleshy and long, and the whole muscle which shows itself on the outside of the thigh should be large and very thick.

Nothing is so essential to the health of these serviceable creatures as cleanliness; if they are fed ever so well, and not kept clean, they will be subject to numerous diseases. The servant who has the care of them ought to be up very early, and to clean the racks and mangers from all filth. The currying of them must be carefully performed every morning, but not in the stable, for the dust to fall upon the other horses. After the horses are dusted, you should twist a wisp of straw hard up, and, wetting it in water, rub the legs, shoulders, and body. Many of the diseases of draught horses, are owing to bad water. If there be any running stream in the neighbour-

hood, they should always be led to that to water every day in summer, but in winter well-water is warmer and better for them. If there be a necessity of giving them well-water, in summer, it must be drawn up some hours before the time, and exposed to the sun-beams in tubs or troughs; marsh-water, or that of lowland ditches, is worst of all. When the laboring horse has drunk his water, he should have his oats given him, carefully sifted. It is a common practice, as soon as a horse is come in from his work, to rub down his legs with a hard wisp of hay; but the best judges of horses absolutely condemn this, and observe, that after hard labor it brings down humors into them, and makes them stiff. The rubbing itself is wholesome, but the doing it when the creature is hot is the mischief. The racks are to be well supplied with hay, and the horses should be left to rest and eat about two hours, and then led to water; after this they should be fed. In the evening, the first thing to be done is to examine the feet, and see if any thing is amiss about the shoes. A very material thing for the preservation of all sorts of cattle, but of none so much as draught horses, is fresh and clean litter.

In *old horses*, the eye-pits are generally deep; but this is only an equivocal mark, being also found in young horses begot by old stallions. The most certain knowledge of the age is to be obtained from the teeth. Of these a horse has forty; twenty-four grinders or double teeth, four tushes, and twelve fore-teeth; mares have no tushes, or at least very short ones. It is not from the grinders that we know the age; it is discovered first by the fore teeth, and afterwards by the tushes. The twelve fore-teeth begin to shoot within twelve days after the colt is foaled. These first or foal teeth, are round, short, not very solid, and are cast at different times, to be replaced by others. At the age of two years and a half the four middle fore-teeth are cast, two in the upper jaw and two in the lower. In one year more four others drop out, one on each side of the former, which are already replaced. When he is about four years and a half old he sheds four others, and always next to those which have fallen out and been replaced. These four foal-teeth are replaced by four others, but are far from growing so fast as those which replaced the eight former, and are called the corner-teeth; they replace the last four foal-teeth, and by these the age of a horse is discovered. They are easily known, being the third both above and below, counting from the middle of the jaw. They are hollow, and have a black mark in their cavity. When the horse is four years and a half old they are scarcely visible above the gum, and the cavity is very sensible; at six years and a half they begin to fill; and the mark continually diminishes and contracts till seven or eight years, when the cavity is quite filled up, and the black spot effaced. After eight years, these teeth ceasing to afford any knowledge of the age, it is judged of by the tushes: which are four teeth adjoining to those last mentioned; and, like the grinders, are not preceded by any other teeth. The two in the lower jaw usually begin to shoot at three years and a half, and those of the upper jaw at four; continuing very sharp-pointed till six. At ten the upper seem blunted, worn out, and long, the gum contracting itself as its years increase; the barer therefore they are, the older is the horse. From ten to thirteen or fourteen years little can be seen to indicate the age; but at that time some hairs of the eye-brows begin to turn gray. This mark, however, is equivocal, horses from old stallions or mares having gray hairs in the eye-brows when they are not above nine or ten years old. In some horses the teeth are of such a hardness as not to wear; and in such the black mark always subsists, being never effaced by time; but the age of these horses, which are called beguts by the French, is easily known; the hollow of the tooth being filled up, and at the same time the tushes very long. This is more common in mares than in horses. The age of a horse may be also known, though less accurately, by the bars in his mouth, which wear away as he advances in years.

When the horse is *without blemish* the legs and thighs are clean, the knees straight, the skin and shank thin, and the back-sinew strong and well braced. The sinews and the bones should be so distinct as to make the legs appear thin and lathy, not full and round. The pastern joints should never be large and round, nor must there be any swelling near the coronet. The hock should be lean and dry, not puffed up with wind. With regard to the hoof, the coronet should be equally thick, and the horn shining and grayish. A white horn is the sign of a bad foot, for it will wear out in a short time; and likewise when the horn is thin, it is liable to be spoiled in shoeing, and by travelling hard on stony grounds. This is best known when the shoe is taken off; for then the verge all round the sole will appear thin, and the horse will wince at the least touch of the pincers. A strong foot has the fibres of the hoof very distinct, running in a direct line from the coronet to the toe, like the grain of wood. In this case care must be taken to keep the foot moist and pliable. The greatest inconvenience attending a hard strong foot is its being subject to rifts and fissures, which cleave the hoof quite through sometimes from the coronet down to the bottom. A narrow heel is likewise a defect; and, when it is not above two fingers in breadth, the foot is bad. A high heel causes a horse to trip and stumble often; and the low one, with long yielding pasterns, is very apt to be worn quite away on a journey. Too large a foot in proportion to the rest of the body renders a horse weak and heavy. The head of a horse should be small, and rather lean than fleshy. The ears should be small, erect, thin, sprightly, and pointed. The forehead, or brow, should be neither too broad nor too flat, and should have a star or snip thereon. The nose should rise a little, and the nostrils should be wide, that he may breathe more freely. The muzzle should be small, and the mouth neither too deep nor too shallow. The jaws should be thin, and not approach too near together at the throat, nor too high upwards towards the onset, that the horse may have sufficient room to carry his head in an easy graceful posture. The eyes should be of a middle size, bright, lively, and full of fire. The tongue should

be small, that it may not be too much pressed by the bit; and it is a good sign when his mouth is full of white froth, for it shows that he will not soon be overheated. The neck should be arched towards the middle, growing smaller by degrees from the breast and shoulder to the head. The hair of the mane should be long, small, and fine; and, if it be a little frizzled, so much the better. The shoulder should be pretty long; the withers thin, and enlarge gradually from thence downwards; but so as to render his breast neither too narrow nor too gross. A thick shouldered horse soon tires, and trips and stumbles every minute; especially if he has a thick large neck at the same time. When the breast is so narrow that the fore-thighs almost touch, they are never good for much. A horse of a middle size should have the distance of five or six inches between his fore-thighs, and there should be less distance between his feet than his thighs near the shoulders when he stands upright. The body of a horse should be of a middling size in proportion to his bulk, and the back should sink a little below the withers; but the other parts should be straight and no higher behind than before. He should also be home-ribbed; but the short ribs should not approach too near the haunches, and then he will have room to fetch his breath. When a horse's back is short in proportion to his bulk, and yet otherwise well limbed, he will hold out a journey, though he will travel slow. When he is tall, at the same time with very long legs, he is but of little value.

The *wind* should never be overlooked in the choice of a horse: and it may easily be known by his flanks, if he is broken-winded, when he stands quiet in the stable; because he always pinches them in with a very slow motion, and drops them suddenly. A thick-winded horse fetches his breath often, and sometimes rattles and wheezes. This may be always discovered when he is put to brisk exercises. The temper of a horse should always be observed; a vicious horse generally lays his ears close to his pole, shows the whites of his eye, and looks sullen and dogged. An angry horse may be known by his frowning looks; and he generally seems to stand in a posture of defence. When he is very vicious he pays no regard to the groom that feeds him: however, some horses that are ticklish will lay back their ears, and yet be of a good disposition. A fearful horse is apt to start, and never leaves it off till he is old and useless. A fretful horse is very unfit for a journey; and you may discover his temper as soon as he gets out of the stable. A dull, heavy, sluggish horse may be easily known, whatever tricks are used to rouse his spirits.

With regard to the color of a horse, the bright bay, and indeed all kinds of bays in general, are accounted good colors. The chestnut horse is generally preferable to the sorrel, unless the former happens to be bald, or party colored, with white legs. Brown horses have generally black manes and tails, and their joints are of a rusty black. Those of this color that are dappled are much handsomer than the rest. Horses of a shining black, and well marked without too much white, are high in esteem for their beauty. A star, or blaze, or white muzzle, or one or more feet tipped with white, are thought to be rather better than those that are quite black. Of grays, the dappled are accounted best; though the silver gray make a more beautiful appearance, and often prove good. The iron gray with white manes and tails are thought not to be so hardy. Grays of every kind will turn white sooner or later; but the nutmeg gray, when the dappled parts incline to bay or chestnut, are said to be good hardy horses. Roan horses have a diversity of colors mixed together; but the white is most predominant. They are all generally hardy, and fit for the road; and some are exceedingly good. Those of a strawberry color most resemble the sorrel, and they are often marked with white on the face and legs. When the bay is blended with it, he seems to be tinctured with claret; and some of these prove to be very good. Dun, sallow, and cream-colored horses have a list down their backs; and their manes and tails are black. Dun horses are seldom chosen by gentlemen; and yet they may be very useful to the country farmer. The sallow and cream-colored are more esteemed, both for beauty and use. Those horses that are finely spotted with gay colors like leopards are a great rarity, and for that reason are only in the hands of great men.

HORSES, RACE. See RACING.

HORSEBEAN, *n. s.* Horse and bean. A small bean usually given to horses.

Only the small *horsebean* is propagated by the plough. *Mortimer.*

HORSE'BLOCK. *n. s.* Horse and block. A block on which they climb to a horse.

HORSEBOAT', *n. s.* Horse and boat. A boat used in ferrying horses.

HORSEBOY', *n. s.* Horse and boy. A boy employed in dressing horses; a stable-boy.

Some *horseboys*, being awake, discovered them by the fire in their matches. *Knolles's History.*

HORSE'BREAKER, *n. s.* Horse and break. One whose employment is to tame horses to the saddle.

Under Sagittarius are born chariot-racers, *horse-breakers*, and tamers of wild beasts. *Creech.*

HORSECHEST'NUT, *n. s.* Lat. *æsculus.* Horse and chestnut. A tree. It hath digitated or fingered leaves: the flowers, which consist of five leaves, are of an anomalous figure, opening with two lips: there are male and female upon the same spike: the female flowers are succeeded by nuts, which grow in green prickly husks. Their whole year's shoot is commonly performed in three weeks' time, after which it does no more than increase in bulk, and become more firm; and all the latter part of the Summer is occupied in forming and strengthening the buds for the next year's shoots.

The *horsechestnut* grows into a goodly standard. *Mortimer.*

HORSE'COURSER, *n. s.* Horse and courser. Junius derives it from *horse* and *cose*, an old Scotch word, which signifies to change; and it should therefore, he thinks, be written *horsecoser*. The word now used in Scotland is *horsecouper*, to denote a jockey, seller, or rather changer of horses. It may well be derived from course, as

he that sells horses may be supposed to course or exercise them. One that runs horses, or keeps horses for the races. A dealer in horses.

A Florentine bought a horse for so many crowns, upon condition to pay half down: the *horsecourser* comes to him next morning for the remainder. *L'Estrange.*

A servant to a *horsecourser* was thrown off his horse. *Wiseman.*

HORSE'CRAB, *n. s.* A kind of fish.

HORSE'CUCUMBER, *n. s.* Horse and cucumber. A plant.

The *horsecucumber* is the large green cucumber, and the best for the table, green out of the garden. *Mortimer.*

HORSE'DUNG, *n. s.* Horse and dung. The excrements of horses.

Put it into an ox's horn, and, covered close, let it rot in hot *horsedung.* *Peacham on Drawing.*

HORSE'EMMET, *n. s.* Horse and emmet. Ant of a large kind.

HORSE'FLESH, *n. s.* Horse and flesh. The flesh of horses.

The Chinese eat *horseflesh* at this day, and some gluttons have colt's flesh baked. *Bacon.*

An old hungry lion would fain have been dealing with a good piece of *horseflesh*; but the nag he thought would be too fleet for him. *L'Estrange.*

HORSE'FLY, *n. s.* Horse and fly. A fly that stings horses, and sucks their blood.

HORSE'FOOT, *n. s.* An herb. The same with coltsfoot.

HORSE'HAIR, *n. s.* Horse and hair. The hair of horses.

His glittering helm, which terribly was graced
With waving *horsehair.* *Dryden.*

HORSE'HEEL, *n. s.* An herb.

HORSE'LAUGH, *n. s.* Horse and laugh. A loud violent rude laugh.

A *horselaugh*, if you please, at honesty;
A joke on Jekyl. *Pope.*

HORSE'LEECH, *n. s.* Horse and leech. A great leech that bites horses.

The *horseleech* hath two daughters, crying Give, give. *Proverbs.*

Let us to France; like *horseleeches*, my boys,
The very blood to suck. *Shakspeare.*

From leech; signifying a physician. A farrier.

HORSE'LITTER, *n. s.* Horse and litter. A carriage hung upon poles between two horses, in which the person carried lies along.

He that before thought he might command the waves of the sea, was now cast on the ground and carried in an *horselitter.* 2 *Mac.* ix. 8.

HORSE'MAN, *n. s.* Horse and man. One skilled in riding.

A skilful *horseman*, and a huntsman bred. *Dryden.*

One that serves in wars on horseback.

Encounters between *horsemen* on the one side, and foot on the other, are seldom with extremity of danger; because, as *horsemen* can hardly break a battle on foot, so men on foot cannot possibly chase *horsemen.* *Hayward.*

In the early times of the Roman commonwealth a *horseman* received yearly tria millia æris, and a foot soldier one mille; that is more than sixpence a-day to a horseman, and twopence a-day to a foot soldier. *Arbuthnot on Coins.*

I saw him urge as fleet a steed
As ever served a *horseman's* need.
Byron. The Giaour.

A rider; a man on horseback.

With descending showers of brimstone fired,
The wild Barbarian in the storm expired;
Wrapt in devouring flames the *horseman* raged,
And spurred the steed in equal flames engaged.
Addison.

A *horseman's* coat shall hide
Thy taper shape, and comeliness of side.
Prior.

HORSEMANSHIP.

HORSE'MANSHIP, *n. s.* From horseman. The art of riding; the art of managing a horse.

He vaulted with such ease into his seat,
As if an angel dropt down from the clouds
To turn and wind a fiery Pegasus,
And witch the world with noble *horsemanship.*
Shakspeare.

His majesty, to shew his *horsemanship*, slaughtered two or three of his subjects. *Addison.*

They please themselves in terms of hunting or *horsemanship.* *Wotton.*

Peers grew proud, in *horsemanship* t' excel;
Newmarket's glory rose, as Britain's fell. *Pope.*

HORSEMANSHIP, in its utmost latitude, comprehends whatever relates to the knowledge of the make, color, age, temper, and qualities of horses; their respective countries and climates, with the method of breeching, breaking, propagating, &c.; the discovery of the uses or services they are fitted for; whether for war, the race, the saddle, or labor; and forwarding and accommodating them for these purposes.

In this general sense it also includes the knowledge of the defects and diseases of horses, and the remedies proper for them, with the several operations requisite thereto; and thus comprehends the whole art of farriery. But the word is most commonly used for the art of riding and directing a horse to advantage; not only in the ordinary motions, but more especially in the managing, or making him work upon volts, airs, &c., and in this view chiefly we propose to consider it.

Sect. I.—Of Preparing Horses to be Mounted.

Though most horses are bought at an age when they have already been backed, they should be prepared for the rider with the same care, gentleness, and caution, as if they had never been handled, in order to prevent accidents, which might otherwise arise from a skittishness or other causes: and, as it is proper that they should be taught the figure of the ground they are to go

upon when they are at first mounted, they should be previously trotted in a longe on circles, without any rider.

The earl of Pembroke's directions on this subject are:—Put an easy cavesson upon the horse's nose, and make him go forward round you, standing quiet and holding the longe; and let another man, if you find it necessary, follow him with a whip. All this must be done very gently, and but a little at a time; for horses are spoiled by overmuch work more than by any other treatment whatever; and that by very contrary effects; for sometimes it drives them into vice, madness, and despair, and often stupifies and totally dispirits them.

The first obedience required in a horse is going forwards; till he performs this duty freely, never think of making him rein back, which would inevitably make him restive; as soon as he goes forwards readily, stop and caress him. Remember in this, and every other exercise, to use him to go equally well to the right and left; and, when he obeys, caress him and dismiss him immediately. If a horse that is very young takes fright, and stands still, lead on another horse before him, which probably will induce him to follow. Put a snaffle in his mouth; and, when he goes freely, saddle him, girting him at first very loose. Let the cord which you hold be long and loose; but not so much so as to endanger the horse's entangling his legs in it. Small circles, in the beginning, would constrain the horse too much, and put him upon defending himself. No bend must be required at first; never suffer him to gallop false; but, whenever he attempts it, stop him without delay, and then set him off afresh. If he gallops of his own accord, and true, permit him to continue: but, if not, do not demand it of him at first. Should he jump, shake the cord gently upon his nose, and he will fall into his trot again. If he stands still, plunges, or rears, let the man who holds the whip make a noise with it; but never touch him till necessary to make him go on. When you change hands, stop and caress him, and entice him to come up to you: for by presenting yourself, as some do suddenly before horses, and frightening them to the other side, you run a great risk of making them shy. If he keeps his head too low, shake the cavesson to make him raise it; and in whatever the horse does, whether he walks, trots, or gallops, let it be a constant rule, that the motion be determined, and really such as is intended, without the least shuffling, pacing, or any other irregular gait.

Sect. II.—Of placing the Rider, and Rendering him Firm on Horseback.

The greatest attention, and the same gentleness that is used in teaching a horse, should also be observed in training his rider. Every method must be practised to create and preserve, both in man and horse, all possible feeling and sensibility; contrary to the usage of many riding-masters, who seem industriously to labor at abolishing these in both.

As many essential points depend upon the manner in which a man is at first placed on horseback, it ought to be attended to with exactness. The absurdity of putting a man, who perhaps has never been on horseback before, upon a rough trotting horse, to which he is obliged to cling with all the force of his arms and legs, is sufficiently obvious. No man can be well seated on horseback, unless he be unconstrainedly master of the balance of his body, and at his ease; which cannot be, if his attention be otherwise engaged; as it must wholly be in a raw unprepared horseman on a rough horse.

The first time a man is put on horseback he should be placed upon a very gentle horse; and not attempt to trot him till he is quite easy in the walk; nor gallop, till he trots properly. Nor should horses be made to trot till they are obedient, and their mouths well formed on a walk; nor to gallop, till the same be effected on a trot. When he attains firmness in his seat, the more he trots rough horses the better. This is the best, easiest, and shortest method: by it a man is soon made a sufficient horseman; but in the other methods a man contracts all sorts of bad habits, and rides worse every day. Before a man mount he should be taught to know if the curb be well placed; that is, when the horse has a bit in his mouth, which at first he should not; but only a snaffle, till the rider is firm in his seat, and the horse also somewhat taught: likewise if the nose-band be properly tight; the throat-band somewhat loose; and the mouth-piece neither too high nor too low in the horse's mouth, so as not to wrinkle the skin nor to hang lax; the girths drawn moderately, but not too tight; and the crupper and the breast-plate properly adjusted. A very careful hand may venture on a bit at first, and succeed with it; only with colts it is better to avoid any pressure on the bars at first, which a curb, though ever so gently used, must in some degree occasion. When the bridle, &c., have been well looked to, let the man approach the horse gently near the shoulder; then, taking the reins and an handful of the mane in his left hand, let him put his foot softly in the left stirrup, by pulling it towards him, lest he touch the horse with his toe; then, raising himself up, let him rest a moment on it with his body upright, but not stiff; and after that, passing his right leg clear over the saddle, without rubbing against any thing, let him seat himself gently down. He must be cautious not to take the reins too short, for fear of making the horse rear, run, fall back, or throw up his head; but let him hold them of an equal length, neither tight nor slack, and with the little finger between them. Horses should be accustomed to stand still to be mounted, and not to stir till the rider pleases. All soldiers are instructed to mount and dismount equally well on both sides, which may be of great use in times of hurry and confusion.

The rider should be placed in his saddle, with his body rather back, and his head held up without stiffness; seated neither forwards, nor very backwards: with the breast elevated a little, and the lower part of the body a little forwards; the thighs and legs turned in without constraint, and the feet in a straight line neither turned in nor out. By this position the natural weight of the thighs has a proper pressure, and the legs are

ready to act: they must hang down easy and naturally, and so as not to be wriggling about, touching, and tickling the horse's sides, but always near them, in case they should be wanted, as well as the heels. The body must be kept easy and firm, and without any rocking; which is a bad habit easily contracted, especially in galloping. The left elbow must be gently leant against the body a little forwards: unless it be so rested, the hand cannot be steady, but will always be checking, and consequently hurt the horse's mouth. The hand and elbow ought to be equally high; if the hand were lower, it would constrain and confine the motion of the horse's shoulders: but, as the mouths of horses are different, the place of the hand also must occasionally differ: a leaning, low, heavy forehand requires a high hand; and a horse that pokes out his nose a low one. The right arm must be placed in a symmetry with the left; only let the right hand be a little more forward or backward, higher or lower, as occasion may require, in order that both hands may be free; both arms must be a little bent at the elbow, to prevent stiffness. A soldier's right hand should be kept unemployed in riding; it carries the sword, which is a sufficient business for it.

One rule ought never to be neglected about the hand, that it must be kept clear of the body; i. e. about two inches and a half forwards from it, with the nails turned opposite to the belly, and the wrist a little rounded downwards; a position not less graceful than ready for slackening, tightening, and moving the reins from one side to the other as may be found necessary.

When the rider is well placed, the more rough trotting he has without stirrups the better; but with a strict care always that his position be preserved very exactly. In all cases great care must be taken to hinder his clinging with his legs: in short, no clinging by hands or legs is ever to be allowed. If the motion of the horse be too rough, slacken it, till the rider grows by degrees more confident; and, when he is quite firm and easy on his horse in every kind of motion, stirrups may be given him; but he must never leave off trotting often without any. The stirrups should be neither short nor long; but of such a length, that when the rider, being well placed, puts his feet into them (about one-third of the length of each foot from the point of it), the points may be between two and three inches higher than the heels. The rider must not bear upon his stirrups, but let the natural weight of his legs rest on them; for, if he bears upon them, he will be raised above and out of his saddle; which should never be, except when a soldier charges sword in hand, with the body inclined forwards at the very instant of attacking. Spurs may be given as soon as the rider is grown familiar with stirrups; or even before, if his legs are well placed.

The hand should always be firm, but delicate; that is, a horse's mouth should never be surprised by any sudden transition of it, either from slack to tight, or from tight to slack. Every thing in horsemanship must be effected by degrees, but at the same time with spirit and resolution. That hand which, by giving and taking properly, gains its point with the least force, is the best; and the horse's mouth, under such a direction, will consequently be the best, supposing equal advantages in both from nature. This principle of gentleness should be observed upon all occasions, and in every part of horsemanship. Sometimes the right hand will be necessary, upon troublesome horses, to assist the left; but the less this is done the better. The snaffle must on all occasions be uppermost; that is, the reins of it must be above those of the bridle, whether the snafflle or the bit be used separately, or together.

When the rider knows enough, and the horse is sufficiently prepared and settled to begin any work towards suppling, one rein must be shortened according to the side worked to; but it must never be so much shortened as to make the whole strength rest on that rein alone: for, not to mention that the work would be false and bad, one side of the horse's mouth would thus be always deadened; whereas it should always be kept fresh by its own play, and by the help of the opposite rein's acting delicately in a somewhat smaller degree of tension; the joint effect of which produces in a horse's mouth the proper, gentle, and easy degree of appui or bearing.

A coward and a mad man make equally bad riders, and are both soon discovered and confounded by the superior sense of the creature they are mounted upon, who is at the same time equally spoiled by both. The coward, by suffering the animal to have his own way, not only confirms him in his bad habits, but creates new ones in him; and the mad or violent rider, by false and violent motions and corrections, drives the horse, through despair, into every vicious trick that rage can suggest.

The hands and legs should always act in correspondence with each other; the latter being subservient and assistant to the former. Upon circles, in walking, trotting, or galloping, the outward leg is the only one to be used, and that only for a moment at a time, in order to set off the horse true, or put him right if he be false; and, as soon as that is done, it must be taken away again immediately: but if the horse be lazy, or otherwise retain himself, both legs must be used and pressed to his sides at the same time together. The less the legs are used, in general, the better. Very delicate good riders, with horses they have dressed themselves, will scarcely ever use them. By the term outward is understood the side which is more remote from the centre; and by inward is meant the side next to the centre. In reining back, the rider should be careful not to use his legs, unless the horse back on his shoulders; in which case they must be both applied gently at the same time, and correspond with the hand. If the horse refuse to back at all, the rider's legs must be gently approached, till the horse lifts up a leg, as if to go forwards; at which time, the rein of the same side with that leg which is lifted up, will easily bring it backwards, and oblige the horse to back; but if the horse offers to rear, the legs must be instantly removed. The inward rein must be tighter on circles, so that

the horse may bend and look inwards, and the outward one crossed over a little towards it, and both held in the left hand.

The man and horse should begin on very slow motions, that they may have time to understand what is taught them; and in proportion as the effects of the reins are better comprehended, and the manner of working becomes more familiar, the quickness of motion may be increased. Every rider must learn to feel, without the help of the eye, when a horse goes false, and remedy the fault accordingly: this is an intelligence which nothing but practice, application, and attention, can give. A horse may not only gallop false, but also trot and walk false. If a horse gallops false, that is to say, if going to the right he leads with the left leg, or if going to the left he leads with the right; or in case he is disunited, i. e. if he leads with the opposite leg behind to that which he leads with before; stop him immediately, and put him off again properly. The method of effecting this is by approaching your outward leg, and putting your hand outwards; still keeping the inward rein the shorter, and the horse's head inwards, if possible: and, if he should still resist, then bend and pull his head outwards also; but replace it again, bent properly inwards, the moment he goes off true. A horse is said to to be disunited to the right, when going to the right, and consequently leading with the right leg before, he leads with the left behind; and is said to be disunited to the left, when going to the left, and consequently leading with the left leg before, he leads with the right behind. A horse may at the same time be both false and disunited; in correcting both which faults, the same method must be used. He is both false and disunited to the right, when in going to the right he leads with the left leg before, and the right behind; notwithstanding that hinder leg be with propriety more forward under his belly than the left, because the horse is working to the right: and he is false and disunited to the left, when in going to the left he leads with the right leg before and the left behind; notwithstanding, as above, the hinder leg be with propriety more forward under his belly than the right, because the horse is working to the left.

In teaching to sit rightly on horseback, the greatest attention must be given to prevent stiffness, and sticking by force in any manner: stiffness disgraces every undertaking, and sticking serves only to throw a man when displaced a greater distance from his horse: whereas, by a proper equilibrating position of the body, and by the natural weight only of the thighs, he must be firm and secure in his seat. As the rider becomes more firm, and the horse more supple, it is proper to make the circles less; but not too much so, for fear of throwing the horse forward upon his shoulders.

Some horses, when first the bit is put into their mouths, if great care be not taken, will put their heads very low. With such horses, raise your right hand with the bridoon in it, and play at the same time with the bit in the left hand, giving and taking. On circles, the rider must lean his body inwards; unless great attention be given to make him do it, he will be perpetually losing his seat. It is scarcely possible for him to be displaced, if he leans his body properly inwards.

Sect. III.—Of suppling Horses with Men upon them by the Epaule en dedans, &c., with and without a Longe, on Circles and on straight Lines.

When a horse is well prepared and settled in all his motions, and the rider firm, it will be proper to proceed towards a farther suppling and teaching of both. Begin this new work by bringing the horse's head a little more inwards than before, pulling the inward rein gently to you by degrees. When this is done try to gain a little on the shoulders, by keeping the inward rein the shorter as before, and the outer one crossed over towards the inward one. The intention of these operations is this: the inward rein serves to bring in the head, and procures the bend; whilst the outward one, that is a little crossed, tends to make that bend perpendicular, and as it should be; that is to say, to reduce the nose and the forehead to a perpendicular line with each other: it also serves, if put forward, as well as crossed, to put the horse forward, if necessary; many horses being apt, in this and other operations, rather to lose their ground backward, when they should rather advance: if the nose were drawn in towards the breast, beyond the perpendicular, it would confine the motion of the shoulders, and have other bad effects.

All other bends besides those above specified are false. The outward rein, being crossed, not in a forward sense, but rather a little backward, serves also to prevent the outward shoulder from getting too forward, and makes it approach the inward one; which facilitates the inward leg's crossing over the outward one, which is the motion that so admirably supples the shoulders. Care must be taken that the inward leg pass over the outward one without touching it: this inward leg's crossing over must be helped also by the inward rein, which you must cross towards and over the outward rein every time the outward leg comes to the ground, in order to lift and help the inward leg over it: at any other time, but just when the outer leg comes to the ground, it would be wrong to cross the inward rein, or to attempt to lift up the inward leg by it; nay, it would be demanding an absolute impossibility, and pulling about the reins and horse to no purpose: because, in this case, a very great part of the horse's weight, resting upon that leg, would render such an attempt not only fruitless, but also prejudicial to the sensibility of his mouth: moreover, it would put the horse under a necessity of straddling before, and of leading with the wrong leg.

When the horse is thus far familiarised to what you require of him, proceed to effect by degrees the same crossing in his hinder legs. By bringing in the fore legs more you will of course engage the hinder ones in the same work: if they resist, the rider must bring both reins more inwards; and, if necessary, put back also, and approach his inward leg to the horse; and

if the horse throws out his croup too far, he must bring both reins outwards, and, if absolutely necessary, he must also make use of his outward leg, in order to replace the horse: observing that the croup should always be considerably behind the shoulders, which in all actions must go first; and, the moment that the horse obeys, the rider must put his hand and leg again in their usual positions.

Nothing is more ungraceful in itself, more detrimental to a man's seat, or more destructive of the sensibility of a horse's sides, than a continual unsettledness in a horseman's legs, which prevents the horse from ever going a moment together, steady, or determined. A horse should never be turned, without first moving a step forwards: and, when it is doing, the rider must not lift his elbow, and displace himself; a motion only of the hand from the one side to the other being sufficient for that purpose. It should also be a constant rule, never to suffer a horse to be stopped, mounted, or dismounted, but when he is well placed. The slower the motions are when a man or horse is taught any thing, the better.

The figures worked upon must be great at first, and afterwards made less by degrees, according to the improvement which the man and horse make; the cadenced pace also, which they work in, must be gradually augmented. The changes from one side to the other should be in a bold determined trot, and at first quite straight forwards, without demanding any side motion on two pistes, which it is very necessary to require afterwards when the horse is sufficiently suppled. By two pistes is meant, when the fore and hinder parts do not follow, but describe two different lines.

In the beginning, a longe is used on circles, and also on straight lines, to help both the rider and the horse; but afterwards, when they are grown more intelligent, they should go alone. At the end of the lesson, rein back; then put the horse forwards by degrees, approaching both legs gently to his sides, and playing with the bridle: if he rears, push him out immediately into a full trot. Shaking the cavesson on the horse's nose, and also putting yourself before him and rather near to him, will generally make him back, though he otherwise refuse to do it: moreover, a slight use and approaching of the rider's legs will sometimes be necessary in backing, in order to prevent the horse from going too much upon his shoulders: but the pressure of the legs ought to be very small, and taken quite away the moment that he puts himself upon his haunches. If the horse will not back upon a straight line properly, the rider must not be permitted to have recourse immediately to his leg, and so distort himself by it; but first try, if crossing over his hand and reins to which ever side may be necessary, will not be alone sufficient: and if not, then employ the leg.

After a horse is properly prepared, and goes freely on his several paces, he ought to be kept to a proper degree upon his haunches, with his hinder legs well placed under him; whereby he will be always pleasant to himself and his rider, will be light in hand, and ready to execute whatever may be demanded of him. The method that is commonly used, of forcing a horse sideways, is a glaring absurdity, and very hurtful to the animal; instead of suppling him, it obliges him to stiffen and defend himself, and often makes a creature that is naturally benevolent, restive, frightened, and vicious.

A running snaffle is best for horses who have very long and high fore-hands, and who poke out their noses; but, for such as bore and keep their heads low, a common one is preferable; though any horse's head may be kept up also with a running one, by the rider keeping his hands very high and forwards: but whenever either is used alone without a bridle, upon horses that carry their heads low and that bore, it must be sawed about from one side to the other.

This lesson of the epaule en dedans should be taught to all who intend to teach horsemanship or to break horses; and the more of such that can be found the better: none others should ever be suffered upon any occasion to let their horses look any way besides the way they are going. But all horses whatever, and all men who are designed for teaching others, must go thoroughly and perfectly through this excellent lesson.

Sect. IV.—Of the Head to the Wall, and the Croup to the Wall.

This lesson should be practised immediately after that of the epaule en dedans, in order to place the horse properly the way he goes, &c. The difference between the head to the wall, and the croup to the wall, consists in this: in the former the fore-parts are more remote from the centre, and go over more ground; in the latter, the hinder parts are more remote from the centre, and consequently go over more ground; in both, as well as in all other lessons, the shoulders must go first. In riding horses, the head to the wall is the easier lesson of the two at first, the line to be worked upon being marked by the wall, not far from his head.

The motion of the legs to the right is the same as that of the epaule en dedans to the left, and so vice versâ; but the head is always bent and turned differently: in the epaule en dedans the horse looks the contrary way to that which he goes; in this he looks the way he is going. In the beginning very little bend is required; too much at once would astonish the horse, and make him defend himself; it must be augmented by degrees. If the horse absolutely refuses to obey, it is a sign that either he or his rider has not been sufficiently prepared by previous lessons. It may happen that weakness or a hurt in some part of the body, or sometimes temper, though seldom, may be the cause of the horse's defending himself: it is the rider's business to find out whence the obstacle arises; and, if he finds it to be from the first mentioned cause, the previous lessons must be resumed; if from the second, proper remedies must be applied; and if from the last cause, when all fair means that can be tried have failed, proper correction must be used.

In practising this lesson to the right, bend the horse to the right with the right rein; helping the

left leg over the right (at the time when the right leg is just come to the ground), with the left rein crossed towards the right, and keeping the right shoulder back with the right rein towards your body, in order to facilitate the left leg's crossing over the right; and so likewise vice versâ to the left, each rein helping the other by their properly mixed effects. In working to the right the rider's left leg helps the hinder parts on to the right, and his right leg stops them if they get too forwards; and so vice versâ to the left: but neither ought to be used, till the hand being employed in a proper manner has failed, or finds that a greater force is necessary to bring about what is required than it can effect alone; for the legs should not only be corresponding with, but also subservient to, the hand; and all unnecessary aids, as well as all force, ought always to be avoided as much as possible.

In the execution of all lessons the equilibrium of the rider's body is of great use to the horse; it ought always to go with, and accompany every motion of the animal; when to the right, to the right; and when to the left, to the left. Upon all horses, in every lesson and action, it must be observed, that there is no horse but has his own peculiar appui or degree of bearing, and also a sensibility of mouth, as likewise a rate of his own, which it is absolutely necessary for the rider to discover. A bad rider always takes off at least the delicacy of both. The horse will inform his rider when he has got his proper bearing in the mouth, by playing pleasantly and steadily with his bit, and by the spray about his chaps. A delicate and good hand will not only always preserve a light appui or bearing in his sensibility; but also of a heavy one, whether natural or acquired, make a light one. The lighter this appui can be made, the better, provided that the rider's hand corresponds with it; if it does not, the more the horse is properly prepared, so much the worse.

Instances of this inconvenience of the best of appuis, when the rider is not equally taught with the horse, may be seen every day. Gentlemen try to get their horses bitted, as they call it, without being suitable prepared themselves for riding them; the consequence of which is, that they ride in danger of breaking their necks; till at length, after much pulling about, and by the joint insensibility and ignorance of themselves and grooms, the poor horse gradually becomes a mere senseless unfeeling automaton; and thereby grows what is called settled. When the proper appui is found, and made of course as light as possible, it must not be kept duly fixed without any variation, but be played with; otherwise one equally continued tension of reins would render both the rider's hand and the horse's mouth very dull. Slight and frequent giving and taking is therefore necessary to keep both perfect.

Whatever pace or degree of quickness you work in, be it ever so fast, or ever so slow, it must be cadenced; time is as necessary for a horseman as for a musician. This lesson of the head and of the tail to the wall is especially to be taught every soldier; scarcely any manœuvre can be performed without it. In closing and opening files, it is almost every moment wanted.

Sect. V.—Of Making Horses stand Fire, and endure Noises, Alarms, Sights, &c.

To make horses stand fire, the sound of drums, and different noises, use them to it by degrees in the stable at feeding-time; and, instead of being frightened at it, they will soon come to like it as a signal for eating. With regard to such horses as are afraid of burning objects, begin by keeping them still at a certain distance from some lighted straw: caress the horse; and in proportion as his fright diminishes, bring gradually the burning straw nearer, and increase the size of it. By this means he may very quickly be brought to be so familiar with it, as to walk undaunted even through it.

As to horses that are apt to lie down in the water, if animating them, and attacking them vigorously, should not have the desired effect, then break a straw-bottle full of water upon their heads, and let the water run into their ears, which is a thing they dislike very much.

All troop horses must be taught to stand quiet and still when they are fired from, to stop the moment you present, and not to move after firing till they are required to do it: in short, the horse must be taught to suffer the rider to act upon him with the same freedom as if he was on foot. Patience, coolness, and temper, are the only means requisite for accomplishing this end. Begin by walking the horse gently; then stop and keep him from stirring for some time, so as to accustom him by degrees not to have the least idea of moving without orders: if he does, then back him: and when you stop him, and he is quite still, leave the reins loose.

To use a horse to fire-arms, first put a pistol or carabine in the manger with his seed; then use him to the sound of the lock and the pan; after which, when you are upon him, show the piece to him, presenting it forwards, sometimes on one side, sometimes on the other: when he is thus far reconciled, proceed to flash in the pan; after which, put a small charge into the piece, and so continue augmenting it by degrees to the quantity which is commonly used: if he seems uneasy, walk him forward a few steps slowly; and then stop, back, and caress him. Horses are also often disquieted and unsteady at the clash, and drawing, and returning of swords; all which they must be familiarised to gradually and gently.

It is necessary for cavalry in general, but particularly for light cavalry horses, to be very ready and expert in leaping ditches, hedges, gates, &c. The leaps, of whatever sort, to which horses are at first brought, ought to be very small, and the rider must keep his body back, raise his hands a little in order to help the fore parts of the horse up, and be very attentive to his equilibrium. It is best to begin at a low bar covered with furze, which pricking the horse's legs, if he does not raise himself sufficiently, prevents his contracting a sluggish and dangerous habit of touching, as he goes over. Let the ditches also you first bring horses to be narrow. Accustom them to come up to every thing which they are

to leap over, and to stand coolly at it for some time; then to raise themselves gently up in order to form an idea of the distance. When they leap well standing, use them to walk gently up to the leap, and to go over it without first halting at it. After this practice is familiar to them, repeat it in a gentle trot, and so by degrees faster and faster, till at length it is as familiar to them to leap flying on a full gallop as another way.

As horses are apt to be frightened at the sight and smell of the dead of their own species, it is advisable to habituate them to walk and leap over carcasses; but the greatest gentleness ought here to be used. Horses should also be accustomed to swim; and a very small portion of strength is sufficient to guide a horse in the water, where they must be permitted to heave their heads, and be no way constrained

The practice of cutting off extremities from horses is in all cases very pernicious. It is particularly so in regard to a troop-horse's tail. It is almost incredible how much they suffer at the piquet for the want of it; kicking about and laming one another; whilst other horses, with their tails on, brush off all flies, are cool and at their ease, and mend daily.

Sect. VI.—Of Reining Back, and Moving Forward immediately after; Piafing Pillars, &c.

Never finish your work by reining back with horses that have any disposition towards retaining themselves; but always move them forwards, and a little upon the haunches also, after it, before you dismount, unless they retain themselves very much indeed; in which case nothing at all must be demanded from the haunches. This lesson of reining back, and piafing, is proper to conclude with, and puts a horse well on the haunches: it may be done, according as horses are more or less suppled, either going forward, backing, or in the same place: if it is done well advancing, or at most on the same spot, it is sufficient for a soldier's horse. For to piafe in backing is too much to be expected in the hurry of training numbers of men and horses together.

This lesson should indeed never be attempted at all, till horses are very well suppled, and accustomed to be put together; otherwise it will create restiveness. If they refuse to back, and stand motionless, the rider's legs must be approached with the greatest gentleness to the horse's sides: at the same time that the hand is acting on the reins to solicit his backing. This seldom fails of procuring the desired effect, by raising one of the horse's fore legs, which is consequently very easily brought backwards by a small degree of tension in the reins.

Well performed, this lesson is particularly serviceable, when pillars are used. Very few regimental riding-houses have pillars, and it is fortunate they have not; for though, when used with skill, they are one of the greatest and best discoveries in horsemanship; they must be allowed to be very dangerous and pernicious when not under proper direction.

Sect. VII.—Of Curing Restiveness, Viciousness, Starting, &c.

Whenever a horse makes resistance, one ought to examine very minutely all the tackle about him; if any thing hurt or tickle him; whether he have any natural or accidental weakness, &c. For want of this precaution many disasters happen, and the animal is frequently accused falsely of being restive and vicious. Correction, according to the way it is used, throws a horse into more or less violent action, which, if he be weak, he cannot support; but a vicious strong horse is to be considered in a very different light, being able both to undergo, and consequently to profit by all lessons; and is far preferable to the best natured weak one upon earth. Patience and attention are never failing means to reclaim such a horse; in whatsoever manner he defends himself, bring him back frequently with gentleness (not, however, without having given him proper chastisement if necessary) to the lesson which he seems most averse to.

Horses are by degrees made obedient, through the hope of reward and the fear of punishment. To blend the operation of the two judiciously together is very difficult; requiring much thought and practice, a good head, and a good disposition. The coolest and best-natured rider will always succeed best. If a horse be impatient, or choleric, never strike him, unless he absolutely refuse to go forward; which you must then resolutely oblige him to do, and which will be of itself a correction. Resistance in horses is sometimes a mark of strength and vigor, and proceeds from spirit, as well as sometimes from viciousness or weakness. Great care should, therefore, be taken to distinguish from which of these causes a horse's resistance arises, before any remedy or punishment is adopted. It is sometimes a bad sign when horses do not at all resist, and may proceed from a sluggish disposition. Horses again are oftener spoilt by having too much done to them, and by attempts to dress them in too great a hurry.

After a horse has been well suppled, if there are no impediments, natural or accidental, and he still resist, chastisement becomes necessary; but this must not be frequent, but always firm, and as little violent as possible. Some horses have quicker parts and more cunning than others. Many will imperceptibly gain a little every day on the rider. Various, in short, are their dispositions and capacities. It is the rider's business to find these out, and to make a horse sensible of attachment, but at the same time that he will be master.

Plunging is a common defence among restive and vicious horses; if they do it while backing, they must, by the rider's legs and spurs firmly applied, be obliged to go forward, and their heads kept up high. But, if they do it flying forwards, keep them back, and ride them gently and very slow for a good while together. Of all bad tempers and qualities in horses, those which are occasioned by harsh treatment and ignorant riders are the worst.

Rearing is a vicious habit, and, in weak horses especially, a very dangerous one. While

the horse is up, the rider must yield his hand; and, when the horse is descending, he must vigorously determine him forwards; if this be done at any other time but while the horse is coming down, it may add a spring to his rearing, and make him fall backwards. With a skilful hand on them, horses seldom persist in this habit. If the foregoing method fail, make the horse kick up behind by getting somebody on foot to strike him behind with a whip; or by pricking him with a goad.

Starting often proceeds from a defect in the sight, which, therefore, must be carefully examined. Whatever the horse is afraid of, bring him up to gently, and caress him at every step. Nothing but great gentleness can correct this fault. If you let him pass the object without bringing him up to it, you increase the fault, and confirm him in his fear. Before such horses as are to a great degree fearful of any object, make a quiet horse, proceed towards it, and gradually entice them to approach nearer and nearer. If the horse thus alarmed be undisciplined and headstrong, he will probably run away with his rider; when his head must be kept up high, and the snaffle moved backwards and forwards from right to left, taking up and yielding the reins of it, as well as the reins of the bit; but this last must not be moved backwards and forwards like the snaffle, but only taken up and yielded properly. No man ever yet did, or ever will, stop a horse, or gain any point over him by main force, or by pulling against him.

Sect. VIII.—Rules for Inexperienced Horsemen.

On this subject Mr. Thompson has given the following rules:—In the first place, every horse should be accustomed to stand still when he is mounted. One would imagine this might be readily granted; yet we see how much the contrary is practised. When a gentleman mounts at a livery stable, the groom takes the horse by the bit, which he bends tight round his under jaw: the horse, striving to go on, is forced back; advancing again, he frets, as he is again stopped short, and hurt by the manner of holding him. The rider, in the mean time, mounting without the bridle, or at least holding it but slightly, is helped to it by the groom, who, being thoroughly employed by the horse's fluttering, has at the same time both bridle and stirrup to give. This confusion would be prevented, if every horse were taught to stand still when he is mounted. Forbid your groom, therefore, when he rides your horse to water, to throw himself over from a horse-block, and kick him with his leg even before he is fairly upon him. This wrong manner of mounting is what chiefly teaches horses this vicious habit.

A constant practice of mounting in the proper manner is all that is necessary to prevent a horse from going on till the rider is fairly in the saddle. A common method is to stand near the croup or hinder part of the horse, with the bridle held long. By this manner of holding the bridle, before you mount, you are liable to be kicked; and, when you are mounted, your horse may go on some time, or play what gambols he pleases, before the rein is short enough in your hand to prevent him. It is common likewise for an awkward rider, as soon as his foot is in the stirrup, to throw himself with all his force to gain his seat; which he cannot do, perhaps, till he has first overbalanced himself on one side or the other. The way to mount with ease and safety is, to stand rather before than behind the stirrup. In this posture take the bridle short, and the mane together in your left hand, helping yourself to your stirrup with your right, so that your toe may not touch the horse in mounting. When your left foot is in the stirrup, move on your right, till you face the side of the horse, looking across over the saddle. Then with your right hand grasp the hinder part of the saddle; and with that and your left, which holds the mane and bridle, lift yourself upright on your left foot. Remain thus a mere instant on your stirrup, only so as to divide the action into two motions. While you are in this posture you have a sure hold with both hands, and are at liberty either to get safely down, or to throw your leg over and gain your seat. By this deliberate motion likewise you avoid, what every good horseman will endeavour to avoid, putting the horse into a flutter.

To dismount, hold the bridle and mane together in your left hand, as when you mounted; put your right hand on the pommel of the saddle, to raise yourself; throw your leg back over the horse; grasp the hinder part of the saddle with your right hand; remain a moment on your stirrup; and in every respect reverse the actions of mounting your horse. Take care not to bend your right knee in dismounting, lest your spur should rub against the horse.

When you ride, hold your bridle at a convenient length. Sit square, and let not the purchase of the bridle pull forward your shoulder: but keep your body even, as it would be if each hand held a rein. Hold your reins with the whole grasp of your hand, dividing them with your little finger. Let your hand be perpendicular; your thumb will then be uppermost and placed on the bridle. Bend your wrist a little outward; and, when you pull the bridle, raise your hand towards your breast, and the lower part of the palm rather more than the upper. Let the bridle be at such a length in your hand, as, if the horse should stumble, you may be able to raise his head, and support it by the strength of your arms, and the weight of your body thrown backward. If you hold the rein too long, you are subject to fall backward as your horse rises. If, knowing your horse perfectly well, you think a tight rein unnecessary, advance your arm a little (but not your shoulder) towards the horse's head, and keep your usual length of rein. By this means you have a check upon your horse, while you indulge him.

If you ride with a curb, make it a rule to hook on the chain yourself; the most quiet horse may bring his rider into danger, should the curb hurt him. If, in fixing the curb, you turn the chain to the right, the links will unfold themselves, and then oppose a farther turning. Put on the chain loose enough to hang down on the horse's under lip, so that it may not rise and

press his jaw till the reins of the bridle are moderately pulled. If your horse has been used to stand still when he is mounted, there will be no occasion for a groom to hold him; but if he does, suffer him not to touch the reins, but that part of the bridle which comes down the cheek of the horse. He cannot then interfere with the management of the reins, which belongs to the rider only; and holding a horse by the curb (which is ever painful to him) is evidently improper when he is to stand still.

Take care not to ride with your arms and elbows as high as your shoulders; nor let them shake up and down with the motion of the horse. The posture is unbecoming, and the weight of the arms (and of the body too if the rider does not sit still) acts in continual jerks on the jaw of the horse, which must give him pain, and make him unquiet, if he has either a tender mouth or any spirit.

Riders wonder why horses are gentle as soon as they are mounted by skilful horsemen. The reason is, the horse goes on at his ease, yet finds all his motions watched; which he has sagacity enough to discover. Such a rider hides his whip, if he finds his horse is afraid of it; and keeps his legs from his sides. Avoid the ungraceful custom of letting your legs shake against the sides of the horse: and as you are not to keep your arms and elbows high, and in motion, so you are not to rivet them to your sides, but let them fall easy: an awkward horseman seems flying off at all points.

It is often said with emphasis, that such a one has no *seat* on horseback; meaning not only that he does not ride well, but that he does not sit on the right part of the horse. To have a good seat is to sit on that part of the horse which, as he springs, is the centre of motion; and from which, of course, any weight would be with most difficulty shaken. As in the rising and falling of a board, placed in equilibrio, the centre will be always most at rest, the true seat will be found in that part of your saddle into which your body would naturally slide if you rode without stirrups; and is only to be preserved by a proper poise of the body, though the generality of riders imagine it is to be done by the grasp of the thighs and knees. The rider should consider himself as united to his horse in this point; and, when shaken from it, endeavour to restore the balance.

The mention of the two extremities of a bad seat may help to point out the true one. The one is, when the rider sits very far back on the saddle, so that his weight presses the loins of the horse; the other, when his body hangs forward over the pommel of the saddle. The first may be seen practised by grooms when they ride with their stirrups affectedly short; the latter by fearful horsemen on the least flutter of the horse. Every good rider has, even on the hunting saddle, as determined a place for his thighs as can be made for him by the bars of a demi-peak. Indeed there is no difference between the seat of either: only, as in the first you ride with shorter stirrups, your body will be consequently more behind your knees.

To have a good seat for the rider, the saddle must fit well. In general the saddle presses as nearly as possible on that part which we have described as the point of union between the man and the horse; but so as not to obstruct the motion of the horse's shoulders. Place yourself in the middle or lowest part of it: sit erect; but with as little constraint as in a chair. The ease of action marks the good rider: you may repose yourself, but not lounge. The studied exactness acquired in the riding-house, by those whose deportment is not easy, appears ungenteel and unnatural.

If your horse stops short, or endeavours, by raising and kicking, to unseat you, do not bend your body forward, as many do in those circumstances: that motion throws the breech forward, and the rider out of his seat; whereas the advancing the lower part of the body, and bending back the upper part and shoulders, is the method both to keep your seat, and to recover it when lost. The bending your body back, and that in a great degree, is the greatest security in flying leaps; it is a security, too, when your horse leaps standing. The horse's rising does not try the rider's seat; the lash of his hind legs ought chiefly to be guarded against, and is best done by the body being greatly inclined back. Stiffen not your legs or thighs; and let your body be pliable in the loins, like the coachman's on his box.

This manner of sitting will counter-balance every rough motion of the horse; whereas the fixture of the knees, so commonly laid a stress on, will in great shocks conduce to the violence of the fall. Were the cricket-player, when the ball is struck with the greatest force, to hold his hand firm and fixed to receive it, the hand would be bruised, or perhaps the bones fractured by the resistance. To obviate this, he yields his hand to the motion of the ball for a certain distance; and thus, by a due mixture of opposition and obedience, catches it without sustaining the least injury. The case is exactly the same in riding: the skillful horseman will recover his poise by giving some way to the motion; and the ignorant horseman will be flung out of his seat by endeavouring to be fixed.

Stretch not out your legs before you; this will push you against the back of the saddle; neither gather up your knees, like a man riding on a pack; this throws your thighs upwards; each practice unseats you. Keep your legs straight down; and sit not on the most fleshy part of the thighs, but turn them inwards, so as to bring in your knees and toes. It is more safe to ride with the ball of the foot pressing on the stirrup, than with the stirrup as far back as the heel; for the pressure of the heel, being in that case behind the stirrup, keeps the thighs down.

When you find your thighs thrown upwards, widen your knees to get them and the upper part of your fork lower down on the horse. Grasp the saddle with the hollow or inner part of your thighs, but not more than just to assist the balance of your body: this will also enable you to keep the spurs from the horse's sides, and to bring your toes in. Sink your heels straight down; for, while your heels and thighs keep down, you cannot fall; this, aided by the bend of the back, gives the security of a seat to those

who bear themselves up in their stirrups in a swift gallop, or in the alternate rising and falling in full trot.

Let your seat determine the length of your stirrups, rather than the stirrups your seat. If more precision is requisite, let your stirrups, in the hunting saddle, be of such a length, as that, when you stand in them, there may be the breadth of four fingers between your seat and the saddle. It would greatly assist a learner, if he would practice in a large circle, as directed in Sect. II., without stirrups; keeping his face looking on the outward part of the circle, so as not to have a full view of the horse's head, but just of that which is on the outward part of the circle; and his shoulder, which is towards the centre of the circle, very forward. You thus learn to balance your body, and keep a true seat, independent of your stirrups; you may probably likewise escape a fall, should you at any time lose them by being accidentally shaken from your seat.

As the seat in some measure depends on the saddle, because a saddle with a high pommel is thought dangerous, the other extreme prevails, and the pommel is scarcely allowed to be higher than the middle of the saddle. The saddle should lie as near the back-bone as can be, without hurting the horse; for the nearer you sit to his back, the better seat you have. If it does so, it is plain the pommel must rise enough to secure the withers from pressure; therefore a horse, whose withers are higher than common, requires a high pommel. If, to avoid this, you make the saddle straight, the inconvenience spoken of follows; you sit too much above the horse's back, nor can the saddle form a proper seat. There should be no ridge from the button at the side of the pommel, to the back part of the saddle. That line also should be a little concave for your thighs to lie at ease. In short, a saddle ought to be, as nearly as possible, as if cut out of the horse.

When you want your horse to move forward, raise his head a little, and touch him gently with your whip; or else press the calves of your legs against his sides. If he does not move fast enough, press them with more force, and so till the spur just touches him. By this practice he will, if he has any spirit, move upon the least pressure of the leg. Never spur him by a kick; but, if it be necessary to spur him briskly, keep your heels close to his sides, and slacken their force as he becomes obedient. When your horse attempts to be vicious, take each rein separate, one in each hand, and, advancing your arms forward, hold him very short. In this case it is common for the rider to pull him hard, with his arms low. But the horse, thus having his head low too, has it more in his power to throw out his heels: whereas, if his head be raised very high, and his nose thrown out a little, he can neither rise before nor behind; because he can give himself neither of those motions, without having his head at liberty. A plank, placed in equilibrio, cannot rise at one end unless it sinks at the other.

If your horse is headstrong, pull not with one continued pull, but stop, and back him after just shaking the reins, and making repeated pulls till he obeys. Horses are so accustomed to bear on the bit when they go forward, that they are discouraged if the rider will not let them do so. If a horse is loose-necked, he will throw up his head at a continued pull; in which situation the rider, seeing the front of his face, can have no power over him. When your horse does thus, drop your hand, and give the bridle play, and he will of course drop his head again into its proper place: while it is coming down make a second gentle pull, and you will find his mouth. With a little practice, this is done almost instantaneously; and this method will stop, at the distance of a few yards, a horse which will run away with those who pull at him with all their might.

Almost every one has observed, that when a horse feels himself pulled with the bridle, even when he is going gently, he often mistakes what was designed to stop him, as a direction to bear on the bit, and go faster. Keep your horse's head high, that he may raise his neck and crest; play a little with the rein, and move the bit in his mouth, that he may not press on it in one constant and continued manner; be not afraid of raising his head too high; he will naturally be too ready to bring it down, and tire your arms with its weight, on the least abatement of his mettle. When you feel him heavy, stop him, and make him go back a few paces: thus you break by degrees his propensity to press on his bridle.

Many are pleased with a round neck, and a head drawn in towards his breast; but this is a mistake. Let your horse carry his head bridling in, provided he carries it high, and his neck arching upwards: but if his neck bends downwards his figure is bad, his sight is too near his toes, he leans on the bridle, and you have no command over him. If he goes pressing but lightly on the bridle, he is the more sure-footed, and goes pleasanter, as your wrist only may guide him. If he hangs down his head, and makes you support the weight of that and his neck with your arms bearing on his fore legs (which is called being on his shoulders), he will strike his toes against the ground, and stumble. If your horse is heavy upon the bit, tie him every day for an hour or two, with his tail to the manger, and his head as high as you can make him lift it, by a rein on each post of the stall, tied to the rings of the snaffle-bit.

Horse-breakers and grooms have a great propensity to bring a horse's head down, and seem to have no seat without a strong hold by the bridle. They know indeed that the head should yield to the reins, and the neck form an arch; but do not take the proper pains to make an arch upward. A temporary effect of attempting to raise the horse's head may perhaps be making him push out his nose. They will here tell you, that his head is too high already; whereas it is not the distance from the nose, but from the top of his head to the ground, which determines the head to be high or low. Besides, although the fault is said to be in the manner of carrying the

head, it should rather be said to be in that of the neck; for, if the neck was raised, the head would be more in the position of one set on a well formed neck.

The design, therefore, of lifting up the head is to raise the neck, and thereby bring in the head; for, even while the bridle makes the same line from the rider's hand to the bit, the horse's nose may be either drawn in or thrust out, according as his neck is raised or depressed. Instead of what has been here recommended, we usually see colts broken with their heads cavessoned very low, their necks stiff, and not in the least suppled. When the breaking tackle is left off, and they are mounted for the road, having more food and rest, they frequently plunge, and a second breaking becomes necessary. Then, as few gentlemen can manege their own horses, they are put into the hands of grooms, from whom they learn a variety of bad habits.

No curb, martingale, or other forcible method, will teach a horse to carry his head or neck in a posture which nature has made uneasy to him. By trying to pull in his nose farther than he can bear you will give him a bad habit. You could not indeed contrive a more effectual method to make him continually toss his nose up and throw his foam over you. It is a common custom to be always pulling at the bridle, as if to set off to advantage either the spirit of the horse, or the skill of the rider. Our horses therefore are taught to hold their heads low, and pull so as to bear up the rider from the saddle, standing in his stirrups, even in the gentlest gallop: how very improper this is we may be experimentally convinced; when we happen to meet with a horse which gallops otherwise we immediately say, he canters excellently, and find the ease and pleasure of his motion. When horses are designed for the race, and swiftness is the only thing considered, the method may be a good one.

It is not to be wondered that dealers are always pulling at their horses: that they have the spur constantly in their sides, and are at the same time continually checking the rein: by these means they make them bound, and champ the bit, while their rage has the appearance of spirit. These people ride with their arms spread, and very low on the shoulders of their horses: a method which makes them stretch their necks, and gives a better appearance to their forehands: it conceals also a thick jaw, which, if the head were up, would prevent its yielding to the bit: it hides likewise the ewe-neck, which would otherwise show itself. Indeed, if you have a horse unsteady to the bit, formed with a naturally heavy head, or one which carries his nose obstinately in the air, you must find his mouth where you can, and make the best of him.

Many horses are taught to start by whipping them for starting. How is it possible they can know it is designed as a punishment? In the riding house the horse is taught to rise up before, and to spring and lash out his hinder legs, by whipping him when tied between two pillars, with his head a little at liberty. If he understood this to be a punishment for doing so, he would not by that method learn to do it. He seems to be in the same manner taught to spring and fly when he is frightened. Most horses would go quietly past an object from which they were beginning to fly if their riders, instead of gathering up their bridles and showing themselves so ready, would throw the reins loose upon their necks.

When a horse starts at any thing on one side the generality of riders turn him out of the road, to make him go up to the cause of his starting: if he does not get the better of his fear, or readily comply, he commonly goes past the object, making with his hinder parts, or croup, a great circle out of the road; whereas he should learn to keep straight on, without minding objects on either side. If he starts at any thing on the left, hold his head high, and keep it straight in the road, pulling it from looking at the thing he starts at, and keeping your right leg hard pressed against his side, towards his flank: he will then go straight along the road. By this method, and by turning his head a little more, he may be forced with his croup close up to what frightened him: for, as his head is pulled one way, his croup necessarily turns the other.

Always avoid a quarrel with your horse, if you can: if he is apt to start you will find occasions enough to exercise his obedience, when what he starts at lies directly in his way, and you must make him pass; if he is not subject to start you should not quarrel with him about a trifle. It must be observed, however, that this rule, in going past an object, may perhaps be a little irregular in a maneged horse, which will always obey the leg: but even such a horse, if he is really afraid, and not restive, it may not be amiss to make look another way; unless the object be something to the sight of which you would particularly accustom him. The case will also be different with a horse whose fear is owing to his not being used to objects; but such a one is not to be rode by any horseman to whom these rules are directed: the starting here meant arises merely from the horse's being pampered, and springing through liveliness.

The practice of making a horse go immediately up to every thing he is afraid of, and not suffering him to become master of his rider, seems to be sometimes carried too far.

We are apt to suppose that a horse fears nothing so much as his rider: but may he not, in many circumstances, be afraid of instant destruction? of being crushed? of being drowned? of falling down a precipice? Is it a wonder that a horse should be afraid of a loaded waggon? may not the hanging load seem to threaten the falling on him? There cannot be a rule more general than, in such a case, to show him there is room for him to pass. This is done by turning his head a very little from the carriage, and pressing your leg which is farthest from it against his side.

A horse is not to stop without a sign from his rider. Is it not then probable that, when driven up to a carriage he starts at it, he conceives himself obliged either to attack or run against it? Can he understand the rider's spurring him, with his face directed to it, as a sign for him to pass it? That a horse is easily alarmed for his face

and eyes is evident from this, that he will even catch back his head from a hand going to caress him. That he will not go with any force, face to face, even to another horse, if in his power to stop; and that he sees perfectly sideways, are useful hints for the treatment of horses with regard to starting. Though you ought not to whip a horse for starting, there can be no good effect from clapping his neck with your hand to encourage him. If you take any notice of his starting, it should be rather with some tone of voice which he usually understands as an expression of dislike to what he is doing; for there is opposition mixed with his starting, and a horse will ever repeat what he finds has foiled his rider.

Notwithstanding the directions above given, of not pressing a horse up to a carriage he starts at, yet, if one which you apprehend will frighten him meets you at a narrow part of the road, when you have once let him know he is to pass it be sure you remain determined, and press him on. Do this more especially when part of the carriage has already passed you: for if, when he is frightened, he is accustomed to go back, and turn round, he will certainly do it if he finds, by your hand slackening and legs not pressing, that you are irresolute; and this at the most dangerous point of time, when the wheels of the carriage take him as he turns. Remember not to touch the curb rein at this time; it will certainly check him.

The person who would lead a horse by the bridle should not turn his face to him when he refuses to follow him: if he raises his arms, shows his whip, or pulls the bridle with jerks, he frightens the horse, instead of persuading him to follow; which a little patience may bring about. Ride with a snaffle; and use your curb, if you have one, only occasionally. Choose your snaffle full and thick in the mouth, especially at the ends to which the reins are fastened. Most of them are made too small and long; they cut the horse's mouth, and bend back over the bars of his jaw, working like pincers.

The management of the curb is a very nice matter: a turn of the wrist, rather than the weight of your arm, should be applied to it. The elasticity of a rod, when a fish is hooked, may give some idea of the proper play of a horse's head on his bridle; his spirit and his pliableness are both marked by it. A horse should never be put to do any thing which he is not ready at, in a curb; you may force him, or pull his head any way, with a snaffle, but a curb acts only in a straight line. A horse may indeed be turned out of one track into another by a curb; but it is because he knows it is a signal. When he is put to draw a chain, and does not understand the necessity he is then under of taking a larger sweep when he turns, you frequently see him restive, as it is then called; but put him on a snaffle, or buckle the rein to that part of the bit which does not curb him, and the horse submits to be pulled about, till he understands what is desired of him. These directions suppose your horse to have spirit, and a good mouth; if he has not, you must take him as he is, and ride him with such a bit as you find most easy.

When you ride upon a journey be not so attentive to your horse's nice carriage of himself as to your encouragement of him, and keeping him in good humor. Raise his head; but, if he flags, indulge him with bearing a little more upon the bit than you would suffer in an airing. If a horse is lame, tender-footed, or tired, he naturally hangs upon his bridle. On a journey, therefore, his mouth will depend greatly on his strength and the goodness of his feet. Be then very careful about his feet, and let not a blacksmith spoil them.

Few people, even though practised in riding, know they have any power over a horse but by the bridle; nor any use for the spur, except to make him go forward. A little experience will teach them a further use. If the left spur touches him, and he is at the same time prevented from going forward, he has a sign, which he will soon understand, to move sideways to the right; in the same manner to the left, if the right spur goads him. He afterwards, through fear of the spur, obeys a touch of the leg, in the same manas a horse moves his croup from one side of the stall to the other, when any one strikes him with his hand. In short, his croup is guided by the leg as his head is by the bridle. He will never disobey the leg, unless he becomes restive. By these means you will have a far greater power over him; he will move sideways if you close one leg to him; and straight forward if both: even when he stands still, your legs held near him will keep him on the watch; and, with the slightest unseen motion of the bridle upwards, he will raise his head, and show his fore-hand to advantage. On this use of the legs of the rider, and guidance of the croup of the horse, are founded all the airs (as the riding-masters express themselves) which are taught in the manege; the passage, or side-motion of troopers to close or open their files; and indeed all their evolutions.

But some degree of this discipline is convenient even for common use. It is useful if a horse is apt to stumble or start. By pressing your legs to his flank, and keeping up his head, he is made to go light on his fore-legs, which is aiding and supporting him; and, if he does actually stumble, by helping him at the very instant to exert himself, while as yet any part of him remains not irrecoverably impressed with the precipitate motion. Hence this use of the hand and legs of the rider is called giving aids to a horse; for, as to holding up the weight of a heavy inactive horse by mere pulling, it is as impossible as to recover him when falling down a precipice. A horse is supported and helped by the hands and legs of his rider in every action they require of him; hence he is said to perform his airs by the aids from his rider.

The same discipline is useful if a horse starts. For if, when he is beginning to fly to one side, you press your leg on the side he is flying to, he stops his spring immediately; he goes past what he started at, keeping straight on, or as you choose to direct him: and he will not fly back

from any thing if you press him with both legs; you keep his haunches under him going down a hill; help him on the side of a bank; more easily avoid the wheel of a carriage; and approach more gracefully and nearer to the side of a coach or horseman. When a pampered horse curvets irregularly, and twists his body to and fro, turn his head either to the right or left, or both alternately (but without letting him move out of the track), and press your leg to the opposite side; your horse cannot then spring on his hind-legs to one side, because your leg prevents him; nor to the other, because his head looks that way, and a horse does not start and spring to the side on which he looks. Hence the impropriety of the habit which many riders have, of letting their legs shake against the sides of the horse: if a horse is taught, they are then continually pressing him to violent action; and if he is not they render him insensible and incapable of being taught. The fretting of a hot horse will hence be excessive, as it can no otherwise be moderated than by the utmost stillness of the seat, hands, and legs of the rider.

Colts at first are taught to bear a bit, and by degrees to pull at it. If they did not press it, they could not be guided by it. By degrees they find their necks stronger than the arms of a man; and that they are capable of making great opposition, and often of foiling their riders. Then is the time to make them supple and pliant. The part which of all others requires most this pliancy is the neck. Hence the metaphor of stiffnecked for disobedient. A horse cannot move his head but with the muscles of his neck: this may be called his helm; it guides his course, changes and directs his motion.

In a word, the inexperienced horseman should endeavour to remember on all occasions, that there is an ability and readiness in a horse to move every limb, on a sign given him by the hands or legs of his rider; as well as to bend his body, and move in a short compass, quick and collected, so as instantly to be able to perform any motion.

HORSE'MARTEN, *n. s.* A kind of large bee.

HORSE'MEAT, *n. s.* Horse and meat. Provender.

Though green peas and beans be eaten sooner, yet the dry ones that are used for *horsemeat* are ripe last. *Bacon.*

HORSE'MINT, *n. s.* A large coarse mint.

HORSE'MUSCLE, *n. s.* A large muscle.

The great *horsemuscle*, with the fine shell, that breedeth in ponds, do not only gape and shut as the oysters do, but remove from one place to another. *Bacon.*

HORSENS, a well-built sea-port of Jutland, on the Cattegat. It contains about 2400 inhabitants, and has manufactures of flannel and woollen stuffs, and good fisheries. Nineteen miles S. S. W. of Aarhuus. Long. 9° 52′ E., lat. 55° 52′ N

HORSE'PLAY, *n. s.* Horse and play. Coarse, rough, rugged play.

He is too much given to *horseplay* in his raillery, and comes to battle like a dictator from the plough. *Dryden.*

HORSE'POND, *n. s.* Horse and pond. A pond for horses.

HORSE'RACE, *n. s.* Horse and race. A match of horses in running.

In *horseraces* men are curious that there be not the least weight upon the one horse more than upon the other. *Bacon.*

Trajan, in the fifth year of his tribuneship, entertained the people with a *horserace.* *Addison.*

HORSE'RADISH, *n. s.* Horse and radish. A root acrid and biting: a species of scurvy-grass.

Horseradish is increased by sprouts spreading from the old roots left in the ground, that are cut or broken off. *Mortimer.*

Stomachicks are the cresse acrids, as *horseradish* and scurvy-grass, infused in wine. *Floyer on the Humours.*

HORSE'SHOE, *n. s.* Horse and shoe. A plate of iron nailed to the feet of horses. An herb.

I was thrown into the Thames, and cooled glowing hot in that surge, like a *horseshoe.* *Shakspeare.*

HORSE-SHOE, in fortification, a work sometimes of a round, sometimes of an oval figure, enclosed with a parapet, raised in the ditch of a marshy place, or in low grounds; sometimes also to cover a gate, or to lodge soldiers, to prevent surprises, or relieve a tedious defence.

HORSE-SHOE HEAD, a disease in infants in which the sutures of the skull are too open, or too great a vacuity is left between them; so that the aperture shall not be totally closed up, or the cranium in that part not be so hard as the rest for some years after. When the disease continues long, it is reputed a sign of weakness and short life. Sometimes the disorder arises from a collection of water in the head, called an hydrocephalus.

HORSE-SHOE ISLAND, a low island, near the north coast of New Holland at the bottom of the gulf of Carpentaria, between one and two miles long. Lat. 17° 2′ S.

HORSE-SHOE POINT, the most southerly point, near the east end of the island of St. Christopher. Long. 63° 32′ W., lat. 17° 19′ N.

HORSE'STEALER, *n. s.* Horse and steal. A thief who takes away horses.

He is not a pickpurse, nor a *horsestealer*; but, for his verity in love, I do think him as concave as a covered goblet, or a worm-eaten nut. *Shakspeare. As You Like It.*

HORSE'TAIL, *n. s.* A plant. See EPHEDRA and EQUISETUM.

HORSE'TONGUE, *n. s.* An herb. See RUSCUS.

HORSE-VETCH. Hippocrepis.

HORSE'WAY, *n. s.* Horse and way. A broad way by which horses may travel.

Knowest thou the way to Dover?
—Both stile and gate, *horseway* and footpath. *Shakspeare. King Lear.*

HORSE-WORM, in natural history, a species of fly worm called also bott, produced of eggs deposited by a two-winged fly, of the shape and size of the humble bee, in the intestines of horses. See BOTTS.

HORSEY ISLAND, a small island off the coast

of Essex, opposite Walton lights. It is six miles in circumference, and abounds with game. Four miles from Harwich.

HORSHAM, a borough and market town of Sussex, near St. Leonard's forest, thirty-six miles from London, so named from Horsa, brother to Hengist the Saxon. It is one of the largest towns in the county, and has sent members to parliament since the 30th of Edward I. The county gaol is in this town, and the assizes are often held here. It is a borough by prescription, governed by two bailiffs, and burgage holders, &c., who elect the members of parliament. It has a very fine church, and a well-endowed free school; with a weekly market on Saturday, famous for poultry, and a monthly fair. Here are several meeting-houses for dissenters, and several charitable gifts to the poor parishioners.

HORSLEY (John), M. A. and F. R. S., a learned English antiquary born at Northumberland, and educated in Scotland, where he took his degree. He was afterwards minister of a dissenting congregation in Northumberland, where he died in 1731. He wrote an extensive and learned work, entitled Britannia Romana, wherein he gives a copious and accurate account of the relics of Roman antiquity in Britain.

Horsley (Samuel), a learned modern divine of the English church, was born October 1733 in St. Martin's in the Fields, London, of which parish his father held the curacy. His grandfather was a dissenter. He was educated, according to some accounts, at Westminster school, and at Trinity Hall, Cambridge, where he took the degree of LL. B. in 1758: but Mr. Chalmers disputes his ever being at Westminster. Having been ordained, he became curate to his father, then rector of Newington Butts, which benefice he resigned to his son in 1759. In 1767 he was chosen a fellow of the Royal Society; and published the same year an elaborate treatise, entitled The Power of God deduced from the computable instantaneous production of it in the Solar System, 8vo. This he afterwards called 'a singular and whimsical production, which would in all probability roll down the gutter of time and be forgotten.' In 1768 he went to Christ Church, Oxford, as private tutor to lord Guernsey, son of the earl of Aylesford; and took at that university the degree of LL. D. In 1770 he printed, at the Clarendon press, Apollonii Pergæi Inclinationum, Libri ii. Restituebat S. Horsley. In November 1773 he was elected secretary to the Royal Society; and presented by the earl of Aylesford to the rectory of Aldbury, in Surrey, which he held by dispensation, with that of Newington. The next year he published Remarks on the Observations made in the last Voyage towards the North Pole, for discovering the Acceleration of the Pendulum in lat. 79° 50′, in a letter to the hon. C. J. Phipps, 4to.; and married, in December, the daughter of the Rev. John Botham, his predecessor at Aldbury. He now (1776) circulated proposals for a new edition of the works of Sir Isaac Newton, in five volumes quarto, and procured the patronage of bishop Lowth, who collated him to a prebend in St. Paul's. He resigned Aldbury in 1779, and the next year obtained the living of Thorley. In 1781 he became archdeacon of St. Alban's, and early in 1782 vicar of South Weald in Essex. In 1783 and 1784 he was engaged in a controversy with Sir Joseph Banks, respecting his conduct as president of the Royal Society; and delivered several very eloquent speeches on the occasion. Dr. Horsley finally withdrew from the society, and about the same period commenced his celebrated controversy with Dr. Priestley. See our article Antitrinitarianism. Lord chancellor Thurlow now presented him to a prebendal stall in the cathedral of Gloucester; and in 1788 he was, through the same interest, made bishop of St. David's, fully supporting in his episcopal character the reputation for learning and ability which he had previously acquired. His first charge, delivered in 1790, attracted great attention, as did his speech in the house of lords, on the Catholic bill, May 31st, 1791. He was promoted to the see of Rochester, and made dean of Westminster in 1793, on which he resigned the living of Newington: and in 1802 he was translated to St. Asaph. He died at Brighton, October 4th, 1806. Bishop Horsley, besides the works noticed, was the author of Critical Disquisitions on the 18th chapter of Isaiah, 4to.; Hosea, a new translation, with notes, 4to.; a Translation of the Psalms, 2 vols.; Biblical Criticisms; 4 vols. 8vo.; Sermons; Charges; Elementary Treatises on the Mathematics; on the Prosodies of the Greek and Latin Languages; and Various Papers in the Philosophical Transactions.

HORSTIUS (Dr. James), professor of medicine in the university of Helmstadt, was born at Torgau, in 1537, and took the degree of M. D. at Francfort in 1562. He wrote five treatises; 1. On the Qualities of a Good Physician; 2. On those of a Good Apothecary; 3. On the Plague, in German; 4. A Commentary in libros Hippocratis de corde; and, 5, De Noctambulis, on Sleep-walkers. He died in 1600.

Horstius (Gregory), M. D., nephew of the above, called the Æsculapius of Germany, was also born at Torgau in 1578. He graduated at Basil in 1606, and was professor of physic in several universities. He published several books, which are esteemed, and died at Ulm in 1636.

HORTA'TION, *n. s.* } Lat. *hortatio, hortor.*
Hor'tative, *n. s.* } The act of exhorting or
Hor'tatory, *adj.* } encouraging; a precept which animates or exhilarates. Hortatory, applicable to precepts, not to persons; lively, animating, &c.; as, a hortatory speech, not a hortatory speaker.

HORTENSIUS (Lambert), a philosopher, historian, and poet, born at Utrecht in 1501. He assumed this name because his father was a gardener. He studied at Louvain, and was many years rector at Naarden, where he died in 1577. He wrote De Bello Germanico, and several other works.

Hortensius (Martin), a celebrated astronomer, born at Delft in 1605. He wrote a treatise De Mercurio sub sole viso, et Venere invisa; also two tracts De Utilitate et Dignitate Matheseos; et de Oculo ejusque præstantiâ. He died in 1539.

HORTICULTURE.

HORTICULTURE, *n. s.* } Lat. *hortus* and
HOR'TULAN, *adj.* } *cultura*. The art of cultivating gardens. Hortulan, belonging to a garden.

This seventh edition of my *hortulan* kalendar is yours. *Evelyn.*

HORTICULTURE (of Latin *hortus*, a garden, and *colo* I till or dress) is the art of practical gardening, and we adopt this term in preference, because of its direct bearing upon practical operations, as well as because it has been very properly used of late to designate some important societies of gentlemen associated to promote the art. See SOCIETY, HORTICULTURAL, OF LONDON, &c.

We shall not detain the reader with the praises of this pursuit, to be found in almost all our polite writers, but adopt a brief sketch of its *history* from Horace Walpole, and proceed to give practical directions :—

SECT. I.—HISTORY OF GARDENING.

'Gardening,' says Mr. Walpole, 'was probably one of the first arts that succeeded to that of building houses, and naturally attended property and individual possession. Culinary, and afterwards medicinal herbs, were the objects of every head of a family: it became convenient to have them within reach, without seeking them at random in woods, in meadows, and on mountains, as often as they were wanted. When the earth ceased to furnish spontaneously all those primitive luxuries, and culture became requisite, separate enclosures for rearing herbs grew expedient. Fruits were in the same predicament; and those most in use, or that demanded attention, must have entered into and extended the domestic enclosure. Noah planted a vineyard, and drank of the wine; and thus were vineyards, as well as kitchen-gardens and orchards, introduced. No doubt the prototype of all these was the garden of Eden.'

'We have reason to think, that for many centuries the term garden implied no more than a kitchen-garden or orchard. The garden of Alcinous, in the Odyssey, is the most renowned in the heroic times. No admirer of Homer can read this description without rapture.' 'Yet,' continues our author, 'what was that boasted paradise with which

> the gods ordained
> To grace Alcinous and his happy land?

Why, divested of harmonious Greek and bewitching poetry, it was a small orchard and vineyard, with some beds of herbs and two fountains that watered them, enclosed within a quickset hedge. The whole compass of this pompous garden contained four acres. The trees were apples, figs, pomegranates, pears, olives, and vines. Alcinous's garden was planted by the poet, enriched by him with the fairy gift of eternal summer, and was no doubt an effort of imagination surpassing any thing he had ever seen. As he has bestowed on the same happy prince a palace with brazen walls, and columns of silver, he certainly intended that the gardens should be proportionably magnificent.'

The hanging gardens of Babylon were a still greater prodigy. But, as they are supposed to have been formed on terraces, Mr. Walpole concludes, 'they were, what sumptuous gardens have been in all ages till the present, unnatural, enriched by art, possibly with fountains, statues, balustrades, and summer-houses, and were any thing but verdant and rural.' The suiting of the situation to the nature of the trees seems, from the account given by Josephus, (Contra Apion, lib. i. s. 19), to have been one view in these erections. And the success seems to have been answerable, as the trees, says Quintus Curtius, lib. 5, flourished extremely well, and grew as tall as in their native situations.

The eastern gardens appear to have been planted adjoining to the house or palace to which they belonged. Thus king Ahasuerus went immediately from the banquet of wine to walk in the garden of the palace. Esther, vii. 7. The garden of Cyrus, at Sardis, mentioned by Xenophon, seems also to have been contiguous to the palace: as was that of Attalus, mentioned by Justin, lib. xxxvi. c. 4.

The character of the gardening, among the Greeks, it is not very easy to ascertain. The Academus was a wooded shady place; and the trees appear to have been of the olive species. It was situated beyond the limits of the walls, and adjacent to the tombs of the heroes; and, though we are not informed of the particular manner in which this grove was laid out, it may be gathered from Pausanias's Attica, that it was elegantly ornamented. At the entrance was an altar dedicated to Love. Within were the altars of Prometheus, the Muses, Mercury, Minerva, and Hercules; and at a small distance the tomb of Plato. So that, in all probability, it was highly adapted by art, as well as nature, to philosophic reflection and contemplation. Plutarch says, 'that before the time of Cimon, the Academus was a rude and uncultivated spot: but that it was planted by that general, and had water conveyed to it. It was divided into gymnasia, or places of exercise, and philosophic walks, shaded with trees. These flourished very well, until they were destroyed by Sylla, along with those in the Lyceum. Near the academy were the gardens of the philosophers, of Plato and Epicurus; which, however, were probably bu small. The scene of Plato's Dialogue concerning Beauty is elegantly described as being on the banks of the Ilissus, and under the shade of the plantane; but, as no artificial arrangement of objects is mentioned, the prospect seems to have been merely natural.

A taste for gardening does not appear to have prevailed among the Romans, otherwise than as a matter of utility, till a very late period; at least the writers on husbandry, Cato, Varro, Columella, and Palladius, make no menti[illegible] garden as an object of pleasure, but

respect to its productions of herbs and fruits. The gardens of Lucullus are the first we find mentioned of remarkable magnificence; though indeed, from the extravagance to which these were arrived, it is evident they could not be the first. Plutarch speaks of them as incredibly expensive, and equal to the magnificence of kings. They contained artificial elevations of ground to a surprising height, of buildings projected into the sea, and vast pieces of water upon land. In short, his extravagance was so great, that he acquired the appellation of the Roman Xerxes. It is not improbable, from the consideration of Lucullus having spent much time in Asia, in a situation wherein he had an opportunity of observing the most splendid constructions of this kind, that these gardens might be laid out in the Asiatic style.

The Tusculan villa of Cicero, though often mentioned, is no where described in his works, so as to give an adequate idea of the style in which his gardens were disposed; and little is to be traced in Virgil relative to this subject. Pines, it seems probable, were a favorite ornament in gardens (Eccl. vii. 65); and flowers, roses especially, were much esteemed (Georg. iv. 118), perfumes indeed having been always highly valued in warm climates. Virgil places Anchises in Elysium, in a grove of bays, of the sweet-scented kind. There appears also to have prevailed among the Romans a piece of luxury relative to gardens, which is equally prevalent at present among us, namely, the forcing of flowers at seasons of the year not suited to their natural blowing: and roses were then, as at present, the principal flowers upon which these experiments were tried; as appears from Martial, Lampridius, and others. See *Epig.* l. vi. ep. 80, &c.

When Roman authors, Mr. Walpole remarks, whose climate instilled a wish for cool retreats, speak of their enjoyments in that kind, they sigh for grottoes, caves, and the refreshing hollows of mountains, near irriguous and shady founts; or boast of their porticoes, walks of plants, canals, baths, and breezes from the sea. Their gardens are never mentioned as affording shade and shelter from the rage of the dog-star. Pliny has left us descriptions of two of his villas. As he used his Laurentine villa for his winter retreat, it is not surprising that the garden makes no considerable part of the account. All he says of it is, that the gestatio, or place of exercise, which surrounded the garden (the latter consequently not being very large), was bounded by a hedge of box, and, where that was perished, with rosemary; that there was a walk of vines; and that most of the trees were fig and mulberry, the soil not being proper for any other sorts. On his Tuscan villa he is more diffuse; the garden makes a considerable part of the description:—and what was the principal beauty of that pleasure ground? Exactly what was the admiration of this country about a century ago; box trees cut into monsters, animals, letters, and the names of the master and the artificer. In an age when architecture displayed all its grandeur, all its purity, and all its taste; when arose Vespasian's amphitheatre, the temple of Peace, Trajan's forum, Domitian's baths, and Adrian's villa, the ruins and vestiges of which still excite our astonishment; a Roman consul, a polished emperor's friend, and a man of elegant literature and taste, delighted in what the mob now scarcely admire in a college garden. All the ingredients of Pliny's corresponded exactly with those laid out by London and Wise on Dutch principles. He talks of slopes, terraces, a wilderness, shrubs methodically trimmed, a marble basin, pipes spouting water, a cascade falling into the basin, by trees alternately planted with planes, and a straight walk, whence issued others parted off by hedges of box and apple-trees, with obelisks placed between every two. There wants nothing but the embroidery of a parterre, to make a garden in the reign of Trajan serve for the description of one in that of king William III. In one passage, however, Pliny seems to have conceived that natural irregularity might be a beauty; in opere urbanissimo, says he, subita velut illati ruris imitatio. Something like a rural view was contrived amidst so much polished composition. But the idea soon vanished; lineal walks immediately enveloped the slight scene, and names and inscriptions in box again succeeded to compensate for the daring intrusion of nature.

In the paintings found at Herculaneum are a few traces of gardens. They are small square enclosures, formed by trellis-work and espaliers, and regularly ornamented with vases, fountains, and careatides, elegantly symmetrical, and proper for the narrow spaces allotted to the garden of a house in a capital city.

From these remarks it appears how naturally and insensibly the idea of a kitchen garden slid into that which has for so many ages been peculiarly termed a garden, and by our ancestors in this country distinguished by the name of a pleasure garden. A square piece of ground was originally parted off in early ages for the use of the family: to exclude cattle, and ascertain the property, it was separated from the fields by a hedge. As pride and design of privacy increased, the enclosure was dignified by walls; and, in climes where fruits were not lavished by the ripening glow of nature and soil, fruit trees were assisted and sheltered from surrounding winds by the like expedient; for the inundation of luxuries, which have swelled into general necessities, have almost all taken their source from the simple fountain of reason.

When nature and prospect were thus excluded, by the custom of making square gardens enclosed with walls, pomp and solitude combined to call for something that might enrich and enliven the insipid and unanimated partition. Fountains, first invented for use, which grandeur loves to disguise and throw out of sight, received embellishments from costly marbles, and, at last, to contradict utility as it were, tossed their waste of waters into air in spouting columns. Art, in the hands of rude man, had at first been made a succedaneum to nature; in the hands of ostentatious wealth it became the means of opposing nature; and, the more it traversed the march of the latter, the more nobility thought its power was demonstrated. Canals measured by the

line were introduced in lieu of meandering streams, and terraces were hoisted aloft in opposition to the facile slopes that imperceptibly unite the valley to the hill. Balustrades defended these precipitate and dangerous elevations, and flights of steps rejoined them to the subjacent flat from which the terrace had been dug. Vases and sculpture were added to the unnecessary balconies, and statues furnished the lifeless spot with mimic representations of the excluded sons of men. Thus difficulty and expense were the constituent parts of those sumptuous and selfish solitudes; and every improvement that was made was but a step farther from nature. The tricks of water-works to wet the unwary, not to refresh the panting spectator; and parterres embroidered in patterns like a petticoat, were but the childish endeavours of fashion and novelty to reconcile greatness to what it surfeited on.

To crown these impotent displays of false taste, the shears were applied to the lovely wildness of form with which nature has distinguished each various species of tree and shrub. The venerable oak, the romantic beech, the useful elm, even the aspiring circuit of the lime, the regular round of the chestnut, and the almost moulded orange-tree, were corrected by such fantastic admirers of symmetry. The compass and square were of more use in plantations than the nursery-man. The measured walk, the quincunx, and the etoile, imposed their unsatisfying sameness on every royal and noble garden. Trees were headed, and their sides pared away: many French groves seem green chests set upon poles. Seats of marble, arbors, and summer-houses, terminated every vista; and symmetry, even where the space was too large to permit its being remarked at one view, was so essential, that, as Pope observed,—

——— Each alley has a brother,
And half the garden just reflects the other.

It does not precisely appear what our ancestors meant by a *bower*: it was probably an arbor; sometimes it meant the whole frittered enclosure, and in one instance it certainly included a labyrinth. Rosamond's bower was indisputably of that kind; though whether composed of walls or hedges we cannot determine. A square and a round labyrinth were so capital ingredients of a garden formerly, that in Du Cerceau's architecture, who lived in the time of Charles IX. and Henry III., there is scarcely a ground-plot without one of each.

In Kip's Views of the Seats of our Nobility and Gentry, every house is approached by two or three gardens, consisting, perhaps, of a gravel walk, and two grass-plats or borders of flowers. Each rises above the other by two or three steps, and as many walls and terraces, and so many iron gates, that we recollect those ancient romances in which every entrance was guarded by giants or dragons. Yet, though these and such preposterous inconveniences prevailed from age to age, good sense in this country had perceived the want of something at once more grand and more natural.

These reflections, and the bounds set to the waste made by royal spoilers, gave origin to *parks*. They were contracted forests, and extended gardens. Hentzer says, after Rous of Warwick, the first park was that at Woodstock. If so, it might be the foundation of a legend that Henry II. secured his mistress in a labyrinth; it was no doubt more difficult to find her in a park than in a palace, where the intricacy of the woods, and various lodgings buried in covert, might conceal her actual habitation. It is more extraordinary that, having so long ago stumbled on the principle of modern gardening, we should have persisted in retaining its reverse, symmetrical and unnatural gardens.

Milton's description of Eden is a warmer and more just picture of the present style than Claude of Lorraine could have painted from Hagley or Stourhead. The first lines we quote exhibit Stourhead, says our author, on a more magnificent scale:—

Through Eden went a river large,
Nor changed his course, but through the shaggy hill
Passed underneath ingulphed: for God had thrown
That mountain as his garden mound, high raised
Upon the rapid current———

Hagley seems pictured in what follows:—

Which through veins
Of porous earth, with kindly thirst updrawn,
Rose a fresh fountain, and with many a rill
Watered the garden———

What coloring, what freedom of pencil, what landscape in these lines!

——— From that sapphire fount the crisped brooks,
Rolling on orient pearl and sands of gold,
With mazy error under pendent shades,
Ran nectar, visiting each plant, and fed
Flowers worthy of Paradise, which not nice art
In beds and curious knots, but nature boon
Poured forth profuse on hill and dale and plain,
Both where the morning sun first warmly smote
The open fields; and where the unpierced shade,
Imbrowned the noon-tide bowers:—Thus was this place
A happy rural seat of various view.

Now let us turn to an admired writer, posterior to Milton, and see how cold, how insipid, how tasteless is his account of what he pronounced a perfect garden. We speak not of his style, which it was not necessary for him to animate with the coloring and glow of poetry. It is his want of ideas, of imagination, of taste, that deserve censure, when he dictated on a subject which is capable of all the graces that a knowledge of beautiful nature can bestow. Sir William Temple was an excellent man; Milton, a genius of the first order.

'The best figure of a garden,' says Sir William, 'is either a square or an oblong, and either upon a flat or a descent: they have all their beauties, but the best I esteem an oblong upon a descent. The beauty, the air, the view, make amends for the expense, which is very great in finishing and supporting the terrace walks, in levelling the parterres, and the stone stairs that are necessary from one to the other. The perfectest figure of a garden I ever saw, either at home or abroad, was that of Moor park in Hertfordshire, when I knew it about thirty years ago. It was made by the countess of Bedford, esteemed among the greatest wits of her time, and celebrated by Dr. Donne; and with very great care, excellent con-

trivance, and much cost; but greater sums may be thrown away without effect or honor, if there want sense in proportion to money, or 'if nature be not followed; which I take to be the great rule in this, and perhaps in every thing else, as far as the conduct not only of our lives but of our governments.' [We shall see how natural that admired garden was.] 'Because I take the garden I have named to have been in all kinds the most beautiful and perfect, at least in the figure and disposition, that I ever have seen, I will describe it for a model to those that meet with such a situation, and are above the regard of common expense. It lies on the side of a hill, upon which the house stands, but not very steep. The length of the house, where the best rooms and those of most use or pleasure are, lies upon the breadth of the garden; the great parlour opens into the middle of a terrace gravel walk that lies even with it, and which may lie, as I remember, about 300 paces long, and broad in proportion; the border set with standard laurels and at large distances, which have the beauty of orange trees out of flower and fruit. From this walk are three descents by many stone steps, in the middle, and at each end, into a very large parterre. This is divided into quarters by gravel-walks, and adorned with two fountains and eight statues in the several quarters. At the end of the terrace walk are two summer houses, and the sides of the parterre are ranged with two large cloisters open to the garden, upon arches of stone, and terminating with two other summer-houses even with the cloisters, which are paved with stone, and designed for walks of shade, there being none other in the whole parterre. Over these two cloisters are two terraces covered with lead and fenced with balusters; and the passage into these airy walks is out of the two summer-houses at the end of the first terrace walk. The cloister facing the south is covered with vines, and would have been proper for an orange house, and the other for myrtles or other more common greens, and had, I doubt not, been cast for that purpose, if this piece of gardening had been then in as much vogue as it is now. From the middle of this parterre is a descent by many steps flying on each side of a grotto that lies between them, covered with lead, and flat, into the lower garden, which is all fruit-trees ranged about the several quarters of a wilderness, which is very shady; the walks here are all green, the grotto embellished with figures of shell rock-work, fountains, and water-works. If the hill had not ended with the lower garden, and the wall were not bounded by a common way that goes through the park, they might have added a third quarter of all greens; but this want is supplied by a garden on the other side the house, which is all of that sort, very wild, shady, and adorned with rough rock-work and fountains. This was Moor Park when I was acquainted with it, and the sweetest place, I think, that I have seen in my life, either before or since, at home or abroad.'

'It is unnecessary to add any remarks on this description. Any man might design and build as sweet a garden, who had been born in and never stirred out of Holborn. It is not, however, peculiar to Sir William Temple to think in that manner. How many Frenchmen are there who have seen our gardens, and still prefer unnatural flights of steps and shady cloisters covered with lead! Le Nautre, the architect of the groves and grottoes of Versailles, came hither on a mission to improve our taste. He planted St. James's and Greenwich parks—no great monuments of his invention.'

'Fortunately Kent and a few others were not quite so timid, or we might still be going up and down stairs in the open air. It is true, we have heard much lately, as Sir William Temple did, of irregularity and imitations of nature in the gardens or grounds of the Chinese. The former is certainly true: they are whimsically irregular, as European gardens are formally uniform and unvaried: but, with regard to nature, it seems as much avoided as in the squares and oblongs and straight lines of our ancestors. An artificial perpendicular rock starting out of a flat plain, and connected with nothing, often pierced through in various places with oval hollows, has no more pretension to be deemed natural than a lineal terrace or a parterre.

'Having thus cleared our way by ascertaining what have been the ideas of gardening in all ages, as far as we have materials to judge by, it remains to show to what degree Kent invented the new style, and what hints he had received to suggest and conduct his undertaking. We have seen what Moor Park was, when pronounced a standard. But, as no succeeding generation in an opulent and luxurious country contents itself with the perfection established by its ancestors, more perfect perfection was still sought; and improvements had gone on, till London and Wise had stocked all our gardens, with giants, animals, monsters, coats of arms, and mottos, in yew, box, and holly. Absurdity could go no farther, and the tide turned. Bridgman, the next fashionable designer of gardens, was far more chaste; and whether from good sense, or that the nation had been struck by the admirable paper in the Guardian, No. 173, he banished verdant sculpture, and did not even revert to the square precision of the foregoing age. He enlarged his plans, disdained to make every division tally to its opposite; and though he still adhered much to straight walks with high clipped hedges, they were only his great lines; the rest he diversified by wilderness, and with loose groves of oak, though still within surrounding hedges. As his reformation gained footing, he ventured, in the royal garden at Richmond, to introduce cultivated fields, and even morsels of forest appearance, by the sides of those endless and tiresome walks that stretched out of one into another without intermission. But this was not till other innovators had broke loose too from rigid symmetry. But the capital stroke, the leading step to all that has followed, was the destruction of walls for boundaries, and the invention of fosses—an attempt then deemed so astonishing, that the common people called them Ha! Ha's! to express their surprise at finding a sudden and unperceived check to their walk. No sooner was this simple enchantment made, than levelling, mowing, and rolling, fol-

lowed. The contiguous ground of the park without the sunk fence was to be harmonised with the lawn within; and the garden in its turn was to be set free from its prim regularity, that it might assort with the milder country without. The sunk-fence ascertained the specific garden; but that it might not draw too obvious a line of distinction between the neat and the rude, the contiguous out-lying parts came to be included in a kind of general design; and, when nature was taken into the plan, under improvements, every step that was made pointed out new beauties, and inspired new ideas. At that moment appeared Kent; painter enough to taste the charms of landscape, bold and opinionative enough to dare and to dictate, and born with a genius to strike out a great system from the twilight of imperfect essays. He leaped the fence, and saw that all nature was a garden. He felt the delicious contrast of hill and valley changing imperceptibly into each other, tasted the beauty of the gentle swell or concave slope, and remarked how loose groves crowned an easy eminence with happy ornaments; and, while they called in the distant view between their graceful stems, removed and extended the perspective by delusive comparison.

'Thus the pencil of his imagination bestowed all the arts of landscape on the scenes he handled. The great principles on which he worked were perspective, light, and shade. Groups of trees broke too uniform or too extensive a lawn; evergreens and woods were opposed to the glare of the champaign; and where the view was less fortunate, or so much exposed as to be beheld at once, he blotted out some parts by thick shades, to divide it into variety, or to make the richest scene more enchanting by reserving it to a farther advance of the spectator's step. Thus selecting favorite objects, and veiling deformities by screens of plantations; sometimes allowing the rudest waste to add its soil to the richest theatre: he realised the compositions of the greatest masters in painting. Where objects were wanting to animate his horizon, his taste as an architect could bestow immediate termination. His buildings, his seats, his temples, were more the works of his pencil than of his compasses. We owe the restoration of Greece and the diffusion of architecture to his skill in landscape. But of all the beauties he added to the face of this beautiful country, none surpassed his management of water. Adieu to canals, circular basins, and cascades tumbling down marble steps, that last absurd magnificence of Italian and French villas. The forced elevation of cataracts was no more. The gentle stream was taught to serpentize seemingly at its pleasure; and, where discontinued by different levels, its course appeared to be concealed by thickets properly interspersed, and glittered again at a distance, where it might be supposed naturally to arrive. Its borders were smoothed, but preserved their waving irregularity. A few trees scattered here and there on its edges sprinkled the tame bank that accompanied its meanders; and when it disappeared among the hills, shades descending from the heights leaned towards its progress, and framed the distant point of light under which it was lost, as it turned aside to either hand of the blue horizon.

'Succeeding artists have added new masterstrokes to these touches; perhaps improved or brought to perfection some that have been named. The introduction of foreign trees and plants contributed essentially to the richness of coloring so peculiar to our modern landscape. The mixture of various greens, the contrast of forms between our forest trees and the northern and West Indian firs and pines, are improvements more recent than Kent, or but little known to him. The weeping willow and every florid shrub, each tree of delicate or bold leaf, are new tints in the composition of our gardens. But just as the encomiums are that have been bestowed on Kent's discoveries, he was neither without assistance nor faults. Pope undoubtedly contributed to form his taste. The design of the prince of Wales's garden at Carlton House was borrowed from the poet's Twickenham. There was a little of affected modesty in the latter, when he said, of all his works, he was most proud of his garden. And yet it was a singular effort of art and taste to impress so much variety and scenery on a spot of five acres. The passing through the gloom from the grotto to the opening day, the retiring and again assembling shades, the dusky groves, the larger lawn, and the solemnity of the termination at the cypresses that led up to his mother's tomb, were managed with exquisite judgment; and though lord Peterborough assisted him

'To form his quincunx, and to rank his vines.'

those were not the most pleasing ingredients of his little perspective.'

Having routed professed art (for the modern gardener exerts his talents to conceal his art), Kent, like other reformers, knew not how to stop at the just limits. He had followed nature, and imitated her so happily, that he began to think all her works were equally proper for imitation. In Kensington Garden he planted dead trees, to give a greater air of truth to the scene —but he was soon laughed out of this excess. His ruling principle was, that nature abhors a straight line. His mimics, for every genius has his apes, seemed to think that she could love nothing but what was crooked. Yet so many men of taste of all ranks devoted themselves to the new improvements, that it is surprising how much beauty has been struck out, with how few absurdities. Still in some lights the reformation seems to have been pushed too far. Though an avenue crossing a park or separating a lawn, and intercepting views from the seat to which it leads, are capital faults; yet a great avenue cut through woods, perhaps before entering a park, has a noble air. In other places the total banishment of all particular neatness immediately about a house, which is frequently left gazing by itself in the middle of a park, is a defect. Sheltered, and even close walks, in so very uncertain a climate as ours, are comforts ill exchanged for the few picturesque days we enjoy; and whenever a family can purloin a warm and even something of an old fashioned garden, from the landscape designed for them by the undertaker in fashion, without interfering with the picture,

they will find satisfaction on those days which do not invite strangers to come and see their improvements.'

Thus we have brought down the history of this elegant art to the present period. And from what has been said, it must be evident that gardening, in the perfection to which it is now brought in Britain, is entitled to a place of considerable rank among the liberal arts. 'It is,' says Mr. Wheatley, 'as superior to landscape-painting as a reality to a representation: it is an exertion of fancy; a subject for taste; and being released now from the restraint of regularity, and enlarged beyond the purposes of domestic convenience, the most beautiful, the most simple, the most noble scenes of nature, are all within its province. For it is no longer confined to the spots from which it takes its name; but regulates also the disposition and embellishments, of a park, a farm, a forest, &c., and the business of a gardener is to select and apply whatever is great, elegant, or characteristic, in any of them; to discover, or to show all the advantages of the place upon which he is employed; to supply its defects, to correct its faults, and to improve its beauties.'

Enough has been said upon the large scale of ornamental gardening. We shall now restrict ourselves to the description of such a plan of gardening as will be found to answer best for those who prefer the utile to the dulce, and regard usefulness and convenience more than ornament.

Sect. II.—Of the Choice of Ground for a Garden

When you have the choice of a place proper for a garden, the most essential points to be considered are, general situation, soil, exposure, water, and prospect.

The *situation* ought to be moderately elevated: if a garden be too high it will be exposed to the winds, which are very prejudicial to trees; if it be too low, the dampness, the vermin, and the creatures that breed in ponds and marshy places will add much to its insalubrity. The best situation is on the side of a hill, especially if the slope be easy; if a good deal of level ground be near the house; and if it abound with springs: for being sheltered from the fury of the winds, and the violent heat of the sun, a temperate air will be enjoyed; and the water that descends from the hill, either from springs or rain, will not only supply fountains, &c. for ornament, but, when it has performed its office, will water the adjacent valleys.

A good *soil* is next to be considered; for it is scarcely possible to make a fine garden in a bad soil. There are indeed methods of meliorating ground, but they are expensive; and sometimes, when the expense has been bestowed of laying good earth three feet deep over the whole surface, a garden has been ruined, when the roots of the trees have reached the natural bottom. To judge of the quality of the soil, observe whether heath, thistles, or such like weeds, grow spontaneously in it; and, if there be large trees near, whether they grow crooked and ill shaped; and are of a faded green, and full of moss, or vermin: in all such cases the place is to be rejected But, if it be covered with grass fit for pasture, the depth of the soil may be tried by digging holes three or four feet deep; and if there be three feet of good earth it will do very well, but less than two will not be sufficient. The quality of good ground is neither to be stony nor too hard to work; neither too dry, too moist, nor too sandy and light; nor too strong or clayey, which is the worst of all for gardens.

The next requisite is *water;* the want of which is one of the greatest inconveniences that can attend a garden, and will bring a certain mortality upon whatever is planted in it, especially in the droughts that often happen in a hot and dry situation in summer; add to this, its usefulness in making fountains, canals, cascades, &c., which are the greatest ornaments of any garden.

The last thing to be considered is the *prospect* of a fine country; and, though this is not absolutely necessary, yet it is one of the most agreeable accompaniments of a garden; besides, if a garden be planted in a low place that has no kind of prospect, it will not only be disagreeable but unwholesome.

Sect. III.—Of Laying out and Planting Gardens.

Gardens are usually distinguished into Flower, Fruit, and Kitchen Gardens. The first, being designed for pleasure and ornament, is generally placed next the back front of the house; and the two latter, being designed for use, are less conspicuous. But, though the fruit and kitchen gardens are here mentioned as distinct, they are often united; they equally require a good soil and exposure, and should both be placed out of the view of the house. According to Miller, the area of a handsome garden may take up thirty or forty acres, but no more; and the following rules should be observed in the disposition of it. There ought always to be a descent of at least three steps from the house; this will render the house more dry and wholesome, and the prospect on entering the garden more extensive. The first thing that should here present itself should be an open lawn of grass; which ought to be considerably broader than the front of the building; and, if the depth be one-half more than the width, it will have a better effect: if on the sides of the lawn there are trees planted irregularly, by way of open groves, the regularity of the lawn will be broken, and the whole rendered more like nature.

For the convenience of walking in damp weather, this lawn should be surrounded with a gravel walk, on the outside of which should be borders three or four feet wide for flowers; and from the back of these the prospect will be agreeably terminated by a slope of ever-green shrubs; which, however, should never be suffered to exclude agreeable prospects, or the view of handsome buildings. These walks may lead through the different plantations, gently winding about in an easy natural manner; and, as no garden can be pleasing where there is a want of shade or shelter, they should lead as soon as possible into plantations

Narrow rivulets, which have a constant stream,

if they are judiciously led about the garden, have a better effect than large stagnating ponds or canals. When wildernesses are intended, they should not be cut into stars and other ridiculous figures, nor formed into mazes or labyrinths, or any thing which in a great design might appear trifling.

In a word, the several parts of a garden should be diversified; but, in places where the eye takes in the whole at once, the two sides should be always the same. The general disposition of a garden and of its parts ought to be accommodated to the different situations of the ground, to humor its inequalities, to proportion the number of sorts of trees and shrubs to each part, and to shut out from the view of the garden no objects that may become ornamental.

Practical attention to a garden is by some esteemed a degrading employment. It is true, indeed, that pastoral and agricultural manners, if we may form a judgment from the dignified descriptions of Virgil, are greatly degenerated. The employments of shepherds and husbandmen are now become mean and sordid, and the work of the garden is usually left to a peasant. But the operations of grafting, of inoculating, of pruning, of transplanting, are curious experiments in natural philosophy; and, that they are pleasing as well as curious, those can testify who remember what they felt on seeing their attempts in these branches of practical gardening attended with success. Among the employments suitable to old age, Cicero has enumerated the superintendance of a garden. It requires no great exertion of mind or body; and its satisfactions are of that kind which please without violent agitation. Its beneficial influence on health is an additional reason for an attention to it at an age when infirmities abound.

A very limited tract, properly attended to, will furnish ample employment for an individual. Nor let it be thought a mean care; for the same hand that raised the cedar, formed the hyssop on the wall. Even the orchard, cultivated solely for advantage, exhibits beauties unequalled in the shrubbery; nor can the green-house produce an appearance to excel the blossom of the apple and the almond.

The kitchen garden ought to be situated on one side of the house, near the stables, whence the dung may be easily conveyed to it; and, after having built the wall, borders should be made under them, which, according to Mr. Miller, should be eight or ten feet broad. Upon these borders, exposed to the south, many sorts of early plants may be sown; and, upon those exposed to the north, may be sown some late crops; taking care not to plant any deep-rooting plants, especially beans and peas, too near the fruit trees.

Next proceed to divide the ground into quarters; the best figures for these are a square or an oblong, if the ground will admit of it. The size of these quarters should be proportioned to that of the garden; if too small, the ground will be lost in walks, and, the quarters being enclosed by espaliers of fruit trees, the plants will draw up slender, for want of a more open exposure. The walks should also be proportioned to the size of the ground: these in a small garden should be six feet broad, but in a large one ten, and on each side of the walk there should be allowed a border three or four feet wide between it and the espalier. In these borders may be sown small sallads, or any other herbs that do not take deep root or continue long; but they should not be sown or planted with the same plants two years together.

In the quarter nearest to the stables, and best defended from the cold winds, should be the hot-beds, for early cucumbers, melons, &c., and to these there should be a passage from the stables, and a gate through which a small cart may enter. The most important points of general culture consist in well digging and manuring the soil, and giving a proper distance to each plant, according to their different growths: as also in keeping them clear from weeds; for which purpose, always observe to keep the dunghills free from them, otherwise their seeds will be constantly brought in and spread with the dung.

Sect. IV.—The Gardener's Kalendar.

Under this head we proceed to point out what is proper to be done in the different months of the year, in the Kitchen-Garden, Flower-Garden, Orchard, &c. The arrangement is drawn up for the climate of the midland counties of England; but will suit more northern parts where the climate is mild, equally well, upon allowing a difference of ten or twelve days later for sowing or planting. Where the seasons are still more backward, a proportional allowance will be made by the judicious gardener.

JANUARY.

In January every thing should be done that the weather and circumstances will permit (even if not absolutely necessary), in order to lessen the work of next month, which, when it happens to be an open season, is a very important one, in which the loss of a single day is of consequence.

Kitchen garden.—Asparagus, in this season, being one of the greatest rarities which the art of gardening affords, ought to be planted every month, to have a regular succession of it till April, as it is above three weeks before it will be fit to cut, and the fourth hot-bed should now be made. Beans of the early mazagan sort must be planted for the second crop. Beets and cabbages of every sort, intended to procure seed from, should now be planted, if this was omitted in October. Carrots, to draw young, for the first crop, should now be sown; and those intended for seed should be planted. Cauliflower plants under glasses and frames should be covered with pea-straw, or mats, to defend them from the frost. Celery should be digged up as soon as the frost begins, for daily use, and the other covered with straw. Cress, mustard, radish, and rape, should be sown every week on a hot-bed. Cucumbers, for the first crop, to come early in March, should now be sown. As soon as they are three or four days' old put each into a small pot, and every week sow more to have plenty of plants. Dung should be wheeled into the kitchen-garden in frosty weather, when other work cannot be done. Endive should be digged up, like the celery, as

soon as the frost begins, and the rest covered with straw. Ground lying vacant should be digged up, if omitted in October, and thrown up into ridges. Hot-beds and loam should be prepared for asparagus, cucumbers, and melons. Lettuces under glasses should be examined, and, if they be killed, sow more on a hot-bed. Mint should be planted in pots, and, if there be no hot-bed, it will grow in a warm room. Mushroom beds will require regular attendance, and frost and rain must be kept out by dry straw and mats. Onions, to draw young, should be sown on a warm border. Peas under the south wall, for the first crop, should have the earth drawn up to them in a dry day, and sticks placed to them to defend them from the violence of the winds; and sow the second crop. Plant asparagus for the fourth crop. Beans for the second crop of Mazagans. Beets, cabbages, carrots, parsnips, for seed. Mint and potatoes on a hot-bed. Onions for eschalions and seed. Radishes for the second crop, sow in a warm situation, and the first crop on a hot-bed. Small sallading, as cress, mustard, rape, radishes, sow every week on a hot-bed. Sow carrots for the first crop, and the second of peas. Sow on hotbeds, carrots and cucumbers for the first crop. Cress, mustard, radish, and rape for sallads: sow likewise turnips.

Flower garden and shrubbery.—Anemones which were planted in the autumn, will require to be covered with pea-straw, rotten tan, or mats. Auricula and polyanthus seeds may now be sown in boxes or pots in mild weather. Auriculas should be sheltered from violent rains and frost by mats; and at the end of the month fresh earthed. Beds for bulbous roots should be digged and thrown up into ridges, that they may be planted the first fine weather, if any roots remain unplanted; but it is bad policy not to plant them in October or the beginning of November. Bulbous rooted flowers in boxes or glasses should be removed in frosty weather, before night, from the windows; nor should they be set on chimney-pieces until they are in flower, for shade draws all flowers up very weak. Boxes under five inches deep, eight wide, and sixteen long, filled with light sandy earth, without any dung, are better than glasses, and will not require so much trouble. Stir up the earth often with a table fork. Carnations must be sheltered from violent rains and frost by mats. Plant at the end of the month, or sooner if the weather be mild, all sorts of bulbous roots, as crocuses, jonquilles, narcissuses, polyanthus-narcissuses, snowdrops, tulips, &c. Plant flowering shrubs, which are hardy, and flower early, as almonds, double-flowering cherries, honeysuckles, lilacs, mezereons, roses, &c. Shrubs and trees of all sorts may be planted at the end of this month.—Trenches should be cut to carry off the water, if it stands any where after heavy rains.

Fruit garden and orchard.—Apple-trees should be pruned as soon as the violent frosts are over. Espaliers ought always to be repaired before the buds of the trees begin to open. The fruit room should be often examined, to pick out all fruit which begins to decay; and nail mats before the windows to keep out the frost. Ground for planting should be prepared by digging the holes ready; and, if wettish, a cart load of good loam should be brought for each standard tree, and formed into a little hill before the tree be planted. Scrape off the moss from all fruit trees. Orchards in general are much neglected, by not cutting out the dead wood and branches that cross each other, Pear-trees require pruning, both standards, espaliers, and against walls, as soon as the weather becomes mild. Prune currants, gooseberries, and raspberries. Strawberries in pots may be placed on hot-beds for forcing. Vines should not be pruned till towards the end of the month.

Greenhouse.—Air may be given to the plants, if the weather be mild. Fire must be made if it freezes, and particularly when it begins to thaw, or if it is foggy weather, to dry the house; for dampness is as prejudicial as cold; and, if there be no flue, light a few candles in frosty weather. To know for a certainty when it begins to freeze, set a pan of water near the windows. Leaves, which are any way decayed should be constantly picked off, particularly from the geraniums. Succulent plants, such as aloes, ficoides, &c., should not have any water this month. Water for all sorts of plants should be the softest that can be got; rain-water is the best; the chillness should be taken off by letting it stand in the house some days before it is used; and this month it should be given very sparingly. Windows in frosty weather should be kept very close, by pasting strips of paper where the wind blows in, for that contributes to the frost; and, if the windows must be covered with mats, take them down in the daytime to admit the light; for, if plants be shut up in the dark, their leaves will soon fall off; and the outward door should be opened as seldom as possible; but, to have it proper, there should be another door leading through a shed.

FEBRUARY.

When the ground can be conveniently worked, this is a very busy month, and no time should be lost, nor hands spared, that every thing may be done in its earliest season. The last week is particularly important; some full crops should then be sown, and many other things be done which are frequently neglected.

Kitchen garden.—Asparagus should have the mats taken off the glasses, except when it snows; for without light it will not be green; and the fifth and last crop should be planted on a hot-bed. Beans of the early sorts must now be planted for the third crop, and at the end of this month the first crop of the large sorts, as Windsor, long-podded, &c. Sow beets, but let the ground be digged very deep. Boorcole or kale, and broccoli, will want earthing up, but let the dead leaves be first picked off. Sow cabbages, for the second crop of sugarloaf, and the first of red, and plant out those sown in August. Sow carrots at the end of the month for the general crop, on a deep sandy soil. Cauliflowers under glasses must be examined, all the dead leaves picked off, and the earth stirred up. In mild weather give them air, and plant some out, leaving only the two strongest under each glass.

Sow the second crop on a gentle hot-bed. Sow celery for the first crop on a gentle hot-bed, and draw earth up to blanch what remains in the ground, in dry weather. Sow coleworts for the first crop: cress and mustard every week on hot-beds. Cucumber beds must be constantly attended to, to keep them up to a proper heat, and another made for the plants raised last month: when they have three or four rough leaves, plant them out, three or four to each light, and sow more seed. Tie up endive for blanching, and plant out some for seed. Eschalots, garlic, and rocambole, should not be deferred planting, or the roots will be very small. Ground lying vacant should be digged and thrown up into ridges, to prepare it ready for sowing. Horse-radish should now be planted. Hot-beds for cucumbers, melons, and small sallading, prepare, and have plenty of dung. Sow leeks, and mark some for seed. Plant out lettuces from under glasses, if the weather be mild, and sow the second crop. Give plenty of air to the forced ones. Sow melons at the beginning of the month for the first crop, and, when about three days old, plant each in a small pot. Plant mint in pots on a hot-bed. Defend mushroom beds from wet. Sow onions at the end of this month or beginning of the next for the general crop: weed those sown in autumn, and plant some for seed. Sow parsley for edgings, and some curled, very thin on a bed, to grow large for garnishing of dishes, and the large rooted. Sow parsnips on ground digged very deep. Peas out of the ground should have the earth drawn up to them, as they advance in dry weather, and will require sticking. Sow marrowfats and other large sorts, and the third crop of hotspurs. Plant asparagus for forcing, for the last crop: beans for a third crop: Windsors for the first: cauliflowers from under the glasses: endives for blanching and seed: eschalots, garlic, and rocambole: horse-radish: lettuces from under glasses: leeks, onions, and parsley for seed: potatoes in hot-beds for the first crop. Uncover radishes in mild weather, and put the straw on again at night. Sow fennel. Sow on hot-beds, cauliflowers, celery, cress, cucumbers, melons, mustard, radish, rape for sallads. Sow spinach, the first crop, and hoe the winter crop if it be too thick. Water should be carried away, if it stands after heavy rains, by cutting trenches.

Flower garden and shrubbery.—Anemones and ranunculuses should not be deferred planting the first mild weather, or they will flower weak; and the beds should be prepared some time beforehand. Hardy annual flowers, such as sweet-peas, lark-spurs, candy-tuft, alysson, corn-bottles, persicarias, and some few others, may be now sown, and they will flower very early. Auriculas must be defended by mats from wet, the decayed leaves constantly pulled off, and fresh earthed. Box for edgings may be planted in mild weather. Bulbous roots of every kind unplanted should not be deferred the first opportunity which offers of mild weather; and let the beds be thrown up into ridges beforehand. Bulbous roots in boxes, pots, or glasses, require a regular attention to water them; and the earth should be stirred up once a week. Carnations must be fresh potted, and sheltered from heavy rains by mats. Flowering shrubs and forest trees of all sorts, except ever-greens, may be planted at the end of the month. Grass walks, if intended to be made next month, should have the ground prepared by levelling it. Hot-beds for sowing amaranths, balsams, and other tender annuals, should be prepared, and the seed sown at the end of the month. Hyacinths which are above ground should be covered with mats supported by hoops. Mignonette must be sown on a hot-bed, or it will do in a pot placed in a warm room where the sunshine comes; but let the seed be sown very thin. Perennial-rooted flowers at the end of the month may be removed from the seed-beds, and the old roots transplanted. Plant anemones and ranunculuses. Shrubbery should be digged over and raked smooth, to destroy the young weeds beginning to shoot; but the trees should first be pruned. Shrubs of all sorts should have the suckers taken off, and, if small, be planted in beds a foot asunder until they are stronger; and any sorts may now be planted.

Fruit garden and orchard.—Apple and pear trees should be finished pruning the first mild weather. Plant cuttings of currants and gooseberries. Prepare grafts of apples and pears. Place hurdles against peaches, nectarines, and apricots, in the beginning of the month; they should be about two feet higher than the walls, that they may be set sloping; and must be fastened with stakes, and remain there till the fruit is set. Sow kernels of apples and pears, for stocks. Planting all sorts of fruit-trees should be finished early in the month, and the roots covered with mulch. Pruning wall-trees should be finished. Strawberries may be planted at the end of the month, and the old beds dressed; those on hot-beds must be frequently watered. Vines, finish pruning before they bleed. Wall-trees, as apricots, nectarines, peaches, plums, pears, should be finished pruning in the month, and those done in October must be examined, and the dead ends cut off.

Greenhouse.—Admit air very freely in mild weather. Earth the top of the pots, but first take out the old an inch deep. Fire must be made in foggy weather to dry the house. Leaves this month decay very fast; therefore they will require picking off almost every day, but especially from the geraniums. Myrtles, oranges, winter cherries, and some others, water frequently, but not too much at a time. Succulent plants, as aloes, ficoides, &c., must not have any water given them in this month, for it will cause them to rot. Water the plants which require it frequently, but very sparingly; for too much moisture in the house will injure the plants. Windows may be opened for a few hours in the middle of the day, but should be shut again about two o'clock, or whenever it begins to be foggy.

MARCH.

The first week in this month, like the last in February, is very valuable to the good gardener

and must be used industriously if he would have things in season. Necessary assistance must not be spared. Nature now waits for us, let us not neglect to attend upon her.

Kitchen garden.—Alisanders sown in autumn, should be hoed to a foot asunder, and more seed sown. Aromatic shrubs and herbs on beds, weed and fresh earth, early in the month; and sow and plant more of all sorts. Dress artichokes, and take the suckers off for a fresh plantation. Asparagus seed must now be sown to raise roots for forcing, and for fresh beds: at the end of about twelve years destroy the old beds, but take up the roots and force them: by now and then making one new bed, a constant succession may be kept up in full vigor. Plant out that which was sown last year. Fork up the beds, and rake them smooth, but do not leave the alleys above six inches lower than the top of the bed. Water the beds in a morning in dry weather, early in the month, with the drainings from a dunghill, to forward them. Make fresh plantations in moist weather. Plant beans for the fourth early crop, and the second of Windsors: cut off the tops of those in flower. Finish sowing beets. Sow boorcole of various sorts for the first crop. Sow broccoli of the early sort for the first crop. Cabbages; sow the third crop of sugarloaf, the second of red, and the first of savoys. Sow carrots now for the principal crop. Sow capsicums, for pickling, on a hot-bed. Cauliflowers must be planted out, leaving two only of the strongest to each glass: draw earth up to the stems, and prop up the glasses. Prick out those sown last month, and sow the third crop. Prick out the last crop of celery from the seed-bed, and sow the second. Chardons must be sown, and cives planted. Prick out the first crop of colewort. Cress, mustard, radish, and rape, may now be sown in the open ground for sallading; and cover the seed for a few days with a mat, or place hand-glasses over it. Sow cress and mustard very thin for seed. Cucumber beds must be kept to a good heat, by cutting off some around the sides, and adding fresh hot dung instead of it. Plant out the second crop on a fresh bed. About the 20th sow seeds of the Turkey, and some for bell-glasses. Prepare hot-beds for planting cucumbers and melons. Plant Jerusalem artichokes. Sow leeks. Sow kidney-beans at the end of the month, on a warm border. Plant out lettuces, from under the glasses. Sow the third crop of Cos or other sorts. Plant out melons from the first hot-bed. Sow cantaleupes for the second crop, and some on a tan-bed, and for bell-glasses. Mint beds, weed and earth, and plant more. Mushroom beds make for summer use. Nasturtiums for pickling, sow at the end of the month. Carefully weed onion beds before the weeds are high; and finish sowing the principal crop. Sow parsley, both curled and large rooted. Finish sowing parsnips. Earth up peas in dry weather, and stick. Sow the second crop of marrowfats. Plant artichokes, asparagus, beans, cives, cucumbers, Jerusalem artichokes, lettuces, melons, mushrooms, potatoes, and tarragon. Plant aromatic herbs and shrubs; as balm, camomile, lavender, mint, pennyroyal, rosemary, rue, sage, savory, thyme, &c, Pot and sweet-herbs should now be sown. Slip pot-marjoram, savory, and thyme. Weed potatoes, and plant the principal crop. Sow radishes, the fourth crop, and rampions. Sow angelica, basil, borage, burnet, celeriac, chervil, clary, corianders, cucumbers, dill, fennel, hyssop, marjoram, marygolds, melons, purslane, rampions, salsafy, savory, scorzonera, sea-kale, skirrets, sorrel, spinach, tarragon, thyme, tomatoes. Weed spinach, and sow the second crop. Plant tarragon, and sow tomatoes. Turnips, sow the first crop. Sow water-cresses, in a moist place, or where it may be constantly supplied with waste water from the pump. Destroy weeds while small, which will save future trouble.

Flower garden and shrubbery.—Anemones and ranunculuses, if any remain unplanted, must not be deferred longer than the first mild day. Anemones in flower should be covered with mats in windy or rainy weather. Annual flowers which are tender, if sown early in the month, will require a second hot-bed to be transplanted into; and, if not sown, should not be deferred any longer, to have them early and strong. Sow those also mentioned in sect. II. of the general catalogue, on a moderate hot-bed. Annual flowers of all the hardy sorts in the catalogue may be sown about the middle of the month in small patches where they are to remain; hollow the earth out in the form of a basin, fifteen inches over, and an inch deep, and sow the seeds very thin all over it, and not a small patch in the middle, as is too frequently the custom. Auriculas should be removed into the stand, and, if some flat oyster-shells be laid on the earth, they will keep it moist, and save trouble in watering them. Borders of the flower-garden will require to be hoed over or weeded, to destroy weeds which are beginning to shoot, and then raked, that they may appear neat. Box for edgings, in mild weather. Bulbous roots in beds should be covered with mats in rainy or stormy weather, and the earth stirred gently up with the fingers to destroy the weeds; those also in the house must be constantly attended to. Carnations, if not potted last month should be done the beginning of this. Evergreen shrubs, and trees of all sorts, may be planted in mild weather; then cover the roots with turf turned downwards, moss, fern, pea-straw, or some such things, to keep the ground moist, which is better, and gives less trouble than watering. Plant flowering shrubs and forest-trees of all sorts, early in the month, and cover the roots. Grass walks must be swept and rolled. Gravel walks will need turning and rolling, after being weeded, and cleaned from moss with a birch broom. Hyacinths must be covered with mats or canvas, to prevent their flowers from being spoiled, but not kept too close. Larkspurs, in beds or patches, must be thinned and not left nearer than eight or ten inches. Mignonette, sown last month, should be transplanted, and more of it sown. Myrtles, winter cherries, and other hardy greenhouse plants, planted against walls, should have the mats rolled up in fine weather, and the dust washed off from their leaves, but covered again at night. Perennial and biennial flowers must

be sown on beds, very thin, that they may be strong; those sown last year should be transplanted, and the old roots of the perennials divided. Plant annuals from the first hot-bed: biennials and perennials from the seed-bed: evergreens of all sorts: perennials, by dividing their roots, and seedlings of last year's sowing: shrubs and trees early in the month: strawberries and thrift for edging. Shrubberies should be pruned early in the month: the suckers taken off, and planted a foot at least asunder, and the rows two feet apart: the ground hoed or digged, and then raked over, that it may appear neat and clean. Plant strawberries, for an edging to the shrubbery, at six inches asunder; the flowers make a pleasing appearance and afterwards you will have very large fruit by their being in a single row. Plant strawberry trees, against a south wall, which will preserve the flowers, and ripen the fruit. Constantly destroy weeds by hoeing while small, with a Dutch hoe, made to cut both ways, by which method you may always keep your shrubbery in order, with very little trouble.

Fruit garden and orchard.—Apricot, nectarine, and peach trees, should have hurdles placed before them, to defend the blossoms from hail; or else stick branches of yew, fern, or fir, amongst them, but hurdles are the best. Fig trees which have mats nailed over them should have them taken away by degrees, by first unnailing them at the bottom, towards the end of the month. Graft trees, and cut down the budded ones. Peach and nectarine trees ought to be finished pruning at the beginning of the month, if omitted till then; the heads of those lately planted should be cut off. Planting of all sorts should be finished at the beginning of the month. Strawberry beds should now be attended to; hoe them first to destroy the weeds, and stir up the earth between them; then spread some very rotten dung and earth over them. Those on hot-beds want frequent watering, and the dead leaves should be constantly picked off, to let the sun come to the fruit. New plantations may now be made. Vines may now be layered: draw some strong bearing branches through the bottom of the pot, and plunge the pot into the ground; and then they may be transplanted the next season, and produce fruit the first year; plant cuttings. Finish pruning wall trees, and mulch those lately planted.

Greenhouse.—Give air freely in the middle of the day, except the wind be very cold. Place geraniums near the windows to prevent their being drawn up weak. Myrtles, winter cherries, and other hardy plants, will want fresh potting, and, if the weather be mild, may be taken out to make more room, but set them in a sheltered place at first. Orange trees, if their leaves be mildewed, will want washing with a sponge and warm water. Those with ill shaped heads should be cut down, and placed on a strong hot-bed. Sow kernels in pots, good strong seed, and, if they are set an inch asunder, they will grow faster. Succulent plants may now have a little water, but not much at a time. Water the plants in the middle of the day, and only when the sun shines; but the water should be set in the house for two or three days to take off the chillness, and use soft water. Windows may be opened for a few hours in the middle of all fine days.

APRIL.

If by any means the proper early cropping of the ground has been prevented, make no delay to finish and to get the garden into a complete state of cultivation. Let nothing now be met with that appears slovenly or disgusting.

Kitchen-garden.—April being the latest time for sowing the principal crops of the kitchen garden, if any thing directed to be performed last month was omitted, or the weather would not permit, let it be done early in this. Aromatic herbs and shrubs of all the following sorts should now be planted, as balm, camomile, pennyroyal, peppermint, spearmint, tansey, lavender, rosemary, rue, sage, southernwood, wormwood, &c. Finish both sowing and planting asparagus early in the month. Let the beds be forked and raked smooth, and watered twice a-week with drainings of a dunghill. Cut off every bud, however small; for, if they be left on, they weaken the others; this method is in general only practised by the London kitchen-gardeners. Never suffer any weeds to remain after they are an inch high, for they weaken the asparagus very much. Beans in flower should have their tops cut off; and draw the stalks of the first crop close to the wall by strings, and earth them up. Plant the third crop of Windsors. Kale and broccoli should have the first crop pricked out, and the second sown. Cabbages of the early sort should have their leaves tied up to forward their cabbaging. Prick out from the seed-bed the third crop of sugarloaf, the second of red, and the first of savoys. Prick out capsicums from the seed-bed, to prevent their growing weak, upon another hot-bed. Weed carrots, thin the first crop, and sow the second to draw young. Search for caterpillars, upon cabbages and apple-trees particularly. Cauliflowers should have the earth drawn up very high to raise the glasses, and a piece of brick put under each corner, and at the end of the month taken quite away. Break down the leaves when the flowers of any begin to appear; earth the second crop, and prick out the third. Celery, prick out the second crop, and sow the third. Sow cress and mustard every week. Cucumber beds must be attended to, and plenty of air given them, when mild; and, if the heat declines, fresh dung must be added to the sides. Make a gentle hot-bed within the ground for those that are to be under bell or hand glasses, and plant them on it at the end of the month. Sow more seed, that you may have plenty of plants. Endive planted out for seed should be earthed up, and the first crop sown. Sow finochio, in drills a foot asunder, for the first crop. Hot-beds for sowing of melons for bell glasses must be prepared, and loam and rotten dung procured, to be ready. Sow kidney beans, the second crop, and the first of the scarlet flowering. Tie up lettuces, to assist their cabbaging; those in beds should be thinned to a foot distance; others planted out, and the fourth crop sown very thin in an airy place. Melon

beds will require to be kept up to a good heat, and the second and third crops planted out. Finish making mushroom beds early in the month, which will last till September. Onion beds must be attended to, to keep clear from weeds as soon as any appear, and sow the second crop to draw young. Thin parsley for garnishing dishes, and leave those plants which have the best curled leaves. Sow the large-rooted. Earth up peas frequently, and stick them as soon as any tendrils appear. Sow the third crop of marrowfats. Plant beans and mushrooms. Plant cucumbers and melons on fresh hot-beds. Potatoes should now be finished planting. Pot and sweet herbs may still be sown and planted; and weed and earth the beds. Sow purslane on a warm border in rich earth. Sow radishes for a fifth crop in a cool place. Slip and plant out last year's rosemary, rue, sage, savoy, and thyme. Search often for snails and slugs. Sow aromatic herbs and shrubs. Sow on a hot-bed cucumbers and melons. Sow spinach, the third crop, in a cool place. Turnips, hoe the first crop and sow the second. Weed all the beds of seedlings, while the weeds are small, and any other crops also.

Flower garden and shrubbery. — Anemones in stormy weather will still require covering with mats. Annual flowers on hot-beds will require thinning, and some of the strongest must be planted into single pots. Hardy annuals, if not already sown as directed in March, should be deferred no longer, and sown very thin. Auriculas in bloom must be constantly attended to, and defended from violent winds, but yet have plenty of air in mild weather; the seed-beds will want frequent and gentle waterings. Balm of Gilead may be sown or slipped, but the strongest plants will be raised from seed. Biennial and perennial flowers, finish sowing early in the month. Weed or hoe the borders of the shrubbery and flower-garden, and rake frequently. Still plant box for edgings in mild weather. Bulbous rooted flowers, which were planted in boxes or glasses, as soon as the flowers are decayed, should be planted in the ground to strengthen the roots. Carnation seed may now be sown, and stir up the earth frequently of those in pots. Crocus leaves are by many persons cut off; but it greatly weakens the young roots, for the old ones decay, and new roots are formed every year; if they hang over in the walks tie them up in a knot. Finish planting evergreen trees and shrubs, and sow the seed. Grass walks must be swept, rolled, and mowed; if any places be bare, lay down some pieces of fresh turf, or sow some hay seeds. Prepare the ground by levelling, early in the month, where fresh walks are to be made. Gravel walks must be frequently rolled in dry weather, and turned if the top be dirty, but sweep them well first. Hyacinths in bloom, shade with mats or canvas. Kidney beans, with scarlet flowers, will form a pleasing shady walk towards the end of the summer; they must be sown on each side of the walk three or four feet wide, at six inches asunder, and sticks of eight or nine feet long placed to them, or sticks of five feet long will do with some osiers to form the arch at the top. Larkspurs must now be thinned for the last time, and left eight or ten inches asunder; if taken up carefully with a trowel, they may be planted again; by this method the flowers will be strong, and the seed abundant. Layer laurustinuses and various other shrubs, but omit the rose trees till June. Sow mignonette, on a warm border. Myrtles and hardy greenhouse plants against walls, towards the end of the month, may have the mats taken away, and fresh ones planted where necessary. Those from the seed-beds transplanted, and the old roots of the perennials divided. Plant the olive-leaved phillyreas, to make nosegays, as the leaves greatly resemble myrtle. Plant annuals from the hot-beds into pots, and plunge them into another hot-bed: biennials and perennials on the borders: myrtles, heaths, and other hardy green-house plants: hollies and quick for hedges: strawberries and thrift for edgings: shrubs and trees of all sorts early in the month: tuberoses in pots on a hot-bed. Water seedling beds of flowers, shrubs, and trees, often, but very little at a time. Shrubberies should be finished digging and raking, and frequently hoed when any weeds appear. Shrubs or flowers in pots are best to be set in pans, which will save much trouble in watering. Sow balm of Gilead in pots: carnations and pinks in boxes or pots: evergreen shrubs and trees: mignonette; scarlet kidney beans: perennial flowers of all sorts: shrubs and trees of every kind on shady borders, or in boxes. Mix seeds which are small, first with some dry earth, that they may not be sown too thick. Sow tobacco very thin in a bed of fine rich earth. Plant tuberoses on pots on a hot-bed. Turf should be finished laying, and often watered in dry weather. Water seedling beds and shrubs lately planted, in a morning, during this month, on account of the frosts. Weeds should be destroyed while very small, to prevent their running up to seed, especially on beds of seedlings.

Fruit garden and orchard.—Apricots commonly growing in clusters require to be thinned three different times: as soon, therefore, as they are the size of a horse bean, it is proper to begin. Budded fruit-trees, such as apricots, cherries, nectarines, peaches, plums, must be examined to pull off all the shoots which come from the stock. Caterpillars may now be readily found in their webs, but more particularly on apple trees. Grafted fruit-trees, as apples, cherries, pears, must often be examined to take off the shoots below the grafts; and replace any clay which has cracked or fallen off. Apply hog's dung to any fruit-trees which are blighted. Take away hurdles when the fruit is set. Finish planting and pruning nectarines and peaches. Planting and pruning should be entirely finished early in the month; and, if any trees be removed so late, it should be those which have been planted in baskets and trained. Search for snails in the holes of walls. Finish dressing and planting strawberry beds, but plant only strong runners of the last year, and at the following distances—for, in general, they are planted too close, which causes the fruit to be mouldy for want of air. On beds, four feet wide, plant four rows

one foot asunder, of the scarlet, alpine, wood, and green: hautboys, three rows, at sixteen inches asunder. Bath Chili, Devonshire Chili, Carolina and pine-apple Chilis, three rows, and each plant twenty inches asunder. Chilis, three rows at two feet asunder at least: these are but little known; the Carolina are generally taken for them, which are pale, hollow in the centre, and frequently woolly: when there are three rows, plant them in quincunx order in the following manner :—

Decayed leaves from the forced ones should be constantly picked off, and frequently watered. Vines should be examined when they first begin to shoot, and all buds pulled off which grow in improper places. Plant cuttings early in the month. Wall trees of all sorts should not be deferred pruning longer than the beginning of the month.

Greenhouse.—Give air, very freely by keeping the windows open all day, except in storms of hail. American aloes may have water very often, and should be fresh potted. Earth the tops of all the pots, with the compost which each plant requires; and shift those which are in too small pots. Geraniums should be removed as near as possible to the windows, to prevent their being drawn up weak; branches which begin to rot must be cut off, and decayed leaves constantly pulled off. Inarch orange and lemon trees. Constantly pull off decayed leaves from all plants, but especially the geraniums. Myrtles, if prevented from being set out last month, may be removed in this, but should be in a sheltered place. Prune and fresh-pot any plants that may need it. Orange trees must be fresh-potted after the myrtles are taken out; leaves which are mildewed must be cleaned with a sponge and water a little warm, and the stems well brushed. Seeds of any sort which are ripe may still be sown on a hot-bed. Succulent plants will require frequent watering, but give very little at a time. Water the plants only when the sun shines, and keep the windows shut for two or three hours after. Windows may be opened on all fine days, from about nine in the morning till four, except when it hails

MAY.

Let this delightful month be ushered in with due respect by the gardens being in excellent order, to which end let no help be spared, when the gardener is not competent to perform the work himself. It is often too much for the most industrious man. We now gather vegetables that have stood the winter, and have been the care of many months, with some of the products of spring also.

Kitchen garden.—Aromatic herbs and shrubs may still be sown and planted. Artichokes should have the young shoots pulled off, lest they rob the principal one. Asparagus beds ought to be frequently weeded, as it prevents seeing the buds so readily, if the weeds be not pulled up; and in very dry weather watering them will be proper. Beans will require to have their tops cut off as they come into flower, and the earth drawn up to their stems. Prick out the second crop of kale, and be sure to have plenty of plants, for in all long frosty winters its utility is fully proved. Cabbages will often want hoeing and earthing up. Plant the second crop, and the first of red. Sow the fourth crop, and the second of savoys. Cabbage turnips, turnip-rooted cabbages, American and white Scotch cabbages, and Anjou boorcole, must now be sown; whether they are intended for feeding cattle, or for eating. They are most profitable when very large, therefore sow the seed very thin. Plant out capsicums, where they are to flower, and tomatoes into rich ground, or between the bell glasses of cucumbers. Carrots should be weeded before the weeds overtop them, and thinned by hoeing. Caterpillars may now be readily found in the webs, and particularly on apple trees. Cauliflowers to be cut from October to December and plant out the second crop. Prick out the third crop of celery, and sow the fourth. Plant out the first of coleworts. Sow cress and mustard every week on a cool border; and hoe that which is intended for seed. Cucumbers for the fourth crop may be planted out, and let some be against walls, both for seed and superior flavor. Sow now in the open ground. If plants be attacked with black flies, fumigate them with tobacco smoke. Endive, thin the first crop and sow the second. Eschalots, garlic, and rocambole, may have a few roots taken up for present use. Sow finochio for the second. Hoe or weed the beds of beets, carrots, leeks, lettuces, onions, parsley, parsnips, turnips, &c., and thin them before they are too crowded. Sow kidney beans the third crop of dwarfs, and the second of runners. Thin lettuces in beds, and then sow the fourth crop. Melons on the tan-bed must be thinned. Sow seed for an autumn crop; prick out each into a small pot, as soon as the rough leaves appear. Fumigate with tobacco smoke any that are attacked with red spiders. Mushroom beds will want frequently gentle waterings. Thin nasturtiums to a foot asunder, and place some sticks amongst them to prevent their trailing upon the ground. Those planted for seed will require stakes and strings to support them. Sow the third crop to draw young. Parsley for garnishing dishes, thin to eight or ten inches asunder. Sow peas, the fourth crop of marrowfats, and earth and stick those which require it. Hoe the ground before the potatoes appear. Pot-herbs and sweet herbs in beds must be frequently weeded, particularly seedlings. Prick out from the seed-beds, broccoli, cabbages, kale and melons. Radishes for seed should now be planted. Choose only the straight well shaped ones, and which are of a good color. Sage must still be slipped and planted. Seeds of all sorts nearly ripe will often require staking, and defending from birds. Slugs and snails may easily be found and destroyed after rain, or early in the morning. Sow broccoli, cauliflowers, cucumbers, melons, onions, purslane, and radishes. Sow spinach, the sixth crop, in a cool place. Sow turnips, the third crop, and hoe the other. Water often, in dry weather, beds of seedlings. Weeds of no sort should be suffered to seed, and many sorts when

cut down will still ripen their seeds, if not raked up and carried away. Weed, before the young weeds overtop the young plants, the seed-beds and crops of broccoli, cabbages, carrots, endive, finochio, kale, leeks, lettuces, onions, pot-herbs, spinach, and turnips.

Flower garden and shrubbery.—Annuals from the hot-beds should be removed into larger pots, and encouraged in their growth as much as possible, by being constantly watered. Annuals sown on borders will require thinning, weeding, watering in dry weather, and the earth drawn up to support them; but leave a ridge round them to retain the water. Auriculas out of bloom, and the seed boxes, should be removed into a shady place. Weed biennial and perennial flowers in the seed-beds, and thin if necessary. Hoe the borders of the shrubbery and flower garden, and frequently rake them, that they may always look neat. Bulbous roots, which flower early, as aconites, anemones, crocuses, irises, snow-drops, and several others, should be taken up as soon as the leaves are withered, and before they entirely disappear, for then they are more readily found. Those in boxes or glasses, which have done flowering, should be put into the ground to strengthen the roots. Carnations will require sticks to be placed to them as soon as they begin to spindle, and the earth should be often stirred up. Evergreen shrubs and trees lately planted must be frequently watered, and they may also be layered. Weed, roll, and mow the grass walks often. Gravel walks will require frequent rolling. Hyacinths, as soon as the leaves begin to decay, should be taken up, then laid on a ridge of earth with their leaves downwards, and covered with earth two or three inches thick, to harden and ripen the roots. Insects of various sorts, as earwigs, caterpillars, snails, &c., should be searched for and destroyed. Mignonette may be sown in the open ground, for a succession in the autumn. Myrtles, heaths, and other hardy greenhouse plants against walls, will often require watering. Plant annuals into larger pots, and on the borders; and cover them with a pot till they have taken root. Ranunculuses should be weeded, and the earth gently stirred with the fingers. Rosetrees infected with green flies or grubs must be constantly examined; wash off the flies with water, and pinch those leaves which have grubs in them with the finger and thumb. To have roses late in autumn, cut off every flower-bud which now appears, from two or three trees, and water them well for about ten days afterwards. Seeds of every sort of flowers which are ripe should be gathered. Shrubberies should be often hoed with a Dutch hoe, to destroy the young weeds; and shrubs and flowers in pots should be set in pans, and often watered. Sow annuals to flower late in autumn; as alyssons, candy-tufts, cornbottles, yellow fumitories, larkspurs, lavateras, yellow lupines, mignonette, poppies, dwarf stocks, pansies, and sweetscented peas. Still plant tuberoses, to flower late in autumn. Tulips, if out of bloom, should have their seed-vessels broken off, and the early ones taken up. Water annuals, seedlings newly planted, and shrubs and trees, very often in dry weather. Weeds should particularly be prevented from going to seed: the most expeditious method is to cut them up with a Dutch hoe, made to cut both ways; and, if neatly done, the borders will not require raking afterwards, if cut while very small.

Fruit garden and orchard.—Apricots should be thinned for the second time, and all foreright shoots pulled off. Blighted trees should have hogs' dung spread over the border; then fork up the ground and water it well. Pull off curled leaves, water the trees all over, and strew tobacco dust on the leaves; or fumigate them with tobacco smoke, which will greatly help to destroy the insects. Examine budded trees often, and pull off improper shoots. Caterpillars must be searched for upon apple trees, and destroyed. Disbud all the wall trees, by pulling off buds which come out in improper places. Espalier trees should be examined to disbud them and train in the shoots. Grafted trees should have the clay taken off, if properly united. Nectarines and peaches will require thinning for the first time, and the trees to be disbudded. Forced strawberries should have the dead leaves pulled off and be frequently watered. Those which are beginning to flower, or have lately been planted, must be often watered in dry weather. It is not generally known that hautboys and chili strawberries do not, like all the other species, produce hermaphrodite flowers, but male and female flowers on separate plants; and persons ignorant of this fact allege their hautboys are blind; whereas those flowers which turn black in the middle are male plants, and never will produce fruit. To make a plantation properly, let a person skilled in botany examine them when in flower; he will then easily distinguish them by the male stamina above a quarter of an inch high. Most of them should be pulled up, and the male ones marked with a stick; for they cannot be distinguished when out of flower. The females indeed will produce fruit, but neither so large nor well flavored, and often ill-shaped; and the seed will not grow, unless impregnated by the male flowers. In making a new plantation, do it in the following manner:—

The male plants may be transplanted when in flower, if covered with a flower-pot for a few days after: three males will do for every fourteen females. Vines will require a constant attendance to pull off weak shoots, especially where two come together, and to nail the branches. Water trees lately planted, or any infected with insects.

Greenhouse.—Air must be given freely except on cold nights. American aloes must be often watered and placed near the windows. Take out geraniums towards the end of the month, except those with variegated leaves. Turn myrtles which are small out of the pots, and plant them in a bed of light rich earth. Orange trees must be fresh potted, if not done last month; and, as soon as the leaves of mulberry trees are the size of a half crown, it shews that the weather is set-

tled, and they may safely be set out. Water constantly the young trees sown in March, or any on the hot-beds. Seedling plants should be attended to, and shaded with mats, when the sun is hot in the middle of the day, and be often watered. Succulent plants should be earthed at the top, but not shifted; and may still remain in the house towards the windows, and be often but sparingly watered. Water plants frequently, and a little at a time, rather than too much at once. Windows may be kept open all day, and, towards the end of the month, all night, to inure the plants by degrees to the open air.

JUNE.

In this month the gardener begins to find some pause to his labor. The ground is now fully cropped, as to principals, and the chief business is to see that the various plants according to their different ages and growth have necessary attention and assistance.

Kitchen garden.—Aromatic herbs, flowers, and shrubs, for drying and distilling, gather when dry; they are in the greatest perfection just as the flowers begin to open. Beans will still require earthing, and the tops of those which are in flower should be cut off. Beets should be thinned to their proper distance of ten or twelve inches at least. Plant the first crop of kale, and sow the third. Broccoli, plant the first, prick out the third, and sow the fourth crop. Cabbages, plant the third crop, prick out the fourth and sow the fifth. Red cabbages, plant the second crop, and sow the third. Savoys, plant the first, prick out the second, and sow the third. Cabbage-turnips, &c., for cattle, as described under last month, sow for the second crop. Carrots and parsnips, finish hoeing, and leave them at eight or ten inches distance at least. Capsicums, finish planting out, and hoe and water them often in dry weather; for in late seasons they will not ripen unless brought very forward early. Search for caterpillars on cabbages and apple trees. Cauliflowers, plant the third crop, and prick out the fourth. Plant the first crop of celery, prick out the fourth, and sow the fifth. Coleseed and rape may now be sown, if the ground be in proper order. Sow the second crop of coleworts. Cress and mustard intended to stand for seed should now be hoed for the last time; the cress left at six inches distance, and the mustard at eight. Nail up or stick cucumbers against walls. Thin and draw up earth to the stems of those under bell glasses, and water them frequently. Plant out the first crop of endive, thin the second, and sow the third. Sow the third crop of finochio or Italian fennel. Hoe or weed the beds of beets, carrots, leeks, lettuces, onions, parsley, parsnips, turnips, &c., to their proper distances. Kidney beans, sow the fourth crop, and place sticks to the runners. Plant lavender, rosemary, rue, and sage nuttings, in the shade. Hoe and thin leeks to about four inches distant, to be ready for transplanting in July. Sow the sixth crop of lettuces in a cool place, and thin those for seed to a foot distant. Cover melons in frames with mats in the middle of the day, and lay pieces of broken earthen plates or dishes under the fruit. Plant out those for the oiled papers. Examine often the mushroom beds, that they do not want water. Thin the onions to six or eight inches distant. Thin parsley in beds for garnish, and the large rooted to eight or ten inches. Parsnips must be thinned to ten or twelve inches. Sow the last marrowfat peas in a cool place. Plant lettuces and melons. Weed pot-herbs and sweet-herbs often, and gather for drying, just before they begin to flower; then tie them up in small bunches, and hang them across lines in a shady room to dry. Prick out broccoli, cabbages, cauliflowers, and celery. Sow turnips and turnip-radishes. Sow radishes the seventh crop, and turnip-rooted, and black Spanish, in a cold place. Rape and coleseed may now be sown. Seeds of all sorts must be gathered as they ripen, and defended from birds. Sow spinach, the fifth crop; thin in a cool place. Thin the following crops, and leave them at their proper distances. Leeks may be left at four inches, and transplanted in July. Lettuces intended for seed, at least a foot asunder; but fifteen inches will be better. Turnips at six or eight inches. Sow the fourth crop of turnips, and hoe the others. Water all beds of seedlings and cuttings frequently. Weeding the young crops is of the utmost consequence this month, especially if it be a rainy season, and must not on any account be omitted; nor let any weeds run to seed.

Flower garden and shrubbery.—Take up anemones before their leaves are quite withered, and they will be more readily found. Annuals from the hot-beds will require fresh potting, and may be placed in the open air if it be settled and warm, but will want frequent watering. Annuals on the borders should have the earth stirred up with a hoe, and be often watered, and more sown to flower in autumn, as described under last month. Hoe and rake borders of the flower garden and shrubbery frequently. Box may be clipped, but always do it in moist weather. Bulbous rooted flowers of every sort, whose leaves are nearly withered, should be taken up before the leaves entirely disappear, and put into shallow wooden boxes, as directed for hyacinths, as soon as dry. Carnations require to be examined frequently and tied up to the sticks. Search for the ear wigs. Evergreens may be clipped in moist weather. Grass and gravel walks will often require weeding, but it should be done after rain, for then the roots may be drawn out without breaking: they will often want mowing and rolling also. Hyacinths, as soon as dried, should be taken out of the ground, then rubbed with a woollen cloth to clear them entirely from earth, and laid in shallow wooden drawers; but they should never be put into flower-pots, earthen pans, or laid on brick floors, for they will contract a mildew or mouldiness, which will make them rot. Insects of all sorts should be sought for and destroyed. Kidney beans will want earthing, sticking, and the runners to be trained to the sticks. Mignonette, from the seed-beds, should be transplanted into small pots, and only three put into each; it will then be ready to put into larger pots, or upon the borders. Myrtles, and other greenhouse

plants against walls, should be often watered, all fore-right shoots pulled off while small, and the others nailed to the walls with long narrow shreds of fine cloth. Plant out perennials and biennials from the seed-beds in showery weather; and, if the sun should be very hot soon after, cover each plant with a flower-pot, until they have taken root. Pinks may now be increased by making pipings or cuttings, but a glass must be placed over them. Plant out all annuals from the seed-beds and hot-beds: pipings of carnations, and pinks. Attend to ranunculuses, and take them up as soon as the leaves are quite withered. Rose trees may now be layered and budded, and some very rotten dung spread on the ground, and digged in, and often watered; the flies and grubs must also be attended to. Seedlings of trees, shrubs, or flowers, should be covered with mats in the day-time, and often watered; but, if in pots, remove them into the shade. Seeds of all sorts which are ripening should be attended to, and gathered before they drop out of the pods. By a little attention to them, in most seasons, enough may be got for the next year, and the expense of buying saved. Shrubberies ought frequently to be looked over; all straggling branches should be cut off or tied up; and the grounds stirred with a Dutch hoe. Shrubs in pots may be set in pans, and watered often. Sow annuals, as described under last month, to flower in autumn, in any vacancies that may be on the borders of the shrubbery or flower garden. Tulips should be taken up before their leaves are quite decayed, that they may be found more readily; and, if any of the offsets be very small, plant them again directly, and lay the roots to dry in shallow boxes. Tulips produce new bulbs every year, and the old ones decay entirely; therefore they should never be taken up until the new bulbs are quite formed. Water annuals in pots constantly; seed-beds of all sorts; and shrubs and trees lately planted. Weeds, in this month, it is of the utmost consequence to destroy before they flower. When cut down they should be raked up and carried away, for many sorts will otherwise ripen their seeds lying on the ground.

Fruit garden and orchard.—Apple trees in espaliers must be often examined; all fore-right shoots should be taken off while small, and the others regularly trained to their proper distances. Search for caterpillars. If the standard apple trees be infected with caterpillars, light some damp straw, and with a fork direct the smoke through the tree, and they will soon be suffocated, and instantly drop down. Apricots must be thinned for the third and last time, and the shoots frequently nailed up. Blighted trees must be constantly attended to, as directed last month. Bud apricot, cherry, and peach trees. Cherry trees against walls should be covered with nets, to defend the fruit from birds. Look over the espalier trees often, and train the shoots in regular order. Nail up fig trees with very strong shreds. Nail up every week shoots of wall trees. Nectarines and peaches will require thinning the second time, nailing up the shoots and pinching off the ends where vacancies want filling up. Nail up pears and plums as they shoot, and pull off all fore-right shoots. Keep stocks, intended to be budded, free from weeds. Strawberries in flower will need frequent watering in dry weather. Lay tiles or wheat straw under the fruit of the scarlets, and pull off all decayed leaves; this will keep the fruit clean, and cause it to ripen sooner by several days. Cut off all runners as fast as they shoot. To make some fresh beds, reserve the first runners, as they are the strongest. Attend the flowering of the hautboys, as directed under last month. Vines require constant attendance, in rubbing off improper buds, and nailing up the shoots. Water those trees frequently which are blighted: and all newly planted trees in dry weather.

Greenhouse.—Air may now be given very freely in the greenhouse, and the windows may be kept open all night. Fresh earth aloes, and place near the windows, but take out the Americans. Plant cuttings of various sorts, under bell or hand glasses, at the end of the month. Earth all the plants every month at top, if not shifted. It makes them look neater, and grow better. Geranium seedlings sown in March will now require pricking out, and cuttings planted under glasses. Inarch jessamines, lemons, and oranges. Layer jessamines, oleanders, &c. Plant myrtle cuttings at the end of the month under glasses, but never take them off till they have grown two inches. Orange trees, if not taken out at the end of last month, will require it at the beginning of this. Clean well the leaves which are mildewed, or have insects on them, with a sponge and warm water. Inarching may now be performed. Those on hot-beds, and the young seedlings, must be attended to, and the stems of the old trees should be frequently washed. Often water seedling plants of all sorts; shade them in the middle of the day, and prick out the strongest to make room for others. Succulent plants may now be shifted, the offsets taken off, placed near the windows, and be often watered. Watering some of the plants will be necessary almost every day.

JULY.

In the month of July there is a cessation from the great bustle and more laborious works of gardening; yet 'its many cares' still find employment for the willing hand: perfection will not be attained without perseverance in the means. Let nothing, therefore, be omitted that may tend to crown the gardener's credit with a continued production of fine vegetables, fruits, and flowers.

Kitchen garden.—Aromatic herbs, flowers, and shrubs, gathered last month, if hung on lines, will soon be dried. It is then better to strip off the leaves and flowers from the stalks, and put them into paper bags, which will preserve their flavor better, and keep them free from dust. Continue to gather them before their flowers are too much opened. Asparagus, if wished for in autumn, must be attended to at the beginning of this month; the stalks must be cut down, and, if it be dry weather, the beds must be very well watered with the draining from a dunghill. Next day fork them up lightly, and rake them smooth; if the weather continues dry, water them every night for a week, and in about eight or ten days they

will be fit to cut. If this be done every year, leave two or three beds uncut at spring, and make some more beds to allow for this double crop. Beans: plant the fifth crop of Mazagan, and the fourth of Windsor, for late crops. Finish thinning of beets to their proper distance. Plant the second crop of kale, prick out the third, and the first of Anjou. Plant out the third crop of broccoli, and prick out the fourth. Plant the fourth crop of cabbages, and prick out the fifth. Prick out the third crop of red cabbages. Plant the second crop of Savoys, and prick out the third. Cabbage turnips, &c., for cattle, prick out the first crop. Sow carrots to draw young, the third crop. Earth up capsicums, and often water them. Plant out the fourth crop of cauliflowers. Plant the second of celery, and prick out the fifth. Finish sowing coleseeds, coleworts, and rape. Prick out the second crop of coleworts. Stick cucumbers on the open ground, with branches of elm or other sticks. Lay tiles on endive, or tie up the first crop; plant the second, thin the third, and sow the fourth very thin. Take up some eschalots and garlic for present use. Sow finochio, the fourth crop. Sow kidney beans, on a south border, the fifth and last crop. Still plant lavender and rosemary cuttings. Plant out leeks in double rows, at six inches distance, and a foot between the rows. Sow the seventh crop of lettuces in a cool place; and hoe those intended for seed. Melons must be frequently attended to. Water mushrooms in dry weather. Pull onions, when their leaves begin to wither, out of the ground. Sow the first crop of Welsh onions, and the last crop to draw young. Sow the third crop of parsley near a south wall. Peas sown last month will want sticking. Sow the fourth crop of hotspurs. Plant red cabbages, rosemary, and Savoys. Prick out broccoli, cabbages, celery, coleworts, and boorcole. Sow radishes, the eighth crop; also turnip-rooted, and black Spanish; and hoe the first. Seeds of all sorts must be attended to, and gathered as they ripen. Sow rape and turnip-radishes. Sow spinach, the sixth crop, and the first of prickly, in a cool place, very thin. Sow turnips, the fifth and principal crop for winter use, and hoe the other crops. Water beds of seedlings, and all young crops. Weeds must be constantly attended to, and raked off the ground, or else many sorts will ripen as they lie on the ground.

Flower garden and shrubbery.—Annuals in pots require a constant attention, lest they should want water; and those on the borders require sticking and tying. Seeds nearly ripe must be watched and gathered, else many sorts will be lost. Annuals, to flower late in autumn, may still be sown. Auriculas and polyanthuses from the seed bed should be transplanted upon a shady border, and, if possible, in rainy weather. Finish cutting of box and evergreen shrubs. Bud the curious sorts of jessamines, roses, &c. Bulbous roots must still be attended to, to take up dry and clean, and then put in shallow wooden boxes. Saffron, crocus, and many other sorts, which flower in autumn, may now be planted. Carnations must be constantly watered, earwigs searched for, and layers and pipings made. Evergreens, if required, may now be transplanted; but it should be done in rainy weather, and let the clipping be finished. Grass and gravel walks must be frequently weeded, mowed, and rolled. Hyacinths should be examined to see that there is no mouldiness among them; and, if any be decayed, they must be taken away. Kidney beans must be examined, if they are trained to the sticks, and watered in dry weather. Lilies of many sorts, if they have done flowering, may be taken up; but the roots are so full of moisture, that the small off-sets must be planted again directly. Mignonette should now be sown to flower in winter, and more put into pots. Myrtles, and other greenhouse plants against walls, will require frequent nailing and watering. Finish planting perennials and biennials for the seed beds. Pinks: finish making pipings or cuttings. Plant auricula and polyanthus seedlings: biennial and perennial seedlings: cuttings of scarlet lychnis and pinks: off-sets of lilies: off-sets of autumnal flowering bulbs: pipings of carnations and pinks: saffron-crocus. Ranunculuses must be taken up, and laid in the shade to dry; then well cleaned from earth, and laid in shallow boxes, or put into paper boxes. Finish layering and budding of rose trees. Seedling trees, shrubs, and flowers, must be properly shaded and watered. Seeds now begin to ripen very fast; and therefore must be constantly attended to and gathered. Shrubberies will require frequent attention in pruning or hoeing. Sow the last crop of hardy annuals. Tulips should be finished taking up, and as soon as dry the earth should be rubbed off, and then laid in shallow boxes. Water frequently young trees, and shrubs planted this spring. Weeds, if it be rainy this month, grow very fast; the ground should therefore be frequently hoed, and no weeds suffered to run to seed.

Fruit garden and orchard.—Destroy ants, flies, and wasps, as soon as they appear, by hanging bottles half filled with sugar or honey and water. Often look over apricot trees; pull off all foreright shoots, and nail those which are to remain. Attend to blighted trees, and water the borders often. Budding of apricots, cherries, and peaches, finish. Currants intended to be preserved till autumn should now be covered with mats. Often examine espalier trees, and train in the shoots. Fig trees require nailing up as they shoot, with strong nails and long shreds. Fruit should be gathered in the morning, as soon as the sun has dried the dew from it, and before it is heated, and then laid in a cool room. The fruit room should now be prepared; it should be situated to the south, the shelves neat and clean, the walls covered with tiles, or else white-washed or painted white. Destroy insects of all sorts. Nail up every week the shoots of wall trees. Thin nectarines and peaches for the third and last time, and nail up the shoots. Water strawberries in flower constantly in dry weather, and pull off decayed leaves. Tie up the fruit of the hautboys and other large sorts to sticks. Cut off all runners after the first, and these should be planted out as soon as some rain falls. Vines must be very often attended to, to nail up the shoots, and pull off all improper buds. Wall trees require constant attention, to nail up and water in very dry

weather. Water the blighted and newly planted trees, strawberries in flower or runners lately planted.

Greenhouse.—African aloes, and other succulent greenhouse plants, may now be set out in the open air. Cuttings of asters, geraniums, myrtles, &c., should now be planted under bell or hand glasses, which should not be taken off until they have grown an inch. Earth the tops of all the pots, first taking a little out. In planting geranium cuttings, prick out the seedlings before they are too thick. Those with variegated leaves do best in alcoves or under a little shelter. Paint and white-wash the greenhouse. Inarching and layering various sorts may still be performed. Plant myrtle cuttings under glasses, and water frequently near the glasses, without taking them off. The small ones may be planted in beds. Orange trees must be examined: if there be insects under the leaves wash them off. Shade and water those on hot-beds often. Plant stocks, when four inches high, in separate pots. Pans should be placed under all the pots, as it is better for the plants, and saves much trouble in watering. Shade, water, and prick out seedling plants. Succulent plants, as aloes, cereuses, ficoides, and Indian figs, torch-thistles, &c., may now be set abroad. Watering the plants must be attended to every day.

AUGUST.

In this month (as in some measure before) the gardener anticipates the product of the future year, and sows various vegetables in autumn to stand the winter, for spring and summer use; so that in this and other respects August is an important season, as will be seen by the work directed to be done. The times for the different sowings should be exactly observed to secure success.

Kitchen garden.—Sow alisanders, angelica, and chervil. Asparagus cut down last month will require constant watering. Beans planted last month will also want watering. Boorcole, broccoli, cabbages, cauliflowers, and coleworts, lately planted, will require hoeing around them, and earth must be drawn up to their stems. Plant out the third crop of broccoli. Cabbages, for the first crop at spring, should be sown about the 10th or 12th day of the month. Prick out the second crop of cabbage turnips. Weed carrots sown last month as soon as they appear. Sow cauliflowers, for the first spring crop, about the 20th in rich earth, but shade them in the middle of the day by mats. Earth the crop of celery for blanching, and plant out the third. Plant out some of the second crop of coleworts. Sow corn sallad on beds. Cucumbers for pickling, either large or small, to have them fine, should now be gathered; and they will be free from spots and save much trouble in greening. Train them regularly into the sticks. Often tie up endive for blanching; plant out the third crop, and thin the fourth. Take up eschalots, garlic, and rocambole, if the stalks be quite withered: clean them from earth, and keep them in a dry place. Kidney beans, sown for the last crop, must be watered in dry weather. Finish planting out leeks. Lettuces for standing through the winter, and for forcing, must now be sown very thin at three different times in the month: and plant out those last sown on the south border. Melons, in rainy weather, must be defended from wet by putting hand glasses over them, and sticks placed for the pickling melons to run up. Prepare mushroom beds, by having dung and spawn ready for the next month. Onions must be frequently turned, that they may be well dried. Sow the second crop of Welsh onions. Gather peppermint, for distilling, as soon as it begins to flower. Sow some hotspur peas, on a south border, for the fifth and last crop. Plant celery, endive, leeks, and lettuces. Prick out Anjou, Brussels boorcole, cabbage-turnips, and turnip-rooted cabbages. Sow radishes, the ninth and last crop. Seeds, nearly ripe, must be guarded from birds, particularly radish seeds. Sow cress, fennel, mustard, and sorrel. Sow the second crop of prickly broadcast spinach; and then, at spring, hoe it into beds four feet wide, with paths of eighteen inches between the beds. Hoe, and sow the sixth crop of turnips. Water seedling beds in the morning. Weeds grow very fast in moist weather, and therefore must be hoed frequently, raked together, and carried away.

Flower garden and shrubbery.—Annuals in pots will want frequent watering, those on borders sticking and tying, and the seeds gathering of those nearly ripe. Anemone and auricula seeds are sown this month by many, but they do better in January or February. Slip and fresh pot the auriculas. Balsams in pots, from which seed is intended to be raised, must be removed into shelter. Plant bulbous roots, that flower in autumn, early in the month. Bulbous roots of all sorts should have their off-sets planted at the end of the month. Take off carnation layers, and plant out the pipings from under the glasses. Finish clipping of evergreen trees and shrubs. Grass walks and lawns require frequent mowing. Gravel walks must be weeded and rolled. Take up lilies if their leaves be decayed; but the off-sets must be planted again directly. Plant mignonette in pots to flower in winter, and place them under a south wall. Myrtles and greenhouse plants against walls must be pruned and nailed, and constantly watered. Plant out the pipings of pinks if they have struck roots. Plant Guernsey lilies in pots. Attend to seeds of all sorts of flowers and shrubs, and gather them as they ripen. Remove seedlings in pots to places where they will have the morning sun. Shrubberies will want frequent hoeing to keep down the weeds. Strawberry runners will require to be constantly taken off as they shoot out, to keep the borders and walks neat. Water plants in the morning at the end of the month. Weeds must be frequently destroyed to prevent their running to seed.

Fruit garden and orchard.—Destroy ants, flies, and wasps, by supplying fresh bottles of sugar, or honey, and water. Apple trees on espaliers will require frequent examining. Finish the budding of all trees, and pull off buds and shoots from the stocks. Currants intended to be preserved, finish covering with mats. Examine espalier trees, constantly, to train in the shoots.

Nail up fig trees with strong nails. Gather fruit early in the morning, and lay it in a cool room. Finish the fruit room, by white-washing or painting, and putting the shelves in order. Destroy insects of all sorts. Nail up every week the fruit trees. Nail up nectarines and peaches frequently. Attend to pear and plum trees, both on walls and against espaliers, constantly. Transplant strawberry runners, if rooted, in rainy weather, and cut off all the others as they shoot. Vines must be constantly nailed up, as they shoot very fast, and the bunches of grapes begin to be heavy, and all weak shoots must be constantly taken off. Water strawberry runners lately planted, or any blighted fruit trees.

Greenhouse.—Take off the offsets of aloes, both African and American, and plant them in separate pots. Often water the cuttings of myrtles, geraniums, &c. Earth the tops of all the pots. Water geraniums and myrtles constantly, but pour on the water gently. Oranges still bud till the middle of the month. Prune any which require it, as this is the season of their shooting. Water the young stocks and those on hot-beds. Finish the painting and white-washing of the greenhouse. Finish picking out seedling plants, and water and shade them. Shift the plants which require it into large pots, and earth the others. Succulent plants should be shifted, and, if the end of the month be rainy, take them in. Water very freely, if the weather be dry, but do it in the morning.

SEPTEMBER.

Gardens begin now to fail of their wonted beauty, and therefore dying flowers, all litter, and every thing unsightly, should be removed, and the ground frequently cleaned, that every thing may look neat if not gay.

Kitchen garden.—Aromatic herbs and shrubs should have their decayed stalks cut down to strengthen them; and transplant them. Beans planted in July must be earthed up, and the tops pinched off as soon as they begin to flower. Plant out the third crop of kale and the first of Anjou; hoe the other crops, and earth them up. Plant out part of the fourth crop of broccoli, and earth up the other crops. Plant out the fifth crop of cabbage; prick out the first crop, on a south border, and earth up any that want it. Plant out the third crop of Savoys and red cabbages; and the first crop of cabbage-turnips. Hoe carrots sown in July, and leave them at six inches distance. Cauliflowers sown last month must be pricked out, watered, and shaded until they are rooted. Earth up the fourth crop, and break down the leaves if they begin to flower. Plant out the fourth crop of celery, and earth up the first and second to blanch. Chardons will also require blanching. Plant out more of the second crop of coleworts, a few at a time, to thin the bed. Sow cress and mustard every week, and at the end of the month under glasses. Cucumbers for pickling should be finished gathering; which will show the advantage of sticking them, and pickling early. Plant out a little of the fourth crop of endive to thin it, and give the rest more room. Tie up some to blanch. Eschalots, garlic, and rocambole, should have the off-sets and small roots planted. Lettuces must be thinned early in the seed-bed, if sown thick, and pricked out on a south border to about four or five inches asunder. Melons for pickling will now be fit to gather. Make mushroom beds, at the beginning of the month. Gather nasturtiums for pickling. Finish sowing onions early in the month, the second crop of Welsh. Weed those sown last month before the weeds are high. Plant water-cresses. Prick out cabbages, cauliflowers, lettuces. Gather seeds constantly as they ripen. Sow cress, mustard, turnips, and water-cresses. Finish sowing spinach for spring use, and hoe that sown last month. Plant tarragon roots. Hoe and thin turnips, turnip radishes, and black Spanish radishes. Water in dry weather any crops lately planted out. Weeds must be particularly attended to amongst the onions, carrots, and lettuces, while they are small.

Flower garden and shrubbery.—Plant anemones, single flowered, at the end of the month to flower early. Annuals in pots must be frequently watered to ripen the seeds. Remove auriculas, that they may have the morning sun, and finish slipping them. Balsams, cockscombs, egg-plants, or other curious annuals in pots, which are wished to raise seeds from, must be placed under shelter in an alcove, greenhouse, or room fronting the south, and then the seeds will ripen. Prepare beds for planting bulbous roots early in the month. Plant box for edgings at the beginning of the month, or as soon as any rain falls. Plant bulbous roots of all sorts early in the month; but the off-sets, and lilies, and crown imperials, first. Plant evergreens at the end of the month, if the ground be moist. Grass walks may now be repaired, or new ones made. Weed and roll gravel walks often. Plant hyacinths, jonquilles, lilies, narcissuses, polyanthus-narcissuses, &c., at the end of the month. Plant laurel cuttings in the shade. Layer laurustinuses and other shrubs. Take up lillies which flower late, as soon as their leaves are decayed, but plant the off-sets again directly, and all other sorts of lilies. Place mignonette in pots, under shelter. Myrtles and greenhouse plants against walls must be constantly watered in dry weather. Plant out perennial seedlings, and divide the old roots. Plant box for edgings; evergreens, crown imperials, and lilies, early in the month; cuttings of laurel, honeysuckles, jessamines, shrubs, and trees of all sorts; but not until after there has been some rain. Strawberries and thrift for edgings. Gather seeds in the middle of the day. Weed and earth seedling beds. Prune, hoe, and rake shrubberies. Sow hardy annuals, as cornbottles, larkspurs, panseys, persicarias, poppies, sweet peas, &c., to flower early in spring. Constantly take off strawberry runners, and replace any of the edgings which want; dig up entirely the old plants; then take away some of the earth, and bring in fresh loam. Plant tulips, and all sorts of bulbous roots, the off-sets first. Lay down turf for grass walks. Constantly hoe and rake weeds off the ground; in dry weather the seeds will ripen, and in wet weather the roots will strike again.

Fruit garden and orchard.—Destroy ants, flies, wasps, and insects of all sorts constantly. Sow cherry kernels on beds. Plant currant and gooseberry cuttings and trees. Nail up fig-trees frequently with strong shreds. Attend to the fruit room, and pick out the rotten pears, or any other sorts which begin to decay. Put grapes into bags of crape, gauze, or paper. Plant currants, gooseberries, raspberries, strawberries. Strawberries should be planted early in the month, and then they will be well rooted before the frost begins. Dress the beds, and plant some strong roots in pots to force. Plant some alpines in pots, and put them under a frame, and they will bear fruit till January. Top-dressing, in cold wet weather, of soot, salt, or ashes, is proper to be spread on the borders of fruit trees. Vines will require frequent nailing; take of all the weak shoots, that the grapes may not be too much shaded.

Greenhouse.—Remove aloes into the greenhouse in the beginning of the month, but leave out the American ones till the end. Plant cuttings and seedlings in separate pots, and earth the tops of all the pots. Set in geraniums with variegated leaves early in the month, and leave off watering the leaves. Take myrtles out of the ground and pot them. Fresh earth orange trees, thin the fruit, or most of it will fall off, and take them into the house at the end of the month. Take in succulent plants of all sorts early in the month, and give them very little water. Take in aloes, variegated geraniums, and succulent plants, at the beginning of the month; orange trees and tender plants at the end; but myrtles and hardy plants may remain out till the beginning of the next month, unless there is an appearance of frosty nights. Water in the morning, and keep the windows open all night; leave off watering the geraniums over the leaves.

OCTOBER.

This is the chief month of the year for planting trees, shrubs, &c. No part of it should be lost, in either working the ground well for the purpose, or putting in the plants as soon as possible. Early planting, if the ground be fit, is of more consequence than many are willing to admit.

Kitchen garden.—As October is the only time to crop a kitchen garden before winter, omit not any thing ordered now, till next month, and if it can be done at the beginning, instead of the end of the month, it will be much better, lest rain should come on. Weed aromatic herbs and shrubs in beds, and spread some earth over them. Cut down asparagus stalks, hoe the weeds, and spread earth from the paths on them, but first a little rotten dung. Prepare hot-beds for forcing, and plant three-year old plants for the first crop. Beans; the early Mazagan must be planted on a south border, for the first crop. Plant out Anjou boorcole, the second crop early in the month, and hoe the ground around the others. Plant out broccoli, the rest of the fourth crop. Plant out half the cabbages sown in August, of the early sorts, in a warm situation. Plant cabbage-turnips early in the month, and earth up the others. Finish hoeing carrots, sown in July. Attend to cauliflowers, beginning to flower, by breaking down the leaves. Those intended for glasses will want planting out; let there be six to each glass, and the rest in a frame, or under a south wall. Plant out celery, the fifth and last crop, and earth up the second to blanch. Finish planting coleworts. Sow cress, mustard, and radish, under glasses, and on a hot-bed at the end of the month. Tie up endive, to blanch, or lay tiles on it, and plant more. Plant eschalots, garlic, and rocambole. Throw up vacant ground into ridges. Hoe boorcole, broccoli, cabbages, and cabbage-turnips; and draw up earth to their stems. Hoe carrots. Prepare hot-beds, for forcing asparagus and lettuces. Plant out lettuces, cabbage and brown Dutch, on asparagus beds, some under glasses, and others on hot-beds for forcing. Finish gathering melons for pickling. Plant mint in pots, on a hot-bed. Cover mushroom beds well with straw and mats, to defend them from rain. Onions will require to be very well weeded, and should be examined two or three times in the month. Sow peas, the early hotspurs on a south border near the wall, for a first crop. Plant on hot-beds asparagus for the first crop, and lettuces, and mint. Plant out to stand for seed beets, cabbages, carrots, parsley, parsnips, turnips. Weed pot-herbs and sweet herbs on beds; stir up the earth, and spread some over them. Seeds of all sorts should be threshed out, dried, and put into bags. Sow peas on a south border. Hoe spinach for the last time before winter. Destroy weeds in every part of the garden.

Flower garden and shrubbery.—Any thing ordered last month, if omitted, finish early in this, as the beginning of this month is the proper time when the flower garden and shrubbery should be put into order before the winter. Finish planting anemones, to flower early, the first week in the month. Remove auriculas and carnations into shelter, and in wet weather cover them with mats. Balsams, cockscombs, egg-plants, &c., intended to raise seed from, must be constantly attended to, to hasten the ripening of the seed. Turn over beds and composts for bulbous roots frequently. Finish planting box for edgings, early in the month. Plant bulbous roots for forcing in pots or boxes, and finish planting all others before the rain sets in. Plant crocuses, aconites, snow-drops, and any bulbous roots which flower early in the spring, at the beginning of the month. Plant evergreens of all sorts early in the month. Finish laying grass walks, and repair any difficult places. Weed gravel walks, and roll them in dry weather. Plant hyacinths, jonquilles, lilies, narcissuses and polyanthus-narcissuses, early in the month. Finish layering of shrubs. Take off layers and suckers, if rooted. Mignonette should be removed under glasses, or else into a greenhouse or warm closet. Finish planting perennials. Plant bulbous roots early in the month; as aconites, amaryllises, cornflags, crown-imperials, daffodils, garlic moly, irises, martagons, pancratiums, ranunculuses, snow-drops, star of Beth-

chem, tulips, &c. Plant also perennials at the beginning of the month: shrubs and trees of all sorts: strawberries and thrift for edgings: place seedlings in pots, under a south wall in the ground; and weed and earth seedlings in beds. Gather seeds in the middle of the day. Finish pruning and hoeing shrubberies, to lie neat for the winter. Finish planting shrubs and trees. Take off suckers and layers; and, if small, plant them in beds two feet asunder, to be ready against the next season. Finish planting tulips early in the month, and all sorts of bulbous roots. Finish laying turf early in the month. Hoe and rake off weeds, or they will root again. If possible leave nothing ordered this month unfinished, on account of the uncertainty of the weather in the succeeding month.

Fruit garden and orchard.—Gather apples and pears in the middle of fine dry days. Plant apple trees at the end of the month. Plant currants, gooseberries, and raspberries. Examine grapes in bags, to see that they are not mouldy or decayed. Gather nectarines and peaches in the middle of the day. Orchards, or fruit trees intended to be planted, should have the ground prepared, and the holes digged some weeks before-hand; if the soil be very good, some loam and rotten dung should be mixed together, and the trees planted in it. If the orchard be wet, bring a cart load of earth at least for each tree; form the earth into a little hill, about a foot high, and plant the tree upon it, but dig up the tuft first a foot deep in a circle of four or five feet over. Gather peaches in the middle of the day, and, if not ripe, lay them in the sun for a few days in a window; they are much improved by roasting gently like apples, and eating them with sugar and wine. Plant peach trees at the end of the month. Plant fruit trees of all sorts. Prune all sorts of wall trees, but sweep off all the leaves first with a birch broom. Finish dressing strawberry beds, and water the alpines frequently under the frames. Vines in pots should be transplanted; make the holes ready, pour water into them, and then gently turn them out of the pot, or place the pot in the hole and break it, and then the roots cannot be disturbed, and you will have fruit the next year. Finish pruning and planting wall trees, early in the month.

Greenhouse.—Give air very freely in the day time, and leave some of the windows open at night, until the end of the month. Earth the tops of the pots. Take in geraniums early in this month, if not done the last; water them sparingly, or they will begin to shoot afresh, and pick off constantly all decayed leaves. Clean leaves well, before the plants are set in order, and pick off dead ones. Take in myrtles towards the end of the month. Orange trees should not remain out this month; examine the leaves before setting them in, for insects, which fasten themselves underneath, and pick them off; if any leaves be mildewed, wash them with warm water and a sponge. Water succulent plants sparingly. Water myrtles, orange-trees, winter cherries, and all woody plants often. Open the windows, every fine day, but keep them shut in foggy weather.

NOVEMBER.

Though the last is the better month for planting, yet this is the time more commonly adopted; it certainly must not now be delayed. The leaves not being all off should be no obstacle.

Kitchen garden.—Cut down artichoke stalks, and earth them up. Asparagus on hot-beds must have air given to it; and make and plant the second bed; cut down the stalks, and finish dressing the beds. Finish planting beans for the first crop. Plant beets, cabbages, and carrots for seed. Take up carrots and lay them in sand. Give some air to cauliflowers under glasses and frames, in the middle of fine days. Earth up celery when dry, to blanch. Sow cress, mustard, and radishes on hot-beds. Take up endive, not planted out, and plant on the south side of a ridge, raised up two feet high. Throw up vacant ground into ridges. Prepare hot-beds for forcing asparagus and lettuces. Attend to lettuces in hot-beds, and give them air in the middle of the day. Guard mushroom beds from wet. Take up parsnips and large rooted parsley. Draw earth to the peas and beans above ground, and place traps to catch mice. Plant asparagus on a hot-bed for the second crop: endive on the south side of a ridge: and beets, cabbages, and carrots, for seed. Dig up potatoes, sort them, pick out the damaged ones, and reserve the best for use in winter. Sow early short-topped radishes about the tenth day, and spread wheaten straw over the beds. Dig up salsafy, skirrets, and scorzoneras. Sow cress, mustard, and radishes on hot-beds for small sallading. Hoe spinach again, if it be too thick. Drain off stagnant water; weed all the crops; and take off the weeds to prevent their rooting again.

Flower garden and shrubbery.—November being generally a very rainy month, if any thing happened to be omitted last month, let it be done early in this. Bulbous roots, intended for blowing in water early, may now be placed on the glasses, and let all others be finished planting at the beginning of the month. Those in pots or boxes must be frequently watered, and placed as much in the sun and light as possible; for in the shade they will draw up weak. Composts wanted for flowers in spring should now be collected; such as loam, sand, willow-earth, rotten tan, dung, &c. Let them be laid in dry sunny places, and be frequently turned over, but by no means in cold wet places. Gravel walks near the house should be rolled a little when the weather will permit; their being kept hard prevents weeds from growing; but never throw them up into ridges. Leaves should be constantly swept up as they fall, or they will spoil the walks. Myrtles planted against walls should have two boards about six inches wide fixed, one at each side, with a third at the top, on which a mat should be nailed, to roll up and down occasionally. Plant early in the month all bulbous roots; particularly those for forcing. Shrubberies should be pruned, and digged or hoed. All sorts of shrubs and trees should be finished planting early in the month; and long litter, straw, or turf, turned downwards, should be laid over the roots to keep out the frost.

Trenches should be digged, and drains made to carry off the water wherever it stands; a large flower pot, placed downwards in the earth, will carry off a great quantity of water.

Fruit garden and orchard.—Finish gathering apples and pears; after they have lain together and sweated, the most valuable sorts, which keep long, should be wiped dry with a cloth. Prune and plant apple and pear trees. Prune, and pull off the green figs. Attend to the fruit room; pick out every leaf, and all specked and decayed apples or pears. Finish planting orchards at the beginning of this month, and stake the trees. Finish planting and pruning of espaliers, standard and wall trees, early in the month. Place strawberries in pots for forcing, under frames; and attend to the alpines. Finish pruning and planting of wall trees.

Greenhouse.—Give air in the middle of the day, unless when very foggy. Earth the tops of any of the pots, when any mould appears on them. Constantly pick off geranium leaves as they decay more than any others, and give them water very sparingly: also, all decayed leaves, as they corrupt the air of the house very much. Succulent plants, as aloes, ficoides, &c., will require but very little water; large aloes the most. Water woody plants often, but give them only little at a time; as dampness is more prejudicial in a greenhouse than cold.

DECEMBER.

The garden is no longer decorated with flowers or verdure; but it contains many things of promise, which demand attention. There are still some works of labor; and, where there is plenty of dung and frames, hot-beds may be made use of, and spring anticipated.

Kitchen garden.—Asparagus must be planted for the third crop, and give it both light and air to color it. If the beds be not warm enough, line them with fresh dung. Boorcole, broccoli, and cabbages must be well earthed up, to keep them upright, and all decayed leaves picked off. Cauliflower plants must have air while the weather is mild, and pick off dead leaves. Earth up celery when dry, for blanching. Sow cress, mustard, and radishes, on hot-beds every week. Weed and turn over dunghills in frosty weather. Tie up endive for blanching. Hot-beds must be attended to, and plenty of hot dung and loam provided for cucumbers and melons. Lettuces under glasses must have air given them in the middle of mild days. Mushroom beds must have dry straw. Earth up peas and beans above ground. Roots preserved in sand, as carrots, potatoes, &c., should be finished before the frost sets in. Search for snails in the holes of the walls. Sow cress, mustard, and radishes, on hot-beds every week. Repair, grind, and put in order tools. Set traps to catch mice in; and make trenches to drain off the water.

Flower garden and shrubbery.—Examine auriculas frequently, and pick off all decayed leaves. Bulbous roots for forcing must be constantly attended to, to give them water, which should always be soft; and change that in the glasses when foul. Carnations in pots should be plunged into the ground; but, if ashes or sand be put between the pots, it will keep them dryer than earth. Flowers and shrubs in pots should be plunged into the ground, to keep the frost from the roots. Forest trees may still be planted, if there be not much frost; otherwise it is better to defer it till spring. Shrubs and trees may still be pruned; and long litter, &c., laid over the roots of those lately planted. Trenches and drains should be made wherever the water stands.

Fruit garden and orchard.—Examine apples and pears in the fruit room; pick out such as appear the soundest of the best sorts, and wrap each in a piece of paper. This will cause them to keep several weeks longer. Repair espaliers; prune the trees; spread some rotten dung on the border, and fork it in. Finish pruning fig trees. Guard the fruit room from frost, but give it some air, when the weather is not very damp nor frosty. Examine the orchard, and take care that the newly planted trees are well staked and mulched; and cut out the dead wood from the standard trees. Finish pruning and planting wall trees early in the month.

Greenhouse.—Air must be given whenever the weather is mild and will permit it. Earth the tops of the pots, but first take out a little of the old. Frost must be guarded against, by keeping the doors and windows close, when it begins to freeze. Constantly pick off decayed leaves. Myrtles and other greenhouse plants against walls will require to have mats placed before them; and in the middle of fine days, before the frost is set in, rolled up, but let down again at night. Long litter, or rotten tan, should also be laid over the roots to preserve them from the frost. Myrtles may also be preserved in deep pits made against a south wall, and covered in very frosty weather with mats and straw nearly a foot thick. Many are preserved in the nurseries near London, with only hurdles laid over the pit, without any glass, and covered very thick in frost with straw and mats. Succulent plants will require but very little water. Water those plants which require it very sparingly. Open the windows for three or four hours in the middle of the day.

Sect. V.—Modern Improvements in Horticulture.

Thus far the general directions we have given will enable the reader to superintend the ordinary occupations of the garden throughout the year. Certain considerable improvements in this art within the last few years demand a more particular description. We shall class them alphabetically under the same general divisions of horticultural labor that pervade our calendar, viz. the kitchen, flower, and fruit garden:—

I. In the Kitchen Garden—1. An early purple variety of *broccoli*, called the *Cape* broccoli, first attracts our notice. It is of a very superior flavor, but apt in cultivation to start into flower; clever management, however, will obviate this. Two crops are sown in the middle of April and May, the first on any border of light soil. The plants may be removed in a month into sandy loam, manured; and should not stand nearer than two feet apart. Frequent hoeing is necessary. The

second crop should be planted in pots directly from the seed bed. Then sink the pots until the broccoli heads are formed. If these pots in the end of November, are placed in a glass frame, very fine broccoli may be had in the depth of winter.

2. *Cale, Sea.*—Sea-cale is now cultivated on a very superior principle, and is an important market vegetable at Covent Garden. It should be trenched at least two feet deep in a light soil, and having a dry bottom. Recent dung or coarse manure must not be added, the shoots being apt to imbibe a disagreeable flavor from them: sea-weed or rotten leaves are best as manure. The plant may be propagated by offsets, or by small pieces of the root, having eyes or buds attached to them; but it rises freely from seed, sown in patches in March, and leaving fully two feet between each patch. During the first two years, it must be well hoed and weeded. At the approach of winter, some gardeners throw a little light stable dung, or a covering of fresh sandy soil, over the whole bed. In the third year, the plants are fit for blanching; and, if the bed be well managed, it will continue productive for several years. It is proper, however, to sow a small bed yearly to ensure a succession of young and vigorous plants. Fresh seed may be kept in readiness, by allowing two or three plants to produce their flowers and seeds each year; the flowers, which are white and smell of honey, appear in May, and the seeds in September.

In the first volume of the Memoirs of the Caledonian Horticultural Society, Sir George Mackenzie describes an excellent method of blanching. The sea-cale bed is covered early in the spring with clean and dry oat-straw, which is removed as often as it becomes musty. The shoots rise through the straw, and are at the same time pretty well blanched. Mr. Barton, gardener at Bothwell Castle, employed tree-leaves for this purpose. He found that a thin covering of stable dung, sufficient only to keep the leaves from being blown about, was useful in forwarding the production of the sea-cale shoots, a slight fermentation being thus induced. The shoots rise sweet and tender among the leaves, in the early part of spring; but it must evidently be difficult in this way to regulate the heat of fermentation. Another method consists in placing over each plant a flower-pot of the largest size, inverted; and blanching-pots, constructed for this express purpose, are described by Mr. Maher, in the first volume of the Transactions of the Horticultural Society of London. Each pot, during the season, will, upon an average, furnish a dish and a half of shoots.

By means of these pots sea-cale is forced with great facility. In autumn vigorous sea-kale is dressed off in the open border, that is, the stalks are cut over, and all decayed leaves are removed. The ground is at the same time loosened around the plants, and a thin covering of fine gravel, or sifted ashes, laid on the surface. A pot with a moveable lid is now placed over each plant, or patch of plants, if two or more have remained together, and stable litter is closely packed all round the pots, and pressed firmly down, to the depth of a foot or more; but the fermentation produced should never exceed 60° Fahrenheit. In the space of a month shoots will be ready for cutting; and successive shoots may be thus obtained throughout the winter. This method of forcing sea-kale, has universally superseded the plan of planting it in hot-beds, under glass frames, where it has been tried.

3. *Cauliflower* plants have been of late preserved through the winter in the following way:—At the end of October the firmest and best shaped are lifted with a ball of earth attached to the roots, and arranged round the borders of the peach-house, or vinery, close together, but without touching. The larger outside leaves are removed, and any points of leaves that immediately overhang the flower. While the houses are kept without fire, in the first part of the winter, mats and straw are used to cover the cauliflower plants from frost. You may also plant them in hot-bed frames, and draw off the glass in mild days; covering them with mats, &c., as the weather becomes severe, and carefully removing the decayed leaves.

4. *Cress, America.* This is, in fact, a biennial variety of ours, *erysimum præcox*, and much resembles the common winter cress, *E. barbarea*, but its leaves have a pleasanter and milder while warm taste. It has latterly become a favorite sallad, and may be sown at two or three times during the summer, either broadcast, or in drills a foot asunder, on a light soil. When the outer leaves are gathered it should be so managed, that the new ones are regularly produced. Make a late sowing in August or September, on a sheltered border, and the plants will afford leaves until March.

5. *Melons.* The ingenious and scientific Mr. Knight has given some useful cautions to gardeners respecting preserving the leaves of melons. Many old horticulturalists have stripped the plant of them, as he contends, most injudiciously, the fineness of the fruit often being sacrificed thereby. He recommends the employing pegs more freely both to keep the plant, the roots particularly, in its place, and the leaves upright and steady. The *Valentia* and the *Salonica* melon are modern favorites. The former will keep many weeks, and has reached us in our late intercourse with the Peninsula. It is, generally speaking, to be managed like the common melon: the fruit gathered when nearly ripe, and suspended in a dry airy room, will keep till February. It is of a lozenge or long oval shape; the skin thin, and of a dark green color; the pulp whitish, firm, and juicy. The *Salonica* is nearly spherical, with a smooth face, and of a gold color; the pulp of the same general appearance as the Valentia, but more abundant in saccharine.

6. *Mushrooms* are thus raised by what is called Oldacre's method. For the compost he obtains fresh short dung, which has neither been exposed to wet nor fermentation; to which is added about a fifth part of sheep's droppings, or of the cleanings of a cow-house; the whole being well mixed and incorporated. The beds are now formed in coarse wooden boxes. (1.) A stratum of the prepared mixture, about three inches thick, is beaten together on the bottom with a flat wooden

mallet; then another layer beaten as before; and this is repeated till the beds are half a foot thick, and very firm. (2.) The boxes are now placed in the mushroom-house, or any place where a slight increase of temperature can be procured. (3.) When fermentation takes place, and the beds are about milk-warm, holes are dibbled in the mass, about nine inches apart, for receiving the spawn, which is of course to be previously prepared. (4.) These holes are left open until the heat is on the decline, and before it is quite gone a piece of spawn is thrust into each, and they are closed with the compost. (5.) A week afterwards the beds are covered with a coating of rich mould, mixed with about a fifth part of horse-droppings, and beaten down with the back of a spade. (6.) The place is now kept as nearly and equally at 55° Fahrenheit as it can be. When the boxes become dry, it is found necessary to sprinkle over them a little soft water, but this must be done with circumspection. The more free air can be admitted, so as to exclude the frost, the better for the flavor of the mushrooms.

7. *Onions* are much improved, it has been found, by transplanting. Mr. Knight's plan is to sow the seed (preferring the variety named white Portugal onion), at the usual spring season, thick under the shade of trees, and in a poor soil. In the autumn the bulbs being small, but of firm texture, are taken from the ground, and preserved till the succeeding spring, when they are planted at equal distances, perhaps six inches from each other. The plants thus produced possess superior strength and vigor to those raised directly from the seed, owing to the quantity of previously generated sap being greater in the bulb than the seed. In Spain and Portugal they can accomplish this in one summer.

8. Mr. Knight some years ago obtained a new and most beautiful *pea*, by pollen taken from different varieties of blossom, white and gray, the plant generally rising to the height of eight or ten feet. In exposed situations it is apt to be injured by the winds; but in sheltered places, and with the aid of stakes, it proves extremely productive. The blossoms are large and white, and both the legumes or cods, and the seeds or peas, are large. The peas are of a cream color: as they begin to dry, they shrivel or contract in some degree; from which circumstance the name of *wrinkled pea* has been given them among seedsmen. The flavor, when boiled, is peculiarly rich, no pea indeed has hitherto been found to yield an equal quantity of saccharine, and it retains its flavor in autumn uncommonly well. It should not be sown before April or May.

9. *Potatoes* have been improved under the auspices of the Horticultural Societies of the country, but a hardy growth of them is yet wanted. An important fact in the cultivation of potatoes was noticed about the year 1806, by Mr. Thomas Dickson of Edinburgh, viz. that the most healthy and productive plants were to be obtained by employing as seed-stock tubers which had not been thoroughly ripened, or even by planting only the wet, or least ripened ends of long-shaped potatoes. Mr. Knight has also shown the advantage of using, as seed-stock, potatoes which have grown late in the preceding year, or have been only imperfectly ripened. It is likewise important to observe that it seems established, if a valuable kind is exhausted, or has lost its good qualities, it may be restored merely by planting the tubers late in the summer, and preserving the produce of this late planting for seed-stock.

Supplies of young potatoes are often produced, during winter, in boxes placed in the mushroom-house, in the shade at the back of a hot-house, or in a common cellar, out of the reach of frost. Old potatoes are placed in October in layers, alternating with a mixture of tree leaves, sand, and light mould. Vegetation soon proceeds; and, there being no opportunity for the unfolding of stems and leaves, the energies of the plants are expended in the production of young ones. Before mid-winter these attain the usual size and appearance of early potatoes; but they are inferior and of a watery taste.

10. No modern addition to our horticultural productions has been more extensively approved than that of *rhubarb* stalks, and they are every year improving. We do not find them adopted in any other country; but they are an important article of trade to the green-grocers both of London and Edinburgh. By the employment of young seedling plants, say of Rheum rhaponticum, hybridum, compactum, or Sibiricum, the proper removal of leaves, and the keeping of the plants from flowering, the succulent stalk, when peeled, cut down, and baked into tarts, has the appearance of apples, and a mild sweetness preferred by many people. In the open ground the stalks are produced from April till midsummer. Vegetation may be hastened during March, by throwing over the plants some loose haum, care being taken not to injure the shoots. Rhubarb may be forced much in the manner of sea-kale; but the stalks thus become not only of a lighter color, but have less of the peculiar flavor of the plant. Mr. Knight mentions a method of forcing rhubarb by planting it in pots. In the beginning of winter a number of roots of rhubarb are dug up, and placed in some large and deep pots, each being made to receive as many as it will contain. Some fine sandy loam is then washed in, so as closely to fill the interstices between the roots, the tops of which are so placed as to be level with each other, and about an inch below the surface of the mould in the pots. The pots are placed in any kind of hot-house; and other pots of the same size are inverted over them. If water be freely supplied, vegetation proceeds very rapidly: three successive crops of leaf-stalks may generally be obtained. The shaded spaces of vineries or peach-houses, which are generally wholly unoccupied, are exceedingly well suited for this operation.

11. *Sprouts*, called Brussels sprouts (the chou à jets of that neighbourhood), are the smaller rosettes of the stem leaves of this kind of cabbage, resembling the Savoy. They are very delicate eating, and are cultivated much in the manner of coleworts in general. The seed is to be sown in Spring, and seedlings planted out before midsummer on showery days. The plants grow as high as three feet, and the sprouts form a narrow

pyramidal growth round the stem. In October the plants should be furnished round the roots with additional earth. The earliest sprouts become fit for use in November; and, if the weather be mild, they continue good, or even improving till March. Two or three of the best plants, with the rosettes small and closely set, should be allowed to run to flower, in order to secure a supply of seed. In the London Horticultural Transactions, vol. iii., Mr. Van Mons of Brussels states, that, by successive sowings, the sprouts are there obtained for the greater part of the year. The tops of the plants are cut off a fortnight before beginning to gather the sprouts; which, it is thought, promotes the production of rosettes. The sprouts are preferred when small or young; if they be more than half an inch in diameter, they are thought too large. In the spring, when the plants have a tendency to run to flower, their growth is checked, by transplanting them to a cool situation.

2. *Turnips.*—The navew, or navet of the French, is a variety of our brassica napus, first cultivated in this country during the late war. The cultivation is similar to that of other turnips; but the root, which is carrot-shaped, is of a much higher flavor. It is put whole into soups, after being scraped. The Maltese turnip, a fine yellow variety of a round shape and very smooth skin, has also been much cultivated of late: it is best preserved in sand during winter. The Aberdeen yellow turnip is something similar to it in appearance. The Swedish ruta baga is also now preferred by many for the winter, on account of its rich flavor and agreeable sweetness. It may either be stored in sand, or, being a hardy plant, may remain in the ground till wanted. Powdered quick-lime sprinkled over the young plants has been found an excellent remedy against the ravages of the turnip fly.

II. In the Flower Garden and Shrubbery we may notice the additions which have been made of late years to the rose tribes cultivated in this country. These have been largely increased from China, as in *Lady Banks'*, the *blush*, the *crimson*, and the *Macartney* rose. Some varieties of the crimson China rose, with semi-double flowers, are particularly beautiful. Varieties of the *Scots* and *Ayrshire* roses have also extended themselves over England. The latter grows with remarkable rapidity, and has been found useful in covering walls or paling. It is the R. capreolata of Don.

Several Japan shrubs have been also adopted as highly ornamental. We may enumerate, 1. The Japan *apple*, (Pyrus Japonica); the *gold plant* (Aucuba Japonica); and the *corchorus*, or Kerrea Japonica.

From Ireland, within these few years, have been brought three very ornamental evergreens. 1. The most important is a broad-leaved *Irish ivy*, the most superior plant of that tribe. It both grows more freely, and has leaves three or four times larger, as well as of a much brighter green, than the common ivy. 2. The next plant we shall mention is a kind of *yew*, remarkable for its upright growth, and fine dark foliage. 3. The *Irish furze*, also remarkable for its upright growth.

The *Siberian lilac* is a pretty shrub of late introduction. The size of the leaf is between that of the two old species. It seems to be the varin of the French. *Ribes aureum*, or the yellow-flowered currant, makes also a fine appearance when in blossom. It requires shelter, or to be trained. The *tree-peony*, or *moutan*, is also planted in a sheltered situation, and forms a beautiful ornament to the garden or shrubbery when in flower.

The cultivation of *dahlias*, we may add, has become very fashionable; and the showy geraniums have greatly increased. *Acacias* have been yielded from New Holland in great abundance; while the *heaths* of the Cape of Good Hope have become so numerous, and are so beautiful, that upwards of 200 species of them are already adopted.

III. *The* Fruit Garden and Nursery operations have received more attention and improvement of late years, perhaps, than any other branch of horticulture. We shall first notice the chief new varieties of fruit that have been introduced.

1. Of *Apples.*—Mr. Knight has distinguished himself in the culture both of the apple and pear. We owe to him, or his improved methods of cultivation, the *yellow Ingestrie* pippin, the *Scotch nonpareil* and the *Braddock nonpareil*. The Downton pippin, so named after Mr. Knight's seat, has been long known. The Wormsley pippin is a variety of the latter, and a very fine large juicy fruit. The *russet nonpareil* was raised at Pitmaston near Worcester, from seeds of the nonpareil. The blossom is more hardy than that of the parent variety, and the fruit compressed of a dull green, and much covered with russet; the pulp is of a pleasant and very aromatic consistence. The *martin* nonpareil is another fine dessert species raised near Worcester America has of late yielded, the important addition of the *Newtown* pippin of Long Island, a fine dessert apple, similar to the rennet; it keeps well, is in perfection in January, but continues good till March or April. In this country the tree requires a wall with a good aspect. The *Spitzenberg* apple has somewhat of the pine-apple flavor: the tree requires a sheltered west situation and good soil; the fruit is of fine appearance. The *American* nonpareil, or pomme de grise, is a high-flavored apple, introduced only a few years ago: and also flourishes best on a west wall. The *Canadian* rennet may be added as a good wall apple.

2. The *Elton* cherry was produced by Mr. Knight from the pollen of the white heart and the blossom of the graffion. It has a deep crimson tinge on the petals, and very long fruit stalks. The *black eagle* he obtained from the graffion and mayduke. The *Waterloo* and *early black* cherry were similarly produced. All these are great improvements in regard to handsome and juicy fruit.

3. The *cranberry* of America (Vaccinium Macrocarpum) is a useful recent addition to our hardy fruit. It is large for a cranberry, grows freely, and to a good height, and is distinguished by the smoothness of its stem. It flourishes most in a damp situation or near water.

4. In *currants* nothing exceeds the large *Dutch white* and the *Champagne*, an intermediate currant

between red and white, but larger and more juicy than the red. The *Pollock white* is an excellent and very sweet variety, raised from the seed, at the garden of Sir John Maxwell, Bart.

5. *Gooseberries* have been considerably improved in Lancashire, where they speak highest of the Warrington, the Captain, the Old Ironmonger, and the red Champagne. Wilmot's early red likewise deserves mention: it is early ripe, large, and of excellent flavor; in May, it is better for tarts and sauces than most others, the skin melting down with the rest of the berry. It is easily cultivated and very productive.

6. *Grapes* are too important for an incidental notice like the present, see VINE. But we may here mention that Mr. Knight has successfully mingled the pollen of the Aleppo grape with the flower of the white chassilas, and produced one of the best of the new varieties of the grape, the variegated chasselas.

7. The *Woodhall* is the only new variety of *nectarine;* and is so named from its having been raised at Woodhall, near Holyton in Scotland, by Mr. Walter Henderson, a successful cultivator of the citrus and erica tribes. The fruit, which is very successful, generally approaches to the elruge; but it is more juicy, and of a higher flavor. The tree has never shown the slightest symptom of mildew. The blossom is small, early, and hardy.

8. In the *Orangery* large trees are not now so frequently found as formerly. The citron and the lemon are preferred for training on trellises, or for covering the back wall of a hot-house. Mr. Benham of Islesworth, and Mr. Henderson of Woodhall, are considered, we believe, among the most successful cultivators of the orange tribes, and have lately introduced the *Malta* or sweet Philippine orange. It is of a beautiful round shape, reddish-yellow rind, and crimson juice. The fruit is small. The *shaddock* sometimes attains in England a large size, the fruit weighing from four pounds to eight pounds or upwards; but it is not fit to be eaten in a raw state.

9. Mr. Knight meets us again as a successful cultivator of *peaches*. He planted several trees in large pots, and paid every attention to bringing them to a state of high health and vigor; he then applied to the pistil of one good kind the antheræ of another; each tree was allowed to bring not more than three peaches to perfection; and thus he produced the *Acton* and *Spring Grove* peach, both of a beautiful bright color, and firm but melting vinous pulp. Braddick's American peach is recommended in the London Horticultural Transactions, vol. ii. It is a large yellow fruit, red next the sun; the pulp yellow, and of high flavor. It is not, however, hardy, nor does the tree freely produce.

10. In *pears* the *Wormsley Bergamot*, and the *Bon Chretien*, much cultivated near London, are the only important new varieties. The Wormsley Bergamot has been raised by Mr. Knight from the blossom of the autumn bergamot, dusted with the pollen of the St. Germain. The sickle pear of America is also an addition to our fruit gardens.

11. In the third volume of the London Horticultural Transactions, Mr. Hooker has described Wilmot's new early Orleans plum. It resembles generally the common Orleans; but the fruit ripens three weeks before that fruit; while the blossom expands later than in almost any of the plum tribe. The fruit resembles the Orleans, but is more juicy, and of finer flavor; the tree is vigorous and fertile. Coe's golden drop is also a new variety. The leaves are uncommonly large, and this is the principal character of the variety. When the fruit is ripe, the pulp is of a gold yellow color; it is dotted next the sun with violet and crimson. The fruit may be kept for many weeks hung up in a dry place. The trees require a west wall.

Improvements in the rearing of fruit trees.—Mr. Knight, in his treatise on the apple and pear, notices the fact that some of the finest cider and perry fruits of the seventeenth century have become extinct, and observes that, as each variety of fruit springs from an individual at first, it is by means of grafting or budding, that the individual has been extended. Whatever tendency to decay and extinction existed in the individual at first, must, he remarks, exist in all the extensions of that individual accomplished by means of buds or grafts. By careful management, or fortunate situation, the health and life of a particular individual or original tree, therefore, may be prolonged; and, in like manner, some buds or grafts, placed on vigorous stocks and nursed in favorable situations, may long survive the other buds or grafts from the same tree, or may long survive the original unengrafted tree. Still, in all of them, there is a progress to extinction; the same inevitable fate awaits them: the only renewal of an individual, the only true reproduction, is by seed. Mr. Knight's doctrine, in this respect, seems now to be established, and the importance of acquiring new varieties of our staple fruits is generally acknowledged.

Our author has taken uncommon pains to procure promising seeds for this purpose. For example, he prepared stocks of the best kinds of apple capable of being propagated by cuttings, and planted these stocks against a wall in a rich soil; these were next year grafted with the golden pippin. In the course of the following winter the young trees were raised from the ground, and, the roots being shortened, they were replanted. By this mode of treatment they were brought into a bearing state at the end of two seasons. Only two apples were suffered to remain on each tree; these consequently attained a large size and perfect maturity; and the seeds thus procured were sown to procure seedlings allied to the golden pippin.

Mr. Knight, Mr. Macdonald, and others, have also been at great pains to bring the pollen of one kind of approved fruit in contact with the pistils of others; an operation of great nicety. Mr. Knight opened the unexpanded blossom of the variety destined to be the female parent of the new progeny, and with a pair of small pointed scissors cut away all the stamina while the anthers were yet unripe, taking great care to leave the style and stigmata uninjured. The full blown blossoms of the other variety were after-

wards applied. The fruits resulting from such artificial impregnation have been of the most promising character. He has often remarked in the progeny a strong prevalence of the constitution and habits of the female parent. In this country, therefore, in experimenting on pears, the pollen of the more delicate French kinds, as the crasanne, colmar, or chaumontelle, should be dusted upon the flowers (always deprived of stamina) of the muirfowl egg, the gray achan, the green yair, or others that are hardy or of British origin. By these means, it may be hoped that, in the course of another generation, excellent winter pears may be obtained in abundance from our standard trees; for at present we are nearly destitute of hardy winter pears.

We find ourselves indebted to the ingenuity of Mr. Knight at every step of our progress through the nursery and fruit garden. Observing how slow some trees, as the mulberry and walnut for instance, are in bearing, he has ascertained, that if cions be taken from prolific branches of bearing trees, the young trees may be made to anticipate the course of nature many years. If indeed the stocks be planted in pots, and grafted by approach, they will generally afford fruit in three years.

In training young trees, of the peach and pear kinds, Mr. Knight's plants are headed down as usual, a year after being grafted; two shoots only are allowed to each stem, and these are trained to an elevation of about 5°. A branch trained upright, it is well known, grows much more luxuriantly than one confined to an horizontal position. Advantage is taken of this law of vegetation, and, in order to procure the shoots of equal length, the stronger is depressed and the weaker elevated. All lateral shoots are carefully removed. Next season as many branches are encouraged as can be laid in without overshading each other; and care is taken in the spring to select the strongest and earliest buds near the termination of the year-old branches, to be trained lowest, and the weakest and latest buds near the base of the branches to be trained inclining upwards: the result is, that, at the end of the season, each annual shoot comes to be nearly of equal vigor. In the following winter half of the shoots are shortened, and the other half left at full length, one shoot being left and the other cut alternately. In the third year, the central part of a peach-tree will consist of bearing wood. The size and general health, and equality of vigor in every part, of young trees trained by these rules, evince a very regular distribution of sap; and the rules at any rate are simple and of easy observance. Such trees, as they advance, are trained in the fan mode, always preferable where the walls are of a sufficient height.

We may here notice, as connected with this subject, that it has been found to promote the growth of fruit in trees to bend the extreme branches of them, in training, downwards. It checks the tendency to produce wood. It is also a modern practice to conduct the extreme branches of fruit-trees from one side of a wall to the other. Sir Joseph Banks having a Gansel's bergamot pear-tree on a north aspect, where the fruit did not succeed, caused some branches to be turned over to the south side, and trained downwards, when they not only produced fine fruit, but abundance of it. The roots of the May-duke cherry, and some others, require to be in a cool soil. On the north side of a wall, therefore, such trees thrive best; but it has been found, that if their extreme branches be turned over the wall, and trained downwards on the south side, they are not only brought into plentiful bearing, but yield their fruit earlier.

Decorticating, or cleansing the skins of trees by stripping off the bark and washing them, has long been practised. Mr. Lyon, of Edinburgh, has lately invented several simple instruments for facilitating the removal of the bark, and carried the practice much farther than his predecessors. He recommends its being adopted even for young and bearing trees much more frequently, and not merely, as heretofore, in case of the bark appearing diseased or insect-eaten.

The decortication of vines has been revived, and strongly recommended of late, in a pamphlet by Sir John Sinclair.

For improvements in various horticultural erections, see HOT-HOUSES, PINE-STOVES, &c.

SECT. VI.—A TABLE SHOWING THE NUMBER OF CROPS REQUIRED OF EACH SORT OF VEGETABLES, TO HAVE A REGULAR SUCCESSION THROUGH THE YEAR; WITH THE TIME OF SOWING AND PLANTING.

KITCHEN GARDEN PLANTS, SEEDS, AND ROOTS.

	No. of Crops.	Time of Sowing, &c.
Alisanders	2	March, August
Angelica	2	March, August
Artichoke	1	March or April
Asparagus	1	March or April
— forced	5	October, November, December, January, February
— in autumn	1	July, if cut down
Balm	1	March or April
Basil	1	March or April
Beans, early	5	October, January, February, March, July
— late	4	February, March, April, July
Beets	1	February or March
Boorcole or kale	3	March, April, June
— Anjou	2	May, June
Borage	1	February or March
Broccoli	4	March, April, May, June
Burnet	1	March or April
Cabbages, early	1	August
— late	4	February, March, May June
— red	3	February, March, June
— Savoy	3	March, May, June
— for cattle	2	May, June
— for seed	1	October or November
Cabbage turnips	2	May, June
Camomile	1	March or April
Capsicums	1	March or April
Carrots to draw young	3	January, April, July
— principal crop	1	February or March
— for seed	1	February

	No. of Crops.	Time of Sowing, &c.
Cauliflowers	4	August, February, March, May
Celery	5	February, March, April, May, June
Chardons	1	March or April
Chervil	2	March, August
Cives	1	March or April
Clary	1	March or April
Coleseed	1	June or July
Coleworts	2	February, June or July
Corn sallad	2	March, August
Cress for seed	1	March or April
— for sallad		March to September
— on hot-beds		October to March
Cucumbers	5	January, February, March, April, May
— on hot-beds	3	January, February, March
— for bell glasses	1	April
— on open ground	1	May or June
Dill	1	March or April
Endives	4	April, May, June, July
Escalions	1	January or February
Eschalot	2	February, September
Fennel	2	February, August
Finochio	4	April, May, June, July
Garlic	2	February, September
Horse-radish	1	February, or March
Hyssop	1	March or April
Jerusalem artichokes	1	February or March
Kidney beans	5	March, April, May, June, July
—Runners	2	April, May
Lavender	1	May or June
Leeks	1	February or March
Lettuces	7	February to August
Marjoram	2	March, April
Marygolds	1	February to April
Melons	3	February, March, April
—for autumn	1	May
Mint	1	March or April
Mushrooms	2	March, September
Mustard, for seed	1	March or April
—for sallad		March to September
—on hotbeds		October to March
Nasturtiums	1	March or April
Onions to draw young	4	January, April, May, July
—principal crop	1	February or March
—for seed		February or March
—Welsh	2	July, August
Parsley	3	February, March, July
—large rooted	2	February, April
Parsnips	2	February, March or April
Peas, hotspurs	5	October, January, February, July, August
—Marrowfats	5	February, March, April, May, June
Pennyroyal	1	March or April
Potatoes	3	February, March, April
—on hot-beds	1	January or February
Purslane	3	March, April, May
Radishes	9	January to August, and November
—on hotbeds	2	January, February
—for sallad		March to September
—for seed	1	May
Rampion	1	March or April
Rape	1	June or July
—for sallad		March to September
Rocambole	2	February, September
Rosemary	1	May or June
Rue	1	March or April
Sage	1	March or April
Salsafy	1	March or April
Savory	1	March or April
Savoy cabbage	3	March, May, June
Scorzonera	1	March or April
Scotch kale	3	March, April, June
Sea kale	3	March or April
Skirrets	1	March or April
Sorrel	2	March or August
Spinach	6	February to July
—winter	2	July, August, or September
Tansey	1	March or September
Tarragon	1	March or September
Thyme	1	March or April
Tomatoes	1	March or April
Turnips	6	March to August
—for seed	1	February
Turnip-cabbage	2	May, June
Turnip-radish	2	June, July
Water-cress	2	March, September.

SECT. VII.—CATALOGUE OF FLOWERS, SHRUBS, AND TREES USUALLY CULTIVATED.

1. *Tender Annual Flowers.*

To be sown on a strong hot-bed the last week in February, or first in March, transplanted afterwards upon another at four inches distance; then planted in small pots in May; afterwards in larger, and at the end of June placed in the open air.

1. Amaranths
2. Balsams
3. Cockscombs
4. Egg-plants
5. Glocest. amaranths
6. Humble plant
7. Ice plant
8. Sensitive plant
9. Stramoniums.

2. *Annual Flowers.*

To be sown on a moderate hot-bed in March or April, transplanted afterwards, before they are too thick, in rich light earth, and covered with mats; and in a month or six weeks into pots, or borders of the flower-garden.

1. African marygold
2. Browallia, blue
3. Capsicum
4. Cape marygold
5. Chinese aster
6. Chinese or Indian pink
7. Chrysanthemum
8. French marygold
9. Marvel of Peru
10. Mignonette
11. Nolana
12. Palma Christi
13. Stock Julyflower
14. Sultan, yellow
15. Zinnia.

In sowing them, fix numbers to them, corresponding with these, to distinguish each sort when they appear.

3. *Hardy Annual Flowers.*

To be sown in March or April on the borders of the flower garden. Those marked thus †, being very hardy, may be sown in the beginning of February, to flower early. Hollow the earth out in form of a little basin, about a foot over, and two inches deep; draw a circle near the edge half an inch deep, and drop a few seeds in it; thin them soon after they appear, and leave them

at six inches distance, but the large sorts wider. In dry weather they will want frequent watering. Gather the seeds as they ripen, and you may save the expense of buying in another season.

1. Adonis flower†
2. Alkekengi
3. Alysson
4. Amaranth
5. Amethystea
6. Balm, Moldavian
7. Belvidere
8. Candy-tuft†
9. Catchfly, Lobel's†
10. Caterpillar trefoil
11. Clary, red and white
12. Convolvulus
13. Cornbottle†
14. Cucumber, spurting
15. Fumitory, yellow
16. Hedgehog trefoil
17. Honeywort
18. Indian corn
19. Ketmia
20. Larkspur
21. Lavatera†
22. Lupine
23. Mallow
24. Mignonette
25. Nasturtium†
26. Nigella, or devil in a bush†
27. Pansies, or hearts-ease
28. Peas, sweet scented†
29. Persicaria†
30. Poppy†
31. Safflower, or bastard saffron
32. Snail trefoil
33. Snap-dragon
34. Stock Julyflower†
35. Sun-flower
36. Sweet sultan
37. Tobacco
38. Venus's looking-glass†
39. Venus's navelwort
40. Xeranthem

In July sow again annual stock, candy-tuft, convolvulus minor, cornbottles, Lobel's catchfly, and yellow lupines, and they will flower until the frost kills them.

4. *Biennial Flowers.*

To be sown in March or April in beds very thin; as soon as the plants touch one another thin them, and leave them at four or six inches asunder; those drawn out, plant at the same distance. In July transplant them all upon beds, at eight inches asunder; there to remain till the end of September, when they must be planted upon the borders of the flower garden, and they will produce their flowers the next summer, after which they will perfect their seeds and die.

1. Canterbury bell
2. Colutea, Æthiopian
3. French honeysuckle
4. Globe thistle
5. Honesty, or moonwort
6. Mallow tree
7. Poppy, yellow
8. Rocket [horned
9. Scabious
10. Stock Julyflower
11. Sweet William
12. Tree Primrose
13. Wall flower

5. *Perennial Flowers,*

Which, if sown in the same manner as the biennials, and transplanted into the borders of the flower garden, will continue for several years.

1. Alysson
2. Auricula
3. Bee larkspur
4. Campanula
5. Carnation
6. Columbine
7. Flax
8. Fox glove
9. Hawkweed
10. Hollyhock
11. Ox-eye daisy
12. Pea, everlasting
13. Pinks
14. Polyanthus
15. Rhubarb
16. Rose campion
17. Snap dragon
18. Valerian
19. Greek valerian

6. *Perennial Flowers,*

Which are propagated by dividing their roots in spring, in March or April; or in the autumn, in September.

1. Adonis flower
2. Anemone
3. Asphodel
4. Asters
5. Batchelor's button
6. Bean-caper
7. Bear's-breech
8. Borage
9. Bugloss
10. Campanula
11. Campion
12. Cardinal flower
13. Christmas rose
14. Cowslip
15. Cranesbill
16. Crowfoot
17. Daisies
18. Dog-tooth violet
19. Dragons
20. Dropwort
21. Eternal flower
22. Fennel giant
23. Feverfew
24. Flag
25. Fox-glove
26. Fraxinella
27. Fumitory
28. Garlic
29. Gentianella
30. Golden locks
31. Golden rod
32. Greek valerian
33. Hellebore
34. Hepatica
35. Herb benet
36. Houseleek
37. Lady's mantle
38. Lady's slipper
39. Lady's smock
40. Lily of the valley
41. Lion's tail
42. London pride
43. Loose-strife
44. Lupine
45. Lychnis
46. Lychnidea
47. Madwort
48. Marsh Marygold
49. Meadow-sweet
50. Milfoil
51. Milk-vetch
52. Mint
53. Moth-mullen
54. Navelwort
55. Peony
56. Pilewort
57. Plantain
58. Primrose
59. Ragged Robin
60. Ranunculus
61. Reed
62. Rhubarb
63. Saxifrage
64. Skullcap
65. Sneezewort
66. Side-saddle flower
67. Soapwort
68. Solomon's seal
69. Spiderwort
70. Spurge
71. Stonecrop
72. Sunflower
73. Swallow-wort
74. Thrift
75. Throatwort
76. Toadflax
77. True love
78. Valerian
79. Vervain
80. Veronica
81. Violet
82. Viper's bugloss
83. Wake-robin
84. Willow-herb
85. Wolf's-bane
86. Wormwood and some others; but with very little beauty to recommend them.

7. *Bulbous and Tuberous Rooted Flowers.*

1. Aconites
2. Amaryllis
3. Anemone
4. Bulbocodium
5. Cornflags
6. Crocuses
7. Crown imperial
8. Cyclamen
9. Daffodil
10. Garlic Moly
11. Hyacinth
12. Jonquille
13. Iris
14. Lily
15. Martagon
16. Narcissus
17. Pancratiums
18. Polyanthus Narcissus
19. Ranunculus
20. Sisyrinchium
21. Snowdrop
22. Star of Bethlehem
23. Tuberoses
24. Tulips

To be taken up in April, May, and June, as soon as their leaves are withered, and planted again in September or October, but their offsets in August. The ranunculuses and anemones not to be planted till February. The seed to be sown in February, in boxes.

8. *Bulbous-rooted Flowers.*

1. Amaryllis
2. Colchicum
3. Crocus
4. Cyclamen
5. Daffodil
6. Lily, Belladonna
7. — Guernsey
8. Saffron

These flower in autumn. They require to be planted in August, and to be taken up in April or May, as soon as their leaves are decayed; but their offsets in July.

9. *Deciduous Flowering Shrubs and Ornamental Trees.*

To be planted in March, April, September, and October.

1. Acacia, rose-flowering
2. Almond tree
3. Allspice
4. Althæa
5. Ash, mountain
6. Annona, or papaw
7. Azalea
8. Berberry tree
9. Bignonia or trumpet flower.
10. Bladder sena
11. Bramble
12. Buckthorn
13. Caragna
14. Cassioberry bush
15. Catalpa, or trumpet flower.
16. Ceanothus
17. Cephalanthus
18. Cherry tree
19. Cinquefoil, shrubby
20. Clethra
21. Cornel
22. Crab-tree
23. Cytisus
24. Diervilla
25. Dogwood
26. Fothergilla
27. Ginkgo, or maidenhair-tree
28. Gueldres rose
29. Halesia
30. Hammealis
31. Hawthorn.
32. Hickery nut
33. Honeysuckle
34. Honeysuckle, upright
35. Hypericum
36. Jasmin
37. Jesuits'-bark tree, false
38. Indigo, bastard
39. Ironwood tree
40. Judas tree
41. Kidney-bean tree
42. Laburnum
43. Lac, or varnish tree
44. Leatherwood
45. Lilacs
46. Mezereon
47. Nightshade
48. Olive-tree, wild
49. Passion flower
50. Peach trees
51. Periploca, or Virginian silk
52. Plum trees
53. Poison trees
54. Pomegranate tree
55. Privet
56. Raspberry
57. Restharrow
58. Rose tree, eighty varieties
59. St. Peter's wort
60. Sassafras
61. Service tree
62. Snowdrop, or fringe tree
63. Spindle tree
64. Spiræa
65. Sumach
66. Syringa
67. Tamarisk
68. Tea tree
69. Toothach tree
70. Traveller's joy
71. Tupelo tree
72. Viburnum
73. Weeping willow

10. *Deciduous Forest Trees.*

To be planted from the middle of Febru ary till the beginning of April, and from September till December

1. Acacia
2. Alder
3. Ash
4. Beech.
5. Birch
6. Chestnut
7. Crab-tree
8. Cypress
9. Elder
10. Elm
11. Hickery
12. Hornbeam
13. Horse chestnut
14. Larch
15. Lime
16. Magnolia.
17. Maple
18. Nettle-tree
19. Oak
20. Plane
21. Poplar
22. Tulip tree
23. Walnut
24. Willow

11. *Evergreen Flowering Shrubs and Ornamental Trees.*

To be planted in March, April, September, and October.

1. Alaternus
2. Andromeda
3. Arbor vitæ
4. Arbutus
5. Bay
6. Bignonia
7. Box
8. Brooms
9. Cassine, or South Sea tea-tree
10. Cistus or rock rose
11. Crab tree
12. Cytisus, hairy evergreen
13. Groundsel tree
14. Holly
15. Honeysuckle
16. Juniper
17. Ivy.
18. Kalmia
19. Lavender
20. Laurel
21. Laurustinus
22. Magnolia
23. Phillyrea
24. Privet
25. Purslane tree
26. Pyracantha
27. Rhododendron
28. Rose tree
29. Rosemary
30. Rue
31. Savin
32. Spindle tree
33. Sweet briar
34. Tea tree
35. Widow-wail

12. *Evergreen Forest Trees.*

To be planted from the middle of February till the end of April, and from September till December.

1. Cedar
2. Cork
3. Cypress
4. Fir
5. Oak
6. Pine
7. Yew.

13. *Fruit Trees.*

To be planted in February, March, October and November.

1. Almond
2. Apple
3. Apricot
4. Berberry
5. Cherry
6. Crab-tree
7. Currant
8. Fig
9. Filbert
10. Gooseberry
11. Medlar
12. Nectarine
13. Nut-tree
14. Peach
15. Pear
16. Plum
17. Quince
18. Raspberry
19. Service
20. Vine
21. Walnut

The following method may be taken for preserving the blossoms of fruit trees in spring. Procure some sheep-hurdles made of hazel or willow branches, about two or three feet higher than the walls. At spring, just before the blossoms of the fruit-trees begin to open, place these before the trees, and fasten them in windy weather with stakes, and, by their being taller than the walls are high, they may be set sloping about two feet from the bottom of the walls, which will keep them steady. When the fruit is set, and entirely out of danger, take them quite away, and by keeping in a dry place they will last many years, and will be always worth one-third of the first cost for lighting fires, when unfit for any other use.

In an experiment that was made, the hurdles were placed before the trees in December; they also defended a crop of peas, and both seemed to be much benefited, particularly the peas. Possibly vines might also thus be defended in spring, and come forwarder; at least it is worth trying where the walls are not too high.

14. *Hardy Greenhouse Plants.*

To be planted against a south wall, in the open ground, the roots covered with tan or long litter. These will not be killed except in very severe frosts, and then they generally shoot up afresh from their roots. By this method, many curious plants, formerly only kept in greenhouses, will now ornament the walls, where they will appear in greater vigor and beauty, and many may produce both flowers and fruit, which they will not do when confined in pots in a greenhouse.

1. Bay tree
   — Blue-berried Carolinian
2. Boxthorn
   — African
3. Broom
   — Starry
   — Montpelier
4. Cedar tree
   — Bermudian
   — Goa
5. Fig, Indian
6. Heath
   — Many-flowered
   — Mediterranean
   — Three-flowered
7. Jasmin, Catalonian
8. Laurel, Alexandrian
9. Myrtle
   —Portugal
   — Upright Italian
10. Magnolia
11. Oleander.
    — Red
    — White
12. Olive-tree
    — Box-leaved
    — Provence
13. Pistachia nut-tree
14. Pomegranate, dwarf
15. Ragwort, sea
16. Rose tree, Chinese
17. Rosemary, silver-leaved
18. Sophora
    — Small leaved Otaheite
    — Broad-leaved Roman
    — Double-flowered
19. Strawberry tree
20. Tea tree, green
21. Winter cherry.

For other particular operations in gardening, see ESPALIER, FRUIT-TREES, GRAFTING, GREEN-HOUSE, HOTBED, INARCHING, INOCULATING, ORCHARD, PLANTING, PRUNING, TREES, &c. &c. and the culture of the different plants under their respective generic names.

HORTUS SICCUS, a dry garden, an appellation given to a collection of specimens of plants, dried and preserved. The value of such a collection is evident, as a thousand minutiæ may be preserved in the well-dried specimens of plants, which the most accurate engraver would overlook.

HORUS, a renowned deity of ancient Egypt. He was an emblem of the sun. Plutarch, in his treatise De Iside et Osiride, says, 'that virtue which presides over the sun, whilst he is moving through space, the Egyptians called Horus, and the Greeks Apollo.' Job also calls Ur or Orus, the sun—'If I gazed upon the sun (Ur, Orus) when he was shining, or on the moon (Jarêcha) walking in brightness,' &c. Ch. xxxi. ver. 26, 27, 28. The interpretation left by Hermapion of the hieroglyphics engraved on the obelisk of Heliopolis (according to Ammianus Marcellinus) is in these remarkable words: 'Horus is the supreme lord and author of time.' He is called Invisible in winter, Jupiter in the spring, the Sun in summer, and towards the end of autumn the tender Jao. The Egyptians represented him borne on lions, which signified the sun's entrance into the sign of the lion. They who presided over the divine institutions then placed sphynxes at the head of the canals and sacred fountains, to warn the people of the approaching inundations. Plutarch, in his Treatise of Isis and Osiris, relates the sacred fable of Horus; that he was the son of Osiris and Isis; that Typhon, after killing his brother Osiris, took possession of the kingdom: that Horus, leaguing with Isis, avenged the death of his father, expelled the tyrant from his throne without depriving him of life, and reigned gloriously in Egypt. A person who has travelled in Egypt easily discovers natural phenomena hid under this veil of fable. As the philosophers acknowledged the influence of the moon over the state of the atmosphere, they united Isis with this god, to drive the usurper from the throne. The priests, considering Osiris as the father of time, might bestow the name of his son Horus on the sun, who reigned three months in the year. This, according to Mr. Savary, is the explication of this allegory.

HOSAN'NAH, *n. s.* Gr. *οσαννα*. An exclamation of praise to God.

O thou! that art so faire and ful of grace,
Be thou min advocat in that high place,
Ther as withouten ende is songe *Osanne*,—
Thou Cristes mother doughter of dere Anne.
Chaucer. The Second Nonnes Tale.

Through the vast of heaven
It sounded, and the faithful armies rung
Hosanna to the Highest. *Milton.*

The public entrance which Christ made into Jerusalem was celebrated with the *hosannas* and acclamations of the people. *Fiddes.*

HOSANNA, in the Hebrew ceremonies, was a prayer rehearsed on the several days of the feast of tabernacles; thus called, because there was frequent repetition therein of the word הושענא, i. e. save us, we pray. There are many of these hosannahs. The Jews call them hoschannoth, i. e. the hosannahs: and style them hosanna of the first day, hosanna of the second day, &c., according as they are rehearsed.

HOSANNA RABBA, or grand hosanna, is a name given to the feast of the tabernacles, which lasts eight days; because during the course thereof they are frequently calling for the assistance of God, the forgiveness of their sins, and his blessing on the new year; and to that purpose they make great use of the hoschannoth above mentioned.—The Jews also apply the term hosanna rabba more peculiarly to the seventh day of this feast, because they more immediately on that day invoke the divine blessing, &c.

HOSE, *n. s.* }
HO'SIER, *n. s.* } Sax. þoꝛa, plur. hosen; Welsh, *hosan*; Erse, *ossan*; Fr. *chausse*.
HO'SIERY, *n. s.* } plur. *ossanen*;

Applicable either to breeches or stockings. Hosier, one who sells stockings. Hosiery, stockings and other articles of worsted, cotton, or silk.

These men were bound in their coats, *hosen*, hats, and other garments, and cast into the midst of the burning fiery furnace. *Dan.* iii. 21.

He being in love, could not see to garter his *hose*, and you, being in love, cannot see to put on your *hose*. *Shakspeare.*

Guards on wanton Cupid's *hose*. *Id.*

Here's an English taylor come hither for stealing out of a French *hose*. *Id.*

He cross examined both our *hose*,
And plundered all we had to lose. *Hudibras.*

Will she thy linen wash, or *hosen* darn,
And knit thee gloves? *Gay's Pastorals.*

As arrant a cockney as any *hosier* in Cheapside. *Swift.*

HOSEA, the son of Beeri, one of the minor prophets, lived in the kingdom of Samaria, and delivered his prophecies under Jeroboam II. and his successors, kings of Israel; and under Uzziah, Jotham, Ahaz, and Hezekiah, kings of Judah. His principal design is to publish the gross idolatries of the people of Israel and Judah, to denounce the divine vengeance against them, and to fortel the captivity in Assyria.

HOS'PITABLE, *adj.*
HOS'PITABLY, *adv.*
HOS'PITAL, *n. s.*
HOSPITAL'ITY, *n. s.*
HOS'PITALLER, *n. s.*
HOS'PITATE, *v. a.*
HOST, *n. s.* & *v. a.*
HOS'TEL, *n. s.*
HOS'TELRY, *n. s.*
HOS'TESS, *n. s.*
HOS'TESS-SHIP, *n. s.*
HOS'TLER, *n. s.*
HOS'TRY, *n. s.*

Fr. *hospital, hospitalité, hospitalier, hoste;* Lat. *hospitabilis, hospitalis, hospitor, hospes.* These words signify places and persons, where and by whom kindness and entertainment are given to strangers, or relief to the sick; together with the corresponding dispositions of generosity and liberality, as hospitable, hospital, hospitality: host has not only this meaning, but is also the landlord of an inn. Hostel, hostelry, an inn. Hostess-ship, a landlady of an inn. Hostler, one who takes care of horses at an inn. Hostelry, and hostry, the place where the horses of guests were kept. These words were formerly applied to gratuitous liberality shown to strangers and others by persons of opulence; but, with the exception of hospitality, are now generally used in reference to inns, where accommodations are purchased by the traveller. 'Hospitallers are religious persons of both sexes, who attended the sick in hospitals.'—*Chaucer's Glossary.*

And bade our *Hoste* he shulde to him say,
That alle we, to tell his tale him pray.
Our *Hoste* had the wordes for us alle;
Sire Preest, quod he, now faire you befalle
Say what you list and we shul gladly here.
Chaucer. Prologue to the Persones Tale.

But ley as still as any stone, remembryng his foly
That he wold trust a Tapster of a common *hostry.*
Chaucer. The Pardonere and Tapstere.

Saint Austin saith a man may be
In houses that han properte,
As Templars and *Hospitelers.*
Id. Romaunt of the Rose.

They spyed a goodly castle, placed
Foreby a river in a pleasant dale,
Which chusing for that evening's *hospital,*
They thither marched. *Faerie Queene.*

The cause why they are now to be permitted is want of convenient inns for lodging travellers on horseback, and *hostlers* to tend their horses by the way. *Spenser on Ireland.*

The Lacedemonians, forbidding all access of strangers into their coasts, are, in that respect, deservedly blamed, as being enemies to that *hospitality* which, for common humanity's sake, all the nations on the earth should embrace. *Hooker.*

Go, bear it to the centaur, where we *host;*
And stay there, Dromio, till I come to thee.
Shakspeare.

My master is of a churlish disposition,
And little recks to find the way to heaven
By doing deeds of *hospitality.*
Id. As You Like It.

It is my father's will I should take on me
The *hostess-ship* o' the' day: you're welcome, sirs.
Shakspeare.

Time's like a fashionable *host,*
That slightly shakes his parting guest by the hand;
But with his arms out-stretched, as he would fly,
Grasps in the comer. *Id. Troilus and Cressida.*

Ye were beaten out of door,
And railed upon the *hostess* of the house.
Shakspeare.

I'm your *host:*
With robbers' hand my *hospitable* favour
You should not ruffle thus. *Id.*

Fair and noble *hostess,*
We are your guests to-night. *Id. Macbeth.*

Here, father, take the shadow of this tree
For your good *host.* *Id. King Lear.*

Homer never entertained either guests or *hosts* with long speeches, till the mouth of hunger be stopped. *Sidney.*

Undistinguished civility is like a whore or a *hostess.*
Temple.

Swift rivers are with sudden ice constrained,
And studded wheels are on its back sustained;
An *hostry* now for waggons, which before
Tall ships of burden on its bosom bore.
Dryden's Georgics.

Receive the shipwrecked on your friendly shore;
With *hospitable* rites relieve the poor. *Dryden.*

Be as kind an *hostess* as you have been to me, and you can never fail of another husband. *Id.*

That always chuses an empty shell, and thus *hospitates* with the living animal in the same shell.
Grew's Musæum.

I am about to build an *hospital,* which I will endow handsomely for twelve old husbandmen. *Addison.*

Ye thus *hospitably* live,
And strangers with good cheer receive. *Prior.*

They who were so careful to bestow them in a college when they were young, would be so good as to provide for them in some *hospital* when they are old.
Wotton.

The first they reckon such as were granted to the *hospitallers* in titulum beneficii. *Ayliffe's Parergon.*

The former liveth as piously and *hospitably* as the other. *Swift.*

How has this spirit of faction broke all the laws of charity, neighbourhood, alliance, and *hospitality.* *Id.*

HOSPITAL, or spital, is formed of the Latin hospes, a host or stranger. See HOST. In the first ages of the church the bishop had the immediate charge of all the poor, also of the widows, orphans, strangers, &c. When the churches came to have fixed revenues, it was decreed that at least one-fourth part thereof should go to the relief of the poor; and, to provide for them the more commodiously, divers houses of charity were built, since denominated hospitals. They were governed wholly by the priests and deacons, under the inspection of the bishop. In course of time separate revenues were assigned for the hospitals; and many, from motives of piety and charity, gave lands and money for erecting hospitals. When the church discipline began to relax, the priests, who till then had been the administrators of hospitals, converted them into a sort of benefices, which they held at pleasure, reserving the greatest part of the income to their own use; so that the intentions of the founders were frustrated. To remove this abuse, the council of Vienne expressly prohibited the giving any hospital to secular priests in the way of a benefice; and directed the administration thereof to be given to sufficient and responsible laymen, who should take an oath for the faithful discharge thereof, and be accountable to the ordinaries. This decree was confirmed by the council of Trent. In Britain hospitals are buildings properly endowed, or otherwise supported by charitable contributions, for the reception and support of the poor, aged, infirm, sick, or helpless. A charitable foundation, laid

thus for the sustenance of the poor, is to continue for ever. Any person seised of an estate in fee, may, by deed enrolled in chancery, erect and found an hospital, and nominate such heads and governors therein as he shall think fit; and this shall be incorporated, and subject to the inspection and guidance of the heads and visitors nominated by the founder. Likewise such corporations shall have, take, and purchase lands, so as not to exceed £200 a year, provided the same be not held of the king; and to make leases, reserving the accustomed yearly rent. For a list of the principal hospitals in this country, see ENGLAND.

HOSPITAL (Michael de l'), chancellor of France in the sixteenth century, was born at Auvergne in 1505. Although, from political motives, he opposed all severe measures against the Protestants, yet, to prevent the introduction of the inquisition, he agreed to the edict of Romorantin. The spirit of toleration he evinced made him much suspected by the Roman Catholics, and extremely odious to the court of Rome. His pacific views being disliked by Catharine de Medicis, who had contributed to his advancement, she excluded him from the council of war. He retired in 1568 to his country seat at Vignia, but his privacy was cruelly interrupted by the massacre of St. Bartholomew. When a troop of horse approached his house he was asked if he would defend himself by fire-arms; 'By no means,' said he, 'if the wicket is not wide enough to admit the assassins, set open the great gates.' The men, however, who were sent on the bloody errand, were overtaken by a message from the king, announcing that l'Hospital was not among the proscribed, and he was told that the authors of the deed had pardoned him his constant opposition to their plans; 'I did not indeed know,' said the old chancellor, 'that I had merited either death or pardon.' He died in 1573, aged sixty-eight. He published some excellent speeches, memoirs, and poems.

HOSPITAL (William Francis Antony), marquis de St. Merne, a celebrated mathematician, born in 1661. He was a geometrician almost from his infancy; but, at the age of nineteen, entered the army, and was made a captain of horse. He however soon gave up his commission, in order more closely to follow his favorite pursuit. In 1693 he was made an honorary member of the academy of sciences at Paris; and he published a work upon Sir Isaac Newton's calculations, entitled, L'Analyse des Infinimens Petits. He engaged afterwards in another work, in which he included Les Sections Coniques, les Lieux Geometriques, la Constructions des Equations, et Une Theorie des Courbes Mechaniques: but a little before he finished it he was seized with a fever, of which he died, February 2d, 1704, aged forty-three. It was published after his death.

HOSPITALLERS, an order of religious knights, who built an hospital at Jerusalem, wherein pilgrims were received. To these pope Clement V. transferred the effects and revenues of the templars; whom, by a council held at Vienne, he suppressed for their misdemeanours. These hospitallers were called knights of St. John at Jerusalem; and are now called knights of Malta. See MALTA.

HOSPODAR, a title borne by the princes of Walachia and Moldavia, who receive the investiture of their principalities from the grand seignior.

HOST, *n. s.* & *v. n.*
HOS'TAGE, *n. s.*
HOS'TILE, *adj.*
HOSTIL'ITY, *n. s.*
HOS'TINGS, *n. s.*

} Fr. *hostilité*; Lat. *hostis, hostilis.* An army; numbers assembled in war; any great number. Host, to encounter in battle; to review or muster. Hostage, one left in pledge for security of performance of conditions. Hostile, adverse; opposite. Hostility, the practices of an open enemy; open war; opposition in war.

Octavian, that wode was of this dede,
Shope him—an *hoste* on Anthony to lede,
Al utterly for his destruction,
With stoute Romaines, cruel as lion.
Chaucer. Legende of Good Women.

Therfor he made his chalenge his yen for to have
Or els he shuld for them fyne yf he wold them have,
And ligg for them in *hostage* till the fynaunce came,
This was the sotilte of the blynde man.
Id. The Merchantes Second Tale.

Lords have had the leading of their own followers to the general *hostings.* *Spenser on Ireland.*

He has now at last
Given *hostile* strokes, and that not in the presence
Of dreaded justice, but on the ministers
That do distribute it. *Shakspeare.*

Give to a gracious message
An *host* of tongues; but let ill tidings tell
Themselves, when they be felt. *Id.*

Let every soldier hew him down a bough,
And bear't before him; thereby shall we shadow
The numbers of our *host.* *Id. Macbeth.*

Your *hostages* I have, so have you mine;
And we shall talk before we fight. *Shakspeare.*

Do this message honourably;
And, if he stand on *hostage* for his safety,
Bid him demand what pledge will please him best.
Id.

Neither by treason nor *hostility*
To seek to put me down, and reign thyself. *Id.*

He that hath wife and children, hath given *hostages* to fortune; for they are impediments to great enterprises, either of virtue or mischief. *Bacon.*

Hostility being thus suspended with France, preparation was made for war against Scotland. *Hayward.*

What peace can we return,
But, to our power, *hostility* and hate,
Untamed reluctance and revenge? *Milton.*

Strange to us it seemed
At first, that angel should with angel war,
And in fierce *hostings* meet. *Id.*

'Twixt *host* and *host* but narrow space was left
A dreadful interval, and front to front
Presented stood in terrible array
Of hideous length. *Id.*

Fierce Juno's hate,
Added to a *hostile* force, shall urge thy fate.
Dryden.

After these came, armed with spear and shield,
An *host* so great as covered all the field. *Id.*

New authors of dissension spring from him,
Two branches, that in *hosting* long contend
For sovereign sway. *Philips.*

We have shewed ourselves fair, nay, generous adversaries; and have carried on even our *hostilities* with humanity. *Atterbury.*

They who marry give *hostages* to the publick, that they will not attempt to ruin or disturb the peace of it.
Id.

The Romans, having seized a great number of *hostages*, acquainted them with their resolution.
Arbuthnot on Coins.

Blast their design
Great God of *Hosts!* nor let thy creatures fall
Unpitied victims at ambition's shrine.
Porteus's Death.

One effort more to break the circling *host!*
They form—unite—charge—waver—all is lost!
Byron. Corsair.

But Hassan's frown and furious word
Are dreaded more than *hostile* sword.
Id. Giaour.

The question was this—is there less *hostility* in a Portuguese army crossing the frontier, when avowedly in the pay and service of Spain? *Canning.*

HOST, *n. s.* Fr. *hostie;* Lat. *hostia.* The sacrifice of the mass in the Romish church; the consecrated wafer.

Pope Gregory IX. first decreed a bell to be rung, as the signal for the people to betake themselves to the adoration of the *host.* The vessel wherein the *hosts* are kept is called the cibory; being a large kind of covered chalice. *Dr. A. Rees.*

HOST is a term of mutual relation, applied both to a person who entertains another, and to the person thus lodged. It is formed of the Latin hospes, thus called quasi hostium, or ostium petens; for ostium was anciently written with the aspirate. It was a custom among the ancients, when any stranger asked for lodging, for the master of the house and the stranger, each of them to set a foot on their own side of the threshold, and swear they would neither of them do any harm to the other. It was this ceremony that raised so much horror against those who violated the law of hospitality on either side; as they were considered as perjured.

HOST is also used by way of abbreviation for hostia, a victim or sacrifice offered to the deity. Hence host, in the church of Rome, is a name given to the elements used in the eucharist, or rather to the consecrated wafer; which they offer up every day, a new host or sacrifice for the sins of mankind. They pay adoration to the host, upon the presumption that the elements are no longer bread and wine, but transubstantiated into the real body and blood of Christ. See TRANSUBTANTIATION. The vessel wherein the hosts are kept is called the cibory; being a large kind of covered chalice.

HOSTE (Paul l'), an eminent French mathematician, born in 1652. He was a Jesuit, and professor of mathematics at Toulon. He wrote, 1. Traité des Evolutions Navales, folio, 1727. Traités des Mathematiques les plus necessaires à un Officier, 3 vols. 12mo. He died at Toulon, in 1700.

HOSTIA, Host, in antiquity, a victim offered in sacrifice to a deity. The word is formed from hostis, an enemy; it being the custom to offer up a sacrifice before they joined battle, to render the gods propitious; or, after the battle was over, to give them thanks. Some derive the word from hostio, q. d. ferio, I strike. Isidore remarks, that the name hostia was given to those sacrifices which they offered before they marched to attack an enemy, antequam ad hostem pergerent, in contradistinction from victima, which were properly those offered after the victory. Hostia also signified the less sorts of sacrifice, and victima the larger. A. Gellius says, that every priest, indifferently, might sacrifice the hostia, but that the victima could be offered by none but the conqueror himself. But we find these two words promiscuously used by ancient writers. We read of many kinds of hostiæ: as H. ambarvales, victims sacrificed after having been solemnly led round the fields at the ambarvalia: H. ambegnæ, or ambiegne, sacrifices of cows or sheep that had brought forth twins: H. amburbiales, victims slain after the amburbium: H. bidentes, animals of two years old: H. caviares, or caneares, victims sacrificed every fifth year by the pontiffs, in which they offered the part of the tail called caviar: H. harugæ, victims offered to predict future events from: H. mediales, black victims offered at noon: H. prodigæ, sacrifices in which the fire consumed all, and left nothing for the priests: H. puræ, pigs or lambs ten days old: H. succedaneæ, sacrifices offered after others which had exhibited some ill omen.

HOT, *adj.* HOT'LY, *adv.* HOT'NESS, *n. s.* HOT'BRAINED, *adj.* HOT'HEADED, *adj.* HOT'HOUSE, *n. s.* HOT'MOUTHED, *adj.* HOT'SPUR, *n. s.* HOT'SPURRED, *adj.* HOT'BED, *n. s.* Sax. þat; Scot. *hat;* Heb. אש, fire; Germ. *heiss;* Lat. *cestus.* Having the power to excite the sense of heat; contrary to cold; fiery: applied figuratively to temper and disposition, as ardent; zealous; eager; violent; vehement; lustful; piquant; acrid: as applied to substances, most of the compounds are sufficiently expressive. Hot-house, a place to rear plants and exotics; a bagnio; a brothel. Hot-mouthed, headstrong and ungovernable. Hotspur, a violent and passionate man; a pea of speedy growth. Hotbed, a bed of earth made hot by the fermentation of dung.

But I n'ot how it happed, sodainly
As, about none, the sonn so fervently
Waxe *hote* that the pretty tender floures
Had lost the beauty of hir fresh collours.
Chaucer. The Floure and the Leafe.

The enemy, now at hand, began *hotly* to skirmish in divers places with the Christians.
Knolles's History.

Now she professes a *hothouse*, which is a very ill house too. *Shakspeare. Measure for Measure.*

My nephew's trespass may be well forgot;
It hath the excuse of youth and heat of blood,
A harebrained *hotspur* governed by a spleen.
Shakspeare.

What is thy name?
—Thou'lt be afraid to hear it.
—No, though thou call'st thyself a *hotter* name
Than any is in hell. *Id. Macbeth.*

I do contest
As *hotly* and as nobly with thy love,
As ever in ambitious strength I did
Contend against thy valour. *Id. Coriolanus.*

Come, come, lord Mortimer, you are as slow,
As *hot* lord Percy is on fire to go. *Shakspeare.*

The great breezes which the motion of the air in great circles, such as are under the girdle of the world, produceth, do refrigerate; and therefore, in those parts, noon is nothing so *hot* as about nine in the forenoon. *Bacon.*

The bed we call a *hotbed* is this: there was taken horsedung, old and well rotted; this was laid upon a

bank half a foot high, and supported round about with planks, and upon the top was cast sifted earth two fingers deep. *Id.*

Where lately harboured many a famous whore,
A purging bill, now fixed upon the door,
Tells you it is a *hothouse*; so it may,
And still be a whorehouse: th' are synonyma.
Ben Jonson.

Wars are begun by hairbrained dissolute captains, parasitical fawners, unquiet *hotspurs*, and restless innovators. *Burton.*

To draw Mars like a young Hippolytus, with an effeminate countenance, or Venus like that *hotspurred* Harpalice in Virgil, this proceedeth from a senseless judgment. *Peacham.*

Nature to youth *hot* rashness doth dispense,
But with cold prudence age doth recompense.
Denham.

She has, quoth Ralph, a jointure,
Which makes him have so *hot* a mind t' her.
Hudibras.

The stag was in the end so *hotly* pursued, that he was driven to make courage of despair. *Sidney.*

Though this controversy be revived, and *hotly* agitated, I doubt whether it be not a nominal dispute.
Boyle.

I fear my people's faith,
That *hotmouthed* beast that bears against the curb,
Hard to be broken. *Dryden's Spanish Friar.*

You shall find 'em either *hotbrained* youth,
Or needy bankrupts. *Id.*

Our army
Is now in *hot* engagement with the Moors.
Dryden.

Voracious birds, that *hotly* bill and breed,
And largely drink, because on salt they feed. *Id.*

Hot and cold were in one body fixt;
And soft with hard, and light with heavy mixt.
Id.

It is no wonder that men, either perplexed in the necessary affairs of life, or *hot* in the pursuit of pleasures, should not seriously examine their tenets.
Locke.

Of such peas as are planted or sown in gardens, the *hotspur* is the speediest of any in growth.
Mortimer.

Preserve the *hotbed* as much as possible from rain.
Evelyn.

Black substances do soonest of all others become *hot* in the sun's light, and burn; which effect may proceed partly from the multitude of refractions in a little room, and partly from easy commotion of so very small corpuscles. *Newton.*

One would not make the same person zealous for a standing army and publick liberty; nor a *hotheaded* crackbrained coxcomb forward for a scheme of moderation. *Arbuthnot.*

Hotbeds, in gardening, are made with fresh horse-dung, or tanners' bark, and covered with glasses to defend them from cold winds. By the skilful management of hot-beds, we may imitate the temperature of warmer climates; by which means the seeds of plants brought from any of the countries within the torrid zone may be made to flourish even under the poles. The hot-beds commonly used in kitchen-gardens are made with new horse-dung mixed with the litter of a stable, and a few sea-coal ashes, which last are of great service in retaining the heat of the dung. This should remain six or seven days in a heap; and being then turned over, and the parts mixed well together, it should be again cast into a heap; where it may continue five or six days longer, by which time it will have acquired a due heat. The hot-beds are thus made:—In some sheltered part of the garden dig out a trench of a length and width proportionable to the frames you intend it for; and, if the ground be dry, about a foot, or a foot and a half deep; but, if it be wet, not above six inches; then wheel the dung into the opening, stirring every part of it with a fork, and laying it exactly even and smooth on every part of the bed, with the bottom part of the heap, which is commonly free from litter, upon the surface. If it be designed for a bed to plant out cucumbers to remain, make a hole in the middle of the place designed for each light about ten inches over and six deep, which should be filled with good fresh earth, thrusting in a stick to show the places where the holes are; then cover the bed all over with the earth that was taken out of the trench, about four inches thick, and put on the frame, letting it remain till the earth be warm, which commonly happens in three or four days after the bed is made, and then the plants may be placed in it. If the hot-bed be designed for other plants, there need be no holes made in the dung; but, after having smoothed the surface with a spade, cover the dung about three or four inches thick with good earth, putting on the frames and glasses as before. Settle the dung close with a fork, and, if it be pretty full of long litter, it should be trod down equally on every part. During the first eight or ten days after the bed is made, cover the glasses slightly in the night, and in the day-time carefully raise them, to let out the steam. As the heat abates the covering should be increased; and, as the bed grows cold, new hot dung should be added round the sides of it. The hot-bed made with tanners' bark is, however, much preferable to that described above, especially for all tender exotic plants and fruits, which require an equal degree of warmth for several months, which cannot be effected with horse-dung. They are thus made:—Dig a trench about three feet deep, if the ground be dry; but, if wet, it must not be above a foot deep at most, and must be raised two feet above the ground. The length must be proportioned to the frames intended to cover it; but it should never be less than ten or twelve feet, and the width not less than six. The trench should be bricked up round the sides to the height of three feet, and filled in the spring with fresh tanners' bark that has been lately drawn out of their vats, and has lain in a round heap, for the moisture to drain out of it, only three or four days. As it is put in, gently beat it down equally with a dung-fork; but it must not be trodden, which would prevent its heating, by settling it too close; then put on the frame, covering it with glasses; and in about ten or fourteen days it will begin to heat; at which time plunge your pots of plants or seed into it, observing not to tread down the bark in doing it. These beds will continue three or four months in a good temper of heat; and if you stir up the bark pretty deep, and mix a load or two of fresh bark with the old when you find the warmth decline, you will preserve its heat two or three months longer. Many lay hot horse-dung in the bottom

of the trench under the bark; but this ought never to be done unless the bed is wanted sooner than the bark would heat of itself, and even then there ought only to be a small quantity of dung at the bottom. The frames which cover these beds should be proportioned to the several plants they are designed to contain. If they are to cover the ananas or pine-apple, the back part should be three feet high, and the lower part fifteen inches; if the bed be intended for taller plants, the frame must be made of a depth proportionable to them; but, if it be for sowing of seeds, the frame need not be above fourteen inches high at the back, and seven in the front; by which means the heat will be much greater.

Hot-Houses. The changes that have of late years taken place in these important adjuncts to scientific gardening it will be impossible to enumerate in the compass of this article. Their form and general structure have been much varied and the spherical shape largely introduced. A considerable improvement in the mode of *glazing* hot-houses deserves also to be mentioned. It consists in making the upper and lower edges of the panes segments of a circle, instead of being rectilinear or horizontal; the upper edge being made concave, the lower convex. For a pane eight inches wide, a curvature five-eighths of an inch deep in the centre is sufficient. The advantages of this circular form must be evident. The rain which falls, or moisture which collects on the exterior of the glass, gravitates to the centre of the pane, and runs down in a continued line, instead of passing along the sides of the bars, and being partly detained by the capillary attraction of the two surfaces, at the overlapping of the panes. The extent to which one pane overlaps another can, at the same time, therefore, be much lessened; one-eighth of an inch is found sufficient. This narrowness of the lap, again, prevents breakage from the lodging of moisture, and the sudden expansion produced by freezing during the variable weather of winter. When these circular panes are cut from whole sheets of glass, the expense is scarcely greater than for oblong squares. It is proper that the glass should be flat or equal; and the kind known by the name of patent crown glass is preferred. In stoves or hot-houses, where a high temperature must be maintained, the laps are puttied. In this case, a small central opening is left in the putty, by inserting a slip of wood at first, and withdrawing it when the pane is pressed down to its bearing; by this little aperture the condensed vapor generated within escapes without dropping on the plants. Mr. Loudon uses thin sheet lead in place of putty for closing the laps; he thus avoids all risk of expansion from frost, and the lap can thus be made exceedingly narrow.

Heating of hot-houses by steam.—But of all the recent improvements in gardening, the most important, perhaps, is the use of steam for communicating the artificial heat, in place of depending, as formerly, on the passage of heated air through flues, aided in particular houses, called stoves, by the fermentation of tanner's bark. The advantage arising from the use of steam consists in this, that an equable high temperature can thus be maintained for a length of time with great ease and certainty, and the plants can scarcely ever be liable to suffer a scorching heat; ladies and gentlemen visiting the house are also much less apt to be annoyed with the smoke. It has been found also that seven bushels of coal go as far in keeping up steam heat, as ten bushels do in maintaining an equal temperature the other way. It fortunately happens too, that steam may very advantageously be resorted to in aid of the common flues conveying smoke and heated air. A steam-apparatus may be appended to any ordinary hot-house, without incurring any material expense, or any considerable alteration in structure, thus: a boiler is erected over the usual furnace, the smoke of which passes through the flues as formerly. Metal, generally copper, pipes are laid along the top of the brick-flues. A square shape is sometimes preferred; and the pipes are set on edge, so that any condensed vapor trickling to the bottom may occupy little room, or present only a small surface, till it make its way back to the boiler, to which a gentle inclination is given. The boiler as in the common steam-engine, is supplied from a cistern above, and is made to regulate itself by a simple contrivance; in the feed-head is a valve which is opened by the sinking of a float, which descends in proportion as the water is dissipated in steam; and being balanced by a weight, whenever a sufficient quantity of water is admitted, rises again and shuts the valve. A safety-valve is added, loaded according to the strength of the boiler; and there is another valve for admitting atmospheric air, in case of the condensation of the steam causing a vacuum in the boiler. Instead of these steam operations requiring more of the time and attention of the gardener, he will be greatly relieved, and have several additional hours a day which he may devote to other concerns. If the furnace be duly charged, and the boiler properly prepared, the hot-house may be left with confidence for eight or even ten hours together, the temperature continuing equal for that length of time. Where forcing is practised, the gardener is thus also relieved from much anxiety and night-watching.

For heating stoves, conservatories, and green-houses, steam is likewise well adapted. The difficulty of maintaining continually a high temperature in a large stove has, no doubt, been one cause of the comparative neglect into which the cultivation of fine tropical plants has fallen. By means of steam, this is most effectually removed.

For the conservatory and green-house, if the steam be in action from three to nine o'clock P. M. the temperature will be kept constantly within a proper range, in ordinary winter weather. In severe frosts the steam must, of course, be longer applied. The most extensive steam apparatus for the heating of plant-houses is to be seen at the grounds of Messrs. Loddiges, near Hackney, where glazed houses to the extent of almost 1000 feet in length, and forming three sides of a square, are heated solely by steam from a single boiler, of an oblong shape, measuring eleven feet by four, and made of malleable iron. In narrow houses, intended for green-house plants, a single

steam-pipe is found sufficient. In other houses, of considerable height and breadth, or where a higher temperature is required, as in the palm-house, the steam-flue is made to describe two or three turns. The pipes at Hackney are of iron, of a round shape, and four inches bore. They are flanched and screwed together with bolts and nuts. When they make returns within the house, the joints are formed with iron cement on mil-board dipped in white lead.

Where steam is employed in the principal suite of hot-houses, it will be found easy to convey it also to the melon ground; the melon pits or frames must, however, in this case, have their side-walls of brick.

HOTCOCK'LES, *n. s.* Fr. *hautes coquilles*. A play in which one covers his eyes, and guesses who strikes him.

The chytindra is certainly not our *hotcockles*; for that was by pinching, not by striking.
Arbuthnot and Pope.

As at *hotcockles* once I laid me down,
And felt the weighty hand of many a clown,
Buxoma gave a gentle tap, and I
Quick rose, and read soft mischief in her eye.
Gay.

HOTCH'POT, *n. s.* } Fr. *haché* en *poche*, or
HOTCH'POTCH. } *haché* en *pot*, as Camden has it, as being boiled up in a pot; yet the former corruption is now generally used. A mingled hash; a mixture; a confused mass.

Such patching maketh Littleton's *hotchpot* of our tongue, and, in effect, brings the same rather to a Babellish confusion than any one entire language.
Camden's Remains.

A mixture of many disagreeing colours is ever unpleasant to the eye, and a mixture or *hotchpotch* of many tastes is unpleasant to the taste. *Bacon.*

Nor limbs, nor bones, nor carcass would remain;
But a mash'd heap, a *hotchpotch* of the slain.
Dryden.

HOTMAN (Francis), a learned civilian of the sixteenth century. He first took up the profession of the law at Bourges; but, becoming a protestant, was obliged to retire to Geneva, where he read lectures on civil law with great applause. He also wrote several works against the persecution of heretics. He died at Basil in 1590. His Franco-Gallia is well known, having been translated into English by lord Molesworth. He is said to have been the author of Vindiciæ contra Tyrannos. All his works were printed at Geneva in 1590, in 3 vols. folio.

HOTTENTOTS, a people once inhabiting a considerable district of South-eastern Africa, bordering on the Cape of Good Hope. Their country extended to the territory of the Caffres, and was bounded on the north by the Orange River. Found by Europeans in a very low state of civilisation, they have not only undergone no material improvement, but have been for the greater part reduced to a state of wretched servitude, and are now principally to be found as menial servants within the colony of the Cape.

Considered as a whole they are a singularly insulated people; being as distinct, in their persons and manners, from the negro of the west, as they are from the Caffre of the eastern shores, of this continent. Their number has been lately estimated at about 12,000; the greater part (perhaps 10,000 of them) being found in the Graff Reynal district. Mr. Barrow regards them as approaching the nearest to the Chinese and Tartar races, in their color, and the construction of their features, but particularly in the shape of the eye. The name Hottentot is of uncertain etymology; they call themselves Quaiquæ, and were formerly divided into the distinct hordes of the Attaquas, Hessaquas, Houtiniquas, Namaquas, and Coranas. But, while they retain most of their personal peculiarities, they are annually sinking out of being as a nation.

No distinct *kraals*, or villages, such as Kolben states himself to have found in the neighbourhood of Camtoos River, are now seen in any part of the colony, nor even twenty independent individuals in whole districts where they most abound. They have been wholly subdued by the Dutch, to a sort of service worse than slavery; and have purchased the enjoyment of some few European indulgencies, not only at the price of every thing dear to man in society, but almost at the forfeiture of the necessaries of his physical existence. They are the menials of every sort of establishment at the Cape; and while the slaves, from their price, and the circumstance of their being transferable property, are said to be treated better than many European servants, and to live in much more comfort than the peasantry of many civilised states, the Hottentot, in the remoter parts, is exposed to as cruel usage as any of the West Indian slave-drivers can exercise. If he be killed by his master, society does not seem to have any property in him, and the master feels only the personal loss of his services, as the price of his vengeance. Small shot are frequently fired into his legs by way of punishment; and one of the ordinary modes of chastisement is to lash him with heavy thongs of the hide of a rhinoceros, while his more savage proprietor smokes a certain number of pipes.

From many similar instances of cruelty, recorded by Mr. Barrow, we extract the following: 'We had scarcely parted from these people, when, stopping at a house to feed our horses, we, by accident, observed a young Hottentot woman, with a child in her arms, lying stretched on the ground in a most deplorable condition. She had been cut from head to foot with one of those infernal whips, made from the hide of a rhinoceros or sea cow, known by the name of sambocs, in such a barbarous and unmerciful manner, that there was scarcely a spot on her whole body free from stripes; nor had the sides of the little infant, in clinging to its mother, escaped the strokes of the brutal monster. The only crime alleged against her was the attempt to follow her husband, who was among the number of those of his countrymen that had determined to throw themselves upon the protection of the English.'

A pamphlet, published by Baron de P——, private secretary to governor Jansen, during the peace of Amiens, gives an account of fifteen poor Hottentots going to a farm to beg tobacco, being most inhumanly tortured to extort from them the confession of a crime they never contemplated,

viz. that they came to rob the colonists—and that then they were shot in cold blood. Of another instance, equally inhuman, we give the following translation:—'As soon as the English had abandoned the fort (at Algoa Bay), a boor, named Ferrara, of a Portuguese family, made himself master of it, and kept possession till the arrival of a detachment of troops, which government sent thither, under the command of major Von Gelter. The Caffres, fully persuaded that the late peace had put an end to all disturbances between them, sent to the new commander of the fort a bullock to be slain, as the test of reconciliation and friendship. The Caffre, sent on the occasion, put himself under the guidance of a Hottentot; and Ferrara, by way of returning the kind intention, laid hold of the Caffre and broiled him alive; bound the poor Hottentot to a tree, cut a piece of flesh out of his thigh, made him eat it raw, and then released him.'

Their field occupations are to guard the numerous herds and flocks of these districts, to scour the country with them oftentimes for food or water, and endure all the extremes of the climate on scorching plains and snowy heights, covered by a single sheep-skin. Some, regarded as free by the law, and who were bargained with by the boors from year to year, at the rate of an ox, a couple of cows, or a dozen sheep, for their services, had their wages, up to a late period, stopped upon every pretext that occurred; and the loss of an ox or sheep of the master's was sure to be visited on the poor Hottentot. Should no such accidents occur (in a country peculiarly exposed to them) the wretched hireling would often have a bill for tobacco or spirits brought in against his wages to the full amount. Such was the general lot of the unmarried, and those who were the least wretched in their condition.

Those who have families generally live in straw huts, at a short distance from the farm houses, in which their children are early seen to be running about; and, by an old law of the colony, any Hottentot child who has eaten the bread of a farmer becomes his property until he is twenty-five years of age. This is interpreted in the most literal way, so far as to get the children into their service, but the period of his emancipation the Hottentot is either too ignorant to reckon, too inured to the yoke to feel any desire for its removal, or too old (for he is an aged man at thirty) for such liberty as would be afforded him to be a blessing. This part of the law, therefore, is only resorted to occasionally, when the starving wretch is set adrift on the world without prospect or possession of any kind. This at least is the shocking picture of their condition drawn from several recent accounts; and we can find only general assurances of the improvements introduced by government of late, and of the superior vigilance with which the laws are now administered, as a ground of hope that their situation has been truly ameliorated of late years.

It needs not much philosophy to account for the listless disposition, and gradual diminution of such a race. Entailing nothing but misery on their posterity, they have no rational motives for marriage; and many more of them remain single than is common in uncivilised tribes. Those who marry have not usually more than two or three children, and very many of their women are wholly barren. The mode of confining their marriages to their own immediate kraal or horde has been thought to have a tendency to deteriorate their race; but certain it is, that, in their marriages with each other, the physical powers of nature seem exhausted, and their very name, without some radical change in their condition, seems likely to be soon forgotten. The children of the Hottentot women, who marry Europeans, are, on the other hand, numerous, active, and robust. These are called baastards by the Dutch colonists, and are becoming an important part of the population.

In *personal appearance* the Hottentot has been often caricatured by travellers. His face, generally speaking, is certainly far from what an European would reckon handsome, though it differs materially in different families, the nose being in some particularly flat, and in others as remarkably raised. Their cheek-bones are high, their chin small and pointed, and their eyes placed at a remarkable distance from each other. The general color of their eyes is a deep chestnut, their teeth beautifully white. The color of the skin resembles that of a faded leaf, being of a yellowish-brown, but many are nearly as white as Europeans. The hair, which has the appearance and feel of a hard shoe-brush, grows in singular tufts at a distance from each other, and does not cover the whole surface of the scalp, but, if suffered to grow long, it hangs in the neck, in hard twisted tassels. Their limbs are extremely well-proportioned and delicate, but there is nothing to indicate muscular strength: yet it is rarely that a cripple or deformed person is seen amongst them, and, though not long lived, their health is generally firm. Many of the women, when quite young, might serve as perfect models of the human figure, so exquisite is their form; their hands and feet are small and delicate, and they move in an easy and graceful manner. Their charms, however, are quickly dissipated by child-bearing, and their whole frame undergoes a more complete revolution than that of any other human female. The abdomen protrudes, the breasts grow flaccid, and at last enormously distended, while the posteriors acquire immense masses of fat, that give the whole figure a very awkward appearance, especially in walking. There is another peculiarity in the Hottentot female, which Mr. Barrow fully ascertained to be a natural appendage, both in the Bosjesman women (whom he regards as a part of the same race) and the common Hottentot; the elongation of the nymphæ, from three to five inches and a half.

The Hottentot *dress* is simple, and ill contrived for some of the purposes they seem to have in view. A belt cut from the skin of some animal is fastened round the body of the man, to which is attached a curious kind of a bag in front, made of the skin of a jackal. Behind hangs a triangular piece of dried skin, with the broad part downwards, and designed originally to flap and cool the body, as well, perhaps, as to rid it of insects. A sheep-skin in winter is all the addition that is

ever made to this belt; it is worn with the wool inwards, or outwards, according to the weather, and serves at night for a bed and bedding. The female wears a longer apron attached to the belt in front, made of skin cut into threads, and variously ornamented with shells, metal buttons, glass beads, and other trinkets. The whole of the body behind she covers with a sheep's skin which reaches down to the calf of her leg; and thus attired she makes a singular noise in moving from place to place.

The unctuous matter with which the Hottentots anoint themselves has often been remarked upon. This custom, though filthily practised, is evidently conducive to the suppleness of their skin and their general health in a hot climate. It is suffered to accumulate from month to month, occasionally melting and being removed; or, covered with dust, it gathers a complete black coating which hides the natural color of the skin, except on the face and hands. These are said to be rubbed frequently with the dung of cattle as their best means of clearing off the grease.

The Hottentot is as remarkably patient of hunger as he is voracious in his manner of taking and preparing *food*. In his native state he is content to live on roots, gums, and the larvæ of insects, and sometimes makes bread from the pith of the palm tree; he indulges, however, in animal food as often as he can procure it. An ox is no sooner slain than he rushes upon the carcase with his knife, and slashes out of it an immense steak; this he again divides spirally, as a whip-maker cuts his thongs, by introducing his knife at the edge and bringing it repeatedly round to the middle, until he has converted it into some yards of flesh, which he coils round his hand and throws upon the hot ashes of his wood fire. When the meat is just warmed through, he takes it with both hands, and beginning at one end of the length soon devours the whole, considering the ashes that adhere to it as a substitute for salt. His napkin is equally characteristic; its offices are performed by rubbing his hands on different parts of his person. Ardent spirits and tobacco have been the snares, and are the present curse, of this people. Duped out of their lands by the gratifications of this description which the first Dutch settlers offered them, they retain a passionate fondness for both, as the only sort of enjoyment that relaxes the rigor of their oppression. Scarcely at any other time than when taking them are they seen to smile; and the nocturnal dances, in which the Bosjesman delights, are banished from the customs and recollection of the tribes within the colony. A few musical instruments remain amongst them. A kind of guitar called the gabowie, which consists of three strings, stretched over a hollow piece of wood, with a long handle; a wind instrument, called the gowra, made of a piece of gut or sinew twisted into a cord, and fastened to a wooden pipe about three feet long; and a flute made of the bark of trees.

The *arts* practised amongst the Hottentots are few; comprising only the sewing of skins together for their winter dress; the manufacturing of a coarse kind of earthenware; and the preparation of their weapons, the hassagai or javelin, and the bow and arrow. All the tribes are good marksmen; and those that are free, and who occasionally resort to other tribes on the borders, are still very dexterous in the use of their ancient means of warfare. The hassagai is made of a head of iron, about a foot in length, attached to a shaft of wood about four feet long, and is thrown by the finger and thumb, grasping it firmly in the middle. The bow is a plain piece of wood, sometimes tapered at the ends, and measuring about a yard in length. The string is composed of the muscles of animals of the antelope species, twisted into a cord; and the stem of an aloe forms a quiver for the arrows. These are not above two feet long, and consist of a reed, into one end of which is inserted a piece of hard bone, about four inches long, and fixed by strings of gut to a small piece of iron having a triangular point. These strings contain the poison with which they are frequently armed, and which has the appearance and consistence of a sort of varnish. They also conceal a piece of quill pointed toward the opposite end of the arrow, and designed to lacerate the wound it makes. The Hottentot gathers this poison from several vegetables, and sometimes from the serpents of his native shores. The latter, indeed, mixed with the juices of certain bulbous rooted plants, is his principal resource; he lays it on with a brush which he keeps in his quiver, which is furnished with about a dozen arrows, and a sand-stone to sharpen the points. If he has killed an animal, which he wants for eating, with one of these arrows, he immediately cuts away the flesh that surrounds the wound, and squeezes the blood as much as possible from the body, when it is found to be perfectly harmless food.

His *knowledge* of physical nature is very confined. He only distinguishes among the heavenly bodies, the sun and moon, and the stars generally; denoting the time of day in which any particular event happened by pointing to the place which the sun then occupied in the heavens. Past events they pile one upon another, when they have to reckon beyond a day, and state that such a circumstance transpired before some other, in a very confused way. Mr. Barrow declares that he could find none of them in the remote part of the colony who could count beyond five, or put two numbers together without the aid of the fingers. The seasons they reckon by the moons before and after the roots of the iris edulis are fit for food: but they cannot fairly be reckoned as a stupid people; they learn the Dutch language with great facility; and perform any kind of domestic service with as much address as a European servant.

In their general *character*, indeed, considering them as an uncivilised people, the observations of all recent travellers have united to place them high. Partaking for ages the phlegmatic indolence of their Dutch masters, who are fond of a train of servants to perform the duties of a few, they exhibit at Cape Town an inveterate habit of sloth; but where any sort of effort has been made to cultivate their powers, and give them a

feeling of hope and liberty in their occupations, they have been found active, intelligent, and useful. Better soldiers are not trained from the lower orders of any country. A corps of about 500 of them had been formed into a regiment in the Dutch service prior to the British attack on this settlement in 1795, and they are said to have acted with more spirit on that occasion than any other part of the troops. This regiment was afterwards adopted into the British service by Sir James Craig, and additional numbers enlisted into it. 'It is therefore, with the opportunity of knowing them well,' says this officer, 'that I venture to pronounce them an intelligent race of men. All who bear arms exercise well, and understand immediately, and perfectly, whatever they are taught to perform. Many of them speak English tolerably well. We were told that so great was their propensity to drunkenness, we should never be able to reduce them to order or discipline; and that the habit of roving was so rooted in their disposition, we must expect the whole corps would desert the moment they had received their clothing. With respect to the first, I do not find they are more given to the vice of drinking than our own people; and, as to their pretended propensity to roving, that charge is fully confuted by the circumstance of only one man having left us since I first adopted the measure of assembling them, and he was urged to this step from having accidentally lost his firelock. Of all the qualities,' he adds, 'that can be ascribed to a Hottentot, it will be little expected that I should expatiate upon their cleanliness; and yet it is certain that, at this moment, our Hottentot parade would not suffer in a comparison with that of some of our regular regiments. Their clothing may, perhaps, have suffered more than it ought to have done, in the time since it was issued to them, from their ignorance of the means of preserving it; but those articles which are capable of being kept clean by washing, together with their arms and accoutrements, which they have been taught to keep bright, are in good order. They are likewise cleanly in their persons; the practice of smearing themselves with grease being entirely left off. I have frequently observed them washing themselves in a rivulet, where they could have in view no other object but cleanliness.'

The efforts of the Moravians would seem to confirm this account of their capabilities as a people. No congregation in England appears more desirous to be neat and clean on a Sunday than the Hottentots at the churches of their settlements. Other missionaries have recently endeavoured to ameliorate the condition of some of the wilder tribes who inhabit the north and north-west of the colony, and some degree of success appears to have resulted from an experiment of this kind even among the Bosjesman part of their race. On the whole they will be regarded by the philanthropist as an amiable and most interesting people. To much faithfulness and honesty they add a decided regard to truth in all their statements, and a remarkable frankness when accused of faults. To each other they are kind and generous; much attached to children; patient of pain and injuries; and almost entirely devoid of the cunning and malignity of savage tribes. In their field occupations they are uncommonly expert, and seem to have a sort of peculiar instinct in tracing a passage over the deserts; in following game, which they can discover at a great distance; and with regard to the general resources of their country. They will even follow the flight of a bee with the eye to an incredible length of way, and can distinguish the foot marks of their master or companions from a thousand with which they may be intermingled. A better race of agricultural servants, to be cheaply obtained, and permanently attached to a settler's household, no man can desire to find.

It is remarkable that all traces of a national religion are entirely lost among this people. Kolben asserts, that in his time they believed in a deity whom they described 'as an excellent man, who does ill to no one, and lives far beyond the moon; but that they regarded him, like some modern Christians, as too remote a being to be worshipped. When the moon is at the full they made sacrifices to her, he adds, accompanied with prayer for favorable seasons, with dancing, leaping, and violent grimaces. They had also a malignant divinity, little, deformed, and ill-natured, to whom they offered sacrifices by way of softening his temper. Modern travellers find none of these notions or usages remaining. Marriages and funerals are equally conducted without any sort of ceremony. On the death of a chief, or near relation, they shave their heads, but inter all their dead without any further observance than piling a heap of stones over the grave, and being very scrupulous ever after not to pass it without throwing on an additional stone. The heads of young girls are always shaved on their showing the first signs of maturity, their ornaments taken off, and the whole person carefully cleaned. They kill their cattle, ordinarily, by piercing the spinal marrow, immediately behind the horns, and cutting the throat to let off the blood. They also, toward the north of the colony, observe a strange custom of the South Sea islanders, as a remedy in some diseases, that of cutting off the first joint of the little finger. Beyond these there are no customs of this people of any particular note.

Their *language* is of the most extraordinary construction. A sudden retraction or clacking of the tongue, not unlike the noise of a hen in a farm yard, may be said to constitute its chief peculiarity, and will describe their mode of pronouncing most of their monosyllables, and the leading syllable of compound words. This sound is varied according to the signification of the word about to be uttered; for the same sound, with the dental, will have a very different meaning with the palatial retraction of the tongue. The noise of the former is precisely that by which we commonly express disappointment or impatience; and is not an insulated movement, which precedes or follows a syllable, but at the same moment is incorporated and thrown out with it. The Hottentot seems thus to have performed all that is essential to language by a very limited number of compound

ords, aided by a peculiar mode of enunciating iem. He does not make a bad imitation of ature in some cases. We may easily trace the oaking of the frog in kroaak, or kraaie; the wing of the ox in 'mnuo; the mewling of the t in meau; the neighing of the horse in hahæ; id the breaking of the sea upon the shore in rroo. On first seeing a gun they called it hoo, and will pronounce this word so emphaally to a stranger that he cannot mistake their eaning. The ka is thrown out with a strong latial stroke of the tongue, in imitation of that the flint against the cover of the pan; and ith outstretched lips, a full mouth, and proged sound, the boo sends forth the report. t first it appears next to impossible for an uropean to acquire this language, but, as the ief difficulty arises from a proper action of the ngue, it is soon overcome. Many of the Dutch easantry not only speak it, but introduce into eir own language a similar clacking of the gan.

We add a short vocabulary of some principal ords, and what is commonly called the Lord's ayer, as a specimen of the language.

rrie,	the sun.	Hoonooei,	lightning
a,	the moon.	Qua,	wind.
oro,	the stars.	Tookai,	rain.
oo,	the earth.	Quaina,	a man.
om,	air or light.	Quaisha,	a woman.
,	fire.	Toona,	a dog.
am,	water.	Hasai,	to-day.
eoonoo,	thunder.	Quatrie,	to-morrow.

NUMERALS.

Quæ,	one.
Kam,	two.
Gona,	three.
Haka,	four.
Gose,	five.

THE LORD'S PRAYER.

Cita eip—ne nanoop na—sa ons anooke—
ur Father—the heaven in—thy name hallowed be—
koop ha — sa ei i —hoop ei—ne
kingdom come—thy will be done—earth on—the
noop na koommi—cita ceeorobe bersp mata
ven in as —our daily bread give us
neei i cita soorootikoo oobekata—cita
his day and our debts forgive us —our
rooti aukoo citee oobeka koomi— i ta
ebted men we forgive as —and not
wa keikata —gawe coreta eip ga— o
ptation lead in us—but deliver us evil from—for
ne koop ke i de keip — i de isa —
e the kingdom is and the power—and the glory—
amo.
ternity.

HOTTENTOT'S HOLLAND, a small interior dist of the colony of the Cape of Good Hope, ending inland from False Bay. It produces e, brandy, poultry, fruits, &c., for the Cape rket.

HOTTINGER (John Henry), a native of Zu in Switzerland. He was born in 1620, and ght the oriental languages at Leyden. He s drowned with part of his family, in the river Lemit, in 1667. He wrote a prodigious number of works; the principal of which are, 1. Exercitationes Anti-Morinianæ de Pentateucho Samaritano, 4to.; in which he defends the Hebrew text against father Morin. 2. Historia Orientalis 4to. 3. Bibliothecarius quadripartitus. 4. Thesaurus Philologicus Sacræ Scripturæ, 4to. 5. Historia Ecclesiastica. 6. Promptuarium, sive Bibliotheca Orientalis, 4to.

HOTTONIA, water violet; a genus of the monogynia order, and pentandria class of plants; natural order twenty-first, preciæ. COR. salver-shaped; the stamina placed in the tube of the corolla: CAPS. is unilocular. There is but one species, viz.

H. palustris, with a naked stalk. It grows naturally in the standing waters in many parts of England. The leaves, which are for the most part immersed in water, are finely winged and flat like most of the sea plants, and at the bottom have long fibrous roots, which strike into the mud: the flower-stalks rise five or six inches above the water, and towards the top have two or three whorles of purple flowers, terminated by a small cluster of the same. These flowers have the appearance of those of the stock gilliflower, and make a pretty appearance on the surface of the water. It may be propagated in deep standing waters by procuring its seeds when they are ripe, from the places of their natural growth; which should be immediately dropped into the water in those places where they are designed to grow, the spring following they will appear; and, if they are not disturbed, they will soon propagate themselves in great plenty. Cows eat this plant; swine refuse it.

HOUBIGANT (Charles Francis), a learned divine, born at Paris in 1686. He was celebrated for his knowledge of the Hebrew; and translated the whole of the Old Testament from that language into Latin: published with notes at Paris in 1753, in 4 vols. folio. He also translated some English works into French. He died in 1783.

HOUBRAKEN (Jacob), a celebrated portrait engraver. His works are distinguished by an admirable softness and delicacy of execution. They are pretty numerous; and, most of them being for English publications, are sufficiently known in this country. The greater part of the portraits of illustrious men published in London by I. and R. Knapton, were his workmanship.

HOVE, the preterite of heave; hoven, part. passive.

Tom Piper hath *hoven* and puffed up cheeks;
If cheese be so *hoven*, make Cisse to seek creeks.
Tusser.

HOVEDON (Roger de), of an illustrious family in Yorkshire, is said to have been born at Hovedon, now called Howdon, in the reign of Henry I. He studied the law, and became domestic chaplain to Henry II., who employed him to transact several ecclesiastical affairs, in which he acquitted himself with honor. His most meritorious work was his Annals of England, from A. D. 731, when Bede's ecclesiastical history ends, to A. D. 1202. It is one of the most voluminous of our ancient histories, and is more valuable for

the sincerity with which it is written, and the great variety of facts it contains, than for its style or arrangement.

HOV'EL, *n. s.* & *v. a.* Sax. þoꝛe. Diminutive of house. A shed open on all sides, and covered over head; a mean habitation: to take shelter in a hovel.

So likewise a *hovel* will serve for a roome,
To stack on the pease, when harvest shall come.
Tusser.

And was't thou fain, poor father,
To *hovel* thee with swine and rogues forlorn,
In short and musty straw? *Shakspeare.*

If you make a *hovel*, thatched, over some quantity of ground, plank the ground over, and it will breed saltpetre. *Bacon.*

Your hay it is mowed, your corn it is reaped,
Your barns will be full, and your *hovels* heaped.
Dryden.

The men clamber up the declivities, dragging their kine with them, where they feed them and milk them, and do all the dairy-work in such sorry *hovels* and sheds as they build to inhabit during the summer.
Ray on the Creation.

HOVEN CATTLE, in husbandry, black cattle or sheep swollen by eating too voraciously of clover, on any other succulent food. The animal, when not quickly relieved, dies in half an hour. An extraordinary quantity of air being taken down with the clover, in its passage from the intestines upwards, forces the broad leaves of the clover before it, till they close up the passage at the entrance, and thus prevent the wind from returning. The common method of relief is to stab the beast into the paunch, but this is always dangerous and often fatal. Mr. Richard Eager of Graffham, near Guildford, received fifty guineas from the Society for the Encouragement of Arts, &c., for publishing the following method practised by him for curing hoven cattle:—'Let the farmer have always ready smooth knobs of wood, of different sizes, fixed to the end of a flexible cane, which for oxen should be at least six feet long, and for sheep three feet. When a beast is hoven let one person take hold of him by the nostril and one horn; let another hold his tongue fast in one hand, putting the cane down his throat with the other. Be careful not to let the animal get the knob of the cane between his grinders; observe also to put the cane far enough down: the whole length will not injure. You will find the obstacle at the entrance of the paunch: push the cone hard, and when you perceive a smell to come from the paunch, and the animal's body to sink, the cure is performed.'

HOV'ER, *v. n.* Welsh *hovio*; Teut. *hie ofer*. To hang over; to hang in the air overhead; to stand in suspense or expectation; to wander about one place.

O Night! alas! why wilt thou ore us *hove*
As long as Alcmena laie with Jove!
Chaucer. Troilus and Creseide.

The landlord will no longer covenant with him; for that he daily looketh after change and alteration, and *hovereth* in expectation of new worlds.
Spenser on Ireland.

Some fiery devil *hovers* in the sky,
And pours down mischief.
Shakspeare. King John.

Ah, my poor princes! ah, my tender babes!
If yet your gentle souls fly in the air,
And be not fixed in doom perpetual,
Hover about me with your airy wings,
And hear your mother's lamentation.
Id. Richard III.

She that will but now discover
Where the winged wag doth *hover*,
Shall, to-night, receive a kiss,
How, or where, herself would wish. *Jonson.*

A *hovering* mist came swimming o'er his sight,
And sealed his eyes in everlasting night. *Dryden.*

The truth and certainty is seen, and the mind fully possesses itself of it; in the other, it only *hovers* about it. *Locke.*

We see so warlike a prince at the head of so great an army, *hovering* on the borders of our confederates.
Addison.

Great flights of birds are *hovering* about the bridge, and settling upon it. *Id.*

'Till as the earthly part decays and falls,
The captive breaks her prison's mouldering walls;
Hovers a-while upon the sad remains,
Which now the pile, or sepulchre, contains,
And thence with liberty unbounded flies,
Impatient to regain her native skies. *Prior.*

Some less refined, beneath the moon's pale light,
Hover, and catch the shooting stars by night. *Pope.*

I alone,
With bended bow, and quiver full of arrows,
Hovered about the enemy, and marked
The road he took. *Home's Douglas.*

HOUGH, *n. s.* & *v. a.* Sax. þoȝ; Fr. *hue*. The lower part of the thigh; an adz; a hoe: to hamstring; to disable by cutting the sinews; to cut up; to hawk.

Thou shalt *hough* their horses. *Josh* ii. 6.

Blood shall be from the sword unto the belly, and dung of men unto the camel's *hough*.
2 *Esd.* xiii. 36.

Did they really believe that a man, by *houghs* and an axe, could cut a god out of a tree? *Stillingfleet.*

Neither could we *hough* or spit from us; much less could we sneeze or cough. *Grew.*

HOUGH, in the manege, is the joint of the hind leg of a beast which connects the thigh to the leg.

HOUGH (John), a prelate of the church of England justly celebrated for his spirited and prudent resistance to the arbitrary measures of James II., with regard to the presidency of Magdalen College Oxford. He was the son of a citizen of London, descended from the Houghs of Cheshire, and born in 1650. He received his education at Magdalen College, of which he became a fellow in 1675. In 1681 he was appointed chaplain to the duke of Ormond, lord lieutenant of Ireland; and returned to England the next year with that nobleman; through whose influence he was made a prebendary of Westminster, and presented to the living of Tempsford, Bedfordshire. He graduated B. D. in 1687, and soon after encouraged the fellows of his college to reject the mandamus of the king in favor of one Anthony Farmer, who had not been fellow either of Magdalen or of New College, as required by the statutes. As a statutable majority now concurred in electing Mr. Hough president, he accepted the office in defiance of the royal order; his election was confirmed by the bishop of Winchester, the visitor of the college, and he was admitted D.D. This was the commencement of that clerical resistance to the tyrannical proceedings of James,

so creditable to the established church, and which so materially contributed to the revolution of 1688. In vain did the king's ecclesiastical commissioners deprive him in form of the presidentship, and install Dr. Parker, Catholic bishop of Oxford, by proxy, in his room. The fellows refused to sign a submission to their new president, and to the number of twenty-five, with Dr. Hough, they were in consequence expelled the college, and declared incapable of any ecclesiastical dignity or benefice. James, however, on the appearance of the prince of Orange's declaration, meanly retracted these illegal proceedings, and restored our courageous divine and his companions to their rights. In April, 1690, Dr. Hough was made bishop of Oxford: and, in 1699, he was translated to the see of Litchfield and Coventry. Lastly, in 1717, he removed to that of Worcester, which he held for twenty-six years. His death took place on the 8th of March 1743. He was a munificent benefactor both to Magdalen College and his various sees, and his private charities were great. Dr. Hough only published during his life-time eight occasional sermons, and left strict orders that nothing should be printed from his MSS.

HOUGHTON, Major, celebrated for his travels in the interior of Africa, was a captain in the sixty-ninth regiment of foot, and, in 1779, acted as fort-major in the island of Goree, under general Rooke. In 1789, hearing that the African Association wished to penetrate to the Niger by the way of Gambia, he offered his services to execute their plan. His offer being accepted he left England on the 16th of October 1790, and arrived at the mouth of the Gambia on the 10th of November, where he was kindly received by the king of Barra, whom he had formerly visited when at Goree, and who offered him all the assistance in his power. From this place he proceeded to Junkiconda, and thence to Medina, where he met with an equally favorable reception from the king of Woolli, of which kingdom Medina is capital: he next journeyed 150 miles to the country of the Foolies; thence to Bondou; and thence to Ferbanna, the capital of Bambouk, where he was seized with a fever and delirium, but met with the utmost kindness and humanity from the king and his subjects. From Ferbanna he intended to travel to Tombucto and Houssa, the utmost limits of the proposed journey; but, having reached Jarra, he fell in with some Moors, who were travelling to Tisheet, a place in the Great Desert, who, under pretence of conducting him on his journey, robbed him of every thing and left him to perish at a place called Farra; where Mungo Park (the latest traveller to Africa) was shown the spot to which his body had been dragged, but could not learn whether he died of hunger or was murdered by the Mahommedan Moors. Thus perished, in the prime of life, a man whose travels and enquiries greatly enlarged the sphere of European knowledge respecting Africa, and who, had he lived, would have continued to throw much light on these unknown countries. His last despatch to the association was dated from Ferbanna, July 14th 1791.

HOULIERES (Antoniette de Lagarde des), a French lady, whose poetry is highly esteemed. She was born at Paris in 1638. She was the pupil of Henault, and adopted his sceptical principles. Her works and those of her daughter have been collected and printed together. The daughter obtained the poetic prize in the French Academy against Fontenelle. Both these ladies were members of the academy of Ricovatri; the mother was also a member of the academy of Arles. Her life is prefixed to her works in the Paris edition of 1747, in 2 vols. 12mo. She died in 1694; and her daughter in 1718.

HOULT, *n. s.* Sax. þolt. A small wood. Obsolete.

> Or as the wind, in *hoults* and shady greaves,
> A murmur makes among the boughs and leaves.
> *Fairfax.*

HOUND, *n. s.* & *v. a.*
Hound'-fish, *n. s.*
Hounds'tongue, *n. s.*
Hound'tree, *n. s.*
} Sax. þund; Dan. Swed. and Teutonic, *hund*; Scot. *hund*. A dog used in the chase. Hound, to set on chase; to hunt; to pursue. Hound-fish, a kind of fish. Houndstongue, a plant. Hound-tree, a kind of tree.

> And I herde, goynge up and downe,
> Men, horses, *houndes*, and other thinge;
> And al men speken of huntinge.
> *Chaucer. Boke of the Duchesse.*

> This duk wol have a cours at him, or twey,
> With *houndes* swiche as him lust to commande.
> *Id. The Knightes Tale.*

> *Hounds* and greyhounds, mungrels, spaniels, curs,
> Are cleped all by the name of dogs.
> *Shakspeare. Macbeth.*

God is said to harden the heart permissively, but not operatively nor effectively; as he who only lets loose a greyhound out of the slip, is said to *hound* him at the hare. *Bramhall.*

> Jason threw, but failed to wound
> The boar, and slew an undeserving *hound*,
> And through the dog the dart was nailed to ground.
> *Dryden.*

If the wolves had been *hounded* by tygers, they should have worried them. *L'Estrange.*

> The kind spaniel and the faithful *hound*,
> Likest that fox in shape and species found,
> Pursues the noted path and covets home. *Prior.*

> Let hares and *hounds* in coupling straps unite,
> The clacking hen make friendship with the kite.
> *Gay.*

Hound. See Canis. Among sportsmen it is generally understood that hounds of the middle size are the most proper, all animals of that description being stronger than such as are either very small or very large. The shape ought to be particularly attended to; for, if the hound be not well proportioned, he can neither run fast nor do much work. His legs ought to be straight, his feet round and not very large, his shoulders back, his breast rather wide than narrow, his chest deep, his back broad, his head small, his neck thin, his tail thick and bushy and well carried. None of those young hounds which are out at the elbows, or such as are weak from the knee to the foot, should ever be taken into the pack. That the pack may look well the hounds should be as much as possible of a size: and, if they be also handsome, the pack will then be perfect. This, however, contributes nothing to the goodness of a pack; for very unhandsome

packs, consisting of hounds entirely different in size and color, often afford very good sport. It is only necessary that they should run well together; to which indeed a uniformity in size and shape seems to contribute. The pack that can run ten miles, or any other considerable space, in the shortest time, may be said to go fastest, though the hounds taken separately might be considerably inferior to others in swiftness. A pack of hounds, considered in a collective body, go fast in proportion to the excellence of their noses and the head they carry. Packs composed of hounds of various kinds seldom run well. When the packs are very large the hounds are seldom sufficiently hunted to be good; twenty or thirty couple therefore, or at most forty, will be sufficient for the keenest sportsman in this country, as thus he may be enabled to hunt three or even four times a week. The number of hounds to be kept must, however, in a considerable degree, depend on the strength of the pack and the country in which they hunt. They should be left at home as seldom as possible: and too many old hounds should not be kept. None ought to be kept above five or six seasons, though this also is somewhat uncertain, as we have no rule for judging how long a hound will last. In breeding of hounds considerable attention ought to be paid to the dog from which you breed. All such are to be rejected as have a tender nose, as are babblers or skirters. An old dog should never be put to an old bitch. January, February, and March, are the best months for breeding; late puppies seldom thrive. After the females begin to grow big with young, it will not be proper to let them hunt any more, or indeed to remain for a much longer time in the kennel. Sometimes these animals will have an extraordinary number of whelps. Mr. Beckford informs us, that he has known a bitch have fifteen puppies at a litter; and he assures us, that a friend of his informed him, that a hound in his pack brought forth sixteen, all alive. In these cases it is proper to put some of the puppies to another bitch, if you want to keep them all; but, if any are destroyed, the best colored ought to be kept. The bitches should not only have plenty of flesh, but milk also; and the puppies should not be taken from them till they are able to take care of themselves: their mothers will be relieved when they learn to lap milk, which they will do in a short time. After the puppies are taken away from their mother, the litter should have three purging balls given them, one every other morning, and plenty of whey the intermediate day. If a bitch bring only one or two puppies, and you have another that will take them, by putting the puppies to her the former will soon be fit to hunt again. She should, however, be first physicked, and it will also be of service to anoint her dugs with brandy and water. Whelps are very liable to the distemper, to which dogs in general are subject, and which frequently makes great havock among them at their walks. Young hounds should be fed twice a-day, as they seldom take kindly to the kennel-meat at first, and the distemper is most apt to seize them at this time. It is impossible to determine how many young hounds ought to be bred in order to keep up the pack, as this depends altogether on contingencies. The deficiencies of one year must be supplied by the next; but it is probable, that from thirty to thirty-five couple of old hounds, and from eight to thirty-five couple of young ones, will answer the purpose, where no more than forty couple are to be kept. A considerable number, however, ought always to be bred; for it is undoubtedly and evidently true, that those who breed the greatest number of hounds must expect the best pack. After the hounds have become acquainted with the huntsman, and answer to their names, they ought to be coupled, and walked out among sheep; and two dogs should not be coupled together, when you can avoid it. As young hounds are awkward at first, a few ought only to be set out at a time with people on foot, and they will soon afterwards follow a horse. With regard to the first entering of hounds to a scent, our author gives the following directions:—'You had better enter them at their own game; it will save you much trouble afterwards. Many dogs, I believe, like that scent best which they were first blooded to: but, be this as it may, it is most certainly reasonable to use them to that which it is intended they should hunt. Hounds ought to be entered as soon as possible, though the time must depend on the nature of the country in which they are. In corn countries hunting may not be practicable till the corn is cut down; but you may begin sooner in grass countries, and at any time in woodlands. Hounds at their first entrance cannot be encouraged too much. When they are become handy, love a scent, and begin to know what is right, it will then be soon enough to chastise them for what is wrong; in which case one severe beating will save a great deal of trouble. When a hound is flogged, the whipper-in should make use of his voice as well as his whip. They should be low in flesh when you begin to hunt; the ground being generally hard at that time, so that they are very liable to be shaken. Sometimes the huntsman turns down a cat before them, which they kill; and, when the time of hunting approaches, he turns out young foxes or badgers; taking out some of the most steady of his old hounds to lead on the young ones. Small covers and furze brakes are drawn with them to use them to a halloo, and to teach them obedience. If they find improper game, and hunt it, they are stopped and brought back; and, as long as they will stop at a rate, they are not chastised. To render fox-hunting complete, no young hounds should be taken into the pack the first season; a requisite too expensive for most sportsmen. The pack should consist of about forty couple of hounds, that have hunted one, two, three, four, or five seasons. The young pack should consist of about twenty couple of young hounds, and an equal number of old ones. They should have a separate establishment, and the two kennels should not be too near one another. When the season is over, the best of the young hounds should be taken into the pack, and the draft of old ones exchanged for them. Many must be bred to enable a sportsman to take in twenty couple of young hounds

every season. It will always be easy to keep up the number of old hounds; for, when your own draft is not sufficient, drafts from other packs may be obtained, and at a small expense. When young hounds are hunted together for the first season, and have not a sufficient number of old ones along with them, it does more harm than good.'

HOUP, *n. s.* Lat. *upupa.* The pewet or lapwing.

HOU-QUANG, a province of China, in the centre of the empire; divided into two parts by the Yang-tse-kiang. The greater part of it is level, and watered by lakes, canals, and rivers; which render it so fertile that the Chinese call it the storehouse of the empire; and it is a saying among them, that 'the abundance of Kiang-si could furnish all China with a breakfast; but the province of Hou-quang could maintain all its inhabitants. Some princes of the race of Hong-vou formerly resided in this province; but that family was entirely destroyed by the Tartars when they conquered China. The people here boast much of their cotton cloths, simples, gold mines, wax, and paper made of the bamboo-reed. The northern part of the province contains eight cities of the first class, and sixty of the second and third. The southern comprehends seven of the first class, and fifty-four of the second and third, exclusive of forts, towns, and villages, which are numerous.

HOUR, *n. s.* / HOUR'GLASS, *n. s.* / HOUR'LY, *adj.* & *adv.* / HOUR'PLATE, *n. s.* / HOURS, *n. s.* } Fr. *heure;* Latin *hora;* Gr. ὡρα. The twenty-fourth part of a natural day; the space of sixty minutes; a particular time; the time as marked by the clock. Hourglass, a glass filled with sand, which, by running through a narrow hole, marks the time; the space of time. Hourly, happening every hour; frequently; often repeated. Hour-plate, the dial; the plate on which the hours pointed by the hand of a clock are inscribed. Hours, personification of imaginary beings.

Ther shal not perishe an here of his hed, ne a moment of an *houre* ne shall not perishe of his time, that he ne shal yeve thereof a rekening.
Chaucer. The Persones Tale.

The thridde *houre* inequal that Palamon
Began to Venus' temple for to gon,
Up rose the Sonne and up Emelie,
And to the temple of Diane gan hie.
Id. The Knightes Tale.

Whose silver gates (by which there sate an hory
Old aged sire with *hower-glasse* in hand
Night tyme) she entred, were he lief or sory.
Spenser's Faerie Queene.

Then came the *Howres*, faire of high love,
And timely Night, the which were all endewed
With wondrous beauty fit to kindle love;
But they were virgins all, and love eschewed
That might forslack the charge to them fore-shewed
By mighty love; who did them porters make
Of heaven's gate (whence all the gods issued)
Which they did dayly watch and nightly wake
By even turnes, ne ever did their charge forsake.
Id.

Vexation almost stops my breath,
That sundered friends greet in the *hour* of death.
Shakspeare.

See the minutes how they run:
How many makes the *hour* full compleat,
How many *hours* bring about the day,
How many days will finish up the year,
How many years a mortal man may live.
Shakspeare.

The *hour* runs through the roughest day. *Id.*

Our estate may not endure
Hazard so near us, as doth *hourly* grow
Out of his lunacies. *Id. Hamlet.*

When we can intreat an *hour* to serve,
We'll spend it in some words upon that business,
If you would grant the time. *Id. Macbeth.*

In sickness, the time will seem longer without a clock or *hourglass* than with it; for the mind doth value every moment. *Bacon.*

We, within the *hourglass* of two months, have won one town, and overthrown great forces in the field.
Id.

Eliza till this *hour* might reign,
Had she not evil counsels ta'en;
Fundamental laws she broke,
And still new favourites she chose,
Till up in arms my passions rose,
And cast away her yoke. *Cowley.*

They with ceaseless cry
Surround me, as thou sawest; *hourly* conceived,
And *hourly* born, with sorrow infinite
To me! *Milton's Paradise Lost.*

Next morning, known to be a morning better by the *hourglass* than the day's clearness. *Sidney.*

Great was their strife, which *hourly* was renewed,
Till each with mortal hate his rival viewed.
Dryden.

Alcyone
Computes how many nights he had been gone,
Observes the waining moon with *hourly* view,
Numbers her age, and wishes for a new. *Id.*

Love reckons *hours* for months, and days for years,
And every little absence is an age. *Id.*

Shake not his *hourglass*, when his hasty sand
Is ebbing to the last. *Id. Spanish Friar.*

The conscious wretch must all his arts reveal,
From the first moment of his vital breath,
To his last *hour* of unrepenting death. *Id. Æneid.*

If eyes could not view the hand, and the characters of the *hourplate*, and thereby at a distance see what o'clock it was, their owner could not be much benefited by that acuteness. *Locke.*

Our neighbour let her floor to a genteel man, who kept good *hours.* *Tatler.*

They are as loud any *hour* of the morning, as our own countrymen at midnight. *Addison.*

We must live in *hourly* expectation of having those troops recalled, which they now leave with us.
Swift.

No more in vain conjecture let me wear
My *hours* away, but seek the hermit's cell;
'Tis he my doubt can clear, perhaps my care dispel.
Beattie.

Thine are the *hours* and days when both are cheering
And innocent! *Byron.*

Within few *hours* I shall not call in vain—
Yet in this *hour* I dread the thing I dare:
Until this *hour* I never shrunk to gaze
On spirit good or evil, now I tremble,
And feel a strange cold thaw about my heart.
Id. Manfred.

I have epigrams that want nothing but the sting; conundrums, that need nothing but an explanation; rebusses and acrostics, that will be complete with the addition of the name only. These being in great request may be had at an *hour's* warning.
Canning. Microcosm.

Hour. An hour, with us, is a measure of time, equal to a twenty-fourth part of the natural day, or the duration of the twenty-fourth part of the earth's diurnal rotation. It answers nearly to fifteen degrees of the equator. It is divided into sixty minutes; the minute into sixty seconds, &c. The division of the day is very ancient; as it is shown by Kircher. The most ancient hour was the twelfth part of the day. Herodotus, lib. ii., says that the Greeks learnt from the Egyptians the method of dividing the day into twelve parts. The division of the day into twenty-four hours was not known to the Romans before the first Punic war. Till that time they only regulated their days by the rising and setting of the sun. They divided the twelve hours of the day and night into four watches, containing three hours each. See Chronology.

Hours, horæ, in the Romish church, are certain prayers performed at stated times of the day; as matins, vespers, lauds, &c. The less hours are, prime, tierce, sixth, and none. They are called canonical hours, being rehearsed at certain hours prescribed by the canons, in commemoration of the mysteries accomplished at those hours; these hours were anciently called also courses, cursus. The first constitution, enjoining the observation of the canonical hours, is of the ninth century, in a capitular of Heito, bishop of Basil, enjoining the priests never to be absent at the canonical hours by day or night.

HOURIS, in Mahommedan theology, females promised to the faithful in paradise; formed for this purpose, with eternal beauty and undecaying charms.

HOUSATONICK, a river of Connecticut, United States, which rises in Berkshire county, and runs a south-east course along the whole breadth of the state; emptying itself into Long Island Sound, between Stratford and Milford. It is navigable to Derby about twelve miles; and above that is well adapted for machinery. A bar of shells at its mouth obstructs the navigation of large vessels. Between Salisbury and Canaan is a cataract, where the whole water of the river, which is 150 yards wide, falls sixty feet perpendicularly.

HOUSE, *n. s.*, *v. a.* & *v. n.* } Sax. þūr; Bel.
Hous'ing, *n. s.* } *huys*; Scott. *huse*.
Hous'ling, *adj.* } A place of human
Houss, *n. s.* } abode; a place

where studious or religious persons live in common, as a monastery; a college: the manner of living; station of a planet astrologically considered; family of ancestors; descendants and kindred; a body of parliament assembled, as lords or commons. House, to harbour; shelter; to reside, or take up one's abode; to have an astrological station in the heavens. Housing, quantity of inhabited building. From Fr. *houseaux*, *heuses*, or *houses*. Cloth originally used to keep off dirt, now added to saddles as ornamental. Housling, a house warming; something provided for entertainment at first entrance into a house. Houss has the same meaning with housing, but is an obsolete word. House is frequently used in composition, as in the examples which follow:—

I wol you all the shape devise
Of *House* and cite; and al the wise
Howe I gan to this place approche.
Chaucer. The House of Fame.

In the subarbes of the town, of chambres and of halles,
And all other *howseing* that to a lord belongit;
Wos noon wythyn the cete, ne noon so wele behongit
With docers of highe pryse, ne wallid so aboute,
As was a Senatours *hous* wythyn and eke wythoute.
Id. The Merchantes Second Tale.

Ne suffer it to *house* there half a day.
Hubberd's Tale.

Oh, can your counsel his despair defer,
Who now is *housed* in his sepulchre? *Sandys.*

His own two hands the holy knot did knit,
That none but death for ever can divide;
His own two hands, for such a turn most fit,
The *housling* fire did kindle and provide.
Faerie Queene.

The red rose and the white are on his face,
The fatal colours of our striving *houses*.
Shakspeare.

Graze where you will, you shall not *house* with me.
Id.

Slander lives upon succession,
For ever *housed* where it gets possession. *Id.*

Houses are built to live in, not to look on; therefore let use be preferred before uniformity, except where both may be had. *Bacon.*

As we *house* not country plants to save them, so we may *house* our own to forward them. *Id.*

Mere cottagers are but *housed* beggars. *Id.*

Upon the North-sea a valley *houseth* a gentleman, who hath worn out his former name. *Carew.*

Nor were the crimes objected against him so clear, as to give convincing satisfaction to the major part of both *houses*, especially that of the lords.
King Charles.

Summers three times eight, save one,
She had told; alas! too soon,
After so short time of breath,
To *house* with darkness and with death. *Milton.*

These must assist her in her countermines
To overthrow the Derby-*house* designs. *Marvell.*

Palladius wished him to *house* all the Helots.
Sidney.

Pure spiritual substances we cannot converse with, therefore have need of means of communication, which some make to be the celestial *houses*: those who are for the celestial *houses* worship the planets, as the habitations of intellectual substances that animate them. *Stillingfleet.*

By delaying my last fine, upon your grace's accession to the patrimonies of your *house*, I may seem to have made a forfeiture. *Dryden.*

Wit in northern climates will not blow,
Except, like orange trees, 'tis *housed* from snow. *Id.*

In fear of this, observe the starry signs,
Where Saturn *houses*, and where Hermes joins. *Id.*

I, *housing* in the lion's hateful sign,
Bought senates; and deserting troops are mine.
Id.

In expectation of such times as these,
A chapel *housed* 'em, truly called of ease. *Id.*

Six lions' hides with thongs together fast,
His upper parts defended to his waist;
And where man ended, the continued vest,
Spread on his back, the *houss* and trappings of a beast. *Id.*

A poet is not born in every race;
Two of a *house* few ages can afford,
One to perform, another to record.
Id. Fables.

Theodosius arrived at a religious *house* in the city, where now Constantia resided. *Addison.*

He kept a miserable *house*, but the blame was laid wholly upon madam. *Swift.*

In a *house* the doors are moveable, and the rooms square; yet the *house* is neither moveable nor square. *Watts.*

Is thy face like thy mother's my fair child!
Ada! sole daughter of my *house* and heart.
Byron. Childe Harold.

By what shadow of argument could the *House* of Lords be maintained in equal authority and jurisdiction with the *House* of Commons, when once that *House* of Commons should become a mere deputation, speaking the people's will, and that will the rule of government. *Canning's Speeches.*

HOUSE. See ARCHITECTURE. Among the Jews, Greeks, and Romans, houses were flat on the top for walking on, and had usually stairs on the outside, by which they might ascend and descend without coming into the house. Each house was so laid out, that it enclosed a quadrangular area or court; which being open to the sky, gave light to it. This was the place where company was received, and for that purpose it was strewed with mats or carpets, for their better accommodation. It was paved with marble or other materials, according to the owner's ability, and provided with covering to shelter them from the inclemency of the weather. This part of their houses, called by the Romans impluvium, or cava ædium, was provided with channels to carry off the water into the common sewers. The level roof was covered with a strong plaster by way of terrace. Hither, especially among the Jews, it was customary to retire for meditation, private converse, devotion, or the enjoyment of the evening breezes. It is surprising that so few modern houses are built with this convenience. The Grecian houses were usually divided into two parts, in which the men and women had distinct mansions. The apartment of the men was towards the gate, and called Ανδρωνιτις; that of the women was the farthest part of the house, and called Γυναικωνιτις.

HOUSE, in astrology, is the twelfth part of the heavens. The division of the heavens into houses is founded upon the pretended influence of the stars, when meeting in them, on all sublunary bodies. These influences are supposed to be good or bad; and to each of these houses particular virtues are assigned, on which astrologers prepare and form a judgment of their horoscopes. The horizon and meridian are two circles of the celestial houses, which divide the heavens into four equal parts, each containing three houses; six of which are above the horizon, and six below it; and six of these are called eastern, and six western houses. Thus a scheme or figure of the heavens is composed of twelve triangles, in which are marked the stars, signs, and planets, so included in each of these circles. Every planet has likewise two particular houses, in which it is pretended that they exert their influence in the strongest manner; but the sun and moon have only one, the house of the former being Leo, and that of the latter Cancer. See ASTROLOGY.

HOUSE ISLAND, an island of England, one mile and sixty-eight chains from the coast of Northumberland. It is the largest of the Farn Islands. Farn is about a mile in compass, and has a fort and a lighthouse. It contains about six or seven acres of rich pasture; and the shore abounds with good coals which are dug at the ebb of tide. St. Cuthbert is said to have passed the last two years of his life on this island. A priory of Benedictines was afterwards established in it for six or eight monks, subordinate to Durham. A square tower, the remains of a church, and some other buildings, are still to be seen on this island; and a stone coffin, said to be that of St. Cuthbert. At the north end of the isle is a chasm, from the top to the bottom of the rock, communicating with the sea; through which, in tempestuous weather, the water is forced with great violence and noise, and forms a fine jet d'eau of sixty feet high. It is called by the inhabitants of the opposite coast, the Churn.

HOUSE'BREAKER, *n. s.* House and break. Burglar; one who makes his way into houses to steal.

All *housebreakers* and sharpers had thief written on their foreheads. *L'Estrange.*

HOUSE'BREAKING, *n. s.* House and break. Burglary.

When he hears of a rogue to be tried for robbing or *housebreaking*, he will send the whole paper to the government. *Swift.*

HOUSE'DOG, *n. s.* House and dog. A mastiff kept to guard the house.

A very good *housedog*, but a dangerous cur to strangers, had a bell about his neck. *L'Estrange.*

You see the goodness of the master even in the old *housedog*. *Addison.*

HOUSE'HOLD, *n. s.* House and hold. A family living together.

Two *households*, both alike in dignity,
In fair Verona, where we lay our scene,
From ancient grudge break to new mutiny.
Shakspeare.

A little kingdom is a great *household*, and a great *household* a little kingdom. *Bacon's Advice to Vil.*

Of God observed
The one just man alive, by his command,
Shall build a wondrous ark, as thou beheldest,
To save himself and *household* from amidst
A world devote to universal wreck. *Milton.*

He has always taken to himself, amongst the sons of men, a peculiar *household* of his love, which at all times he has cherished as a father, and governed as a master: this is the proper *household* of faith: in the first ages of the world, 'twas sometimes literally no more than a single *household*, or some few families. *Sprat.*

Great crimes must be with greater crimes repaid,
And second funerals on the former laid;
Let the whole *household* in one ruin fall,
And may Diana's curse o'ertake us all.
Dryden's Fables.

Learning's little *household* did embark,
With her world's fruitful system in her sacred ark.
Swift.

In his own church he keeps a seat,
Says grace before and after meat;
And calls, without affecting airs,
His *household* twice a-day to prayers. *Id.*

Family life; domestic management.

An inventory, thus importing
The several parcels of his plate, his treasure,
Rich stuffs, and ornaments of *household*.
Shakspeare.

It is used in the manner of an adjective, to signify domestic; belonging to the family.

Cornelius called two of his *household* servants.
Acts x. 7.

For nothing lovelier can be found
In woman than to study *household* good;
And good works in her husband to promote.
Milton.

It would be endless to enumerate the oaths among the men, among the women the neglect of *household* affairs. *Swift.*

We sacrifice to dress, till *household* joys
And comforts cease. *Cowper.*

HOUSEHOLD, PRINCIPAL OFFICERS OF HIS MAJESTY'S. These are the lord steward, lord chamberlain, the groom of the stole, the master of the great wardrobe, and the master of the horse. The civil government of the king's house is under the care of the lord steward, who, being the chief officer, has authority over all the other officers and servants, except those of his majesty's chapel, chamber, and stable; and he is the judge of all crimes committed either within the verge or the court. Under him are the treasurer, the comptroller, cofferer, the master of the household, the clerks of the green-cloth, and the officers and servants belonging to the accounting house, the marshalsea, the verge, the king's kitchen, the household kitchen, the acatery, bake-house, pantry, buttery, cellar, pastry, &c. Next to him is the lord chamberlain, who has under him the vice-chamberlain, the treasurer, and comptroller of the chamber; forty-eight gentlemen of the privy-chamber, twelve of whom wait quarterly; the gentleman usher, the grooms of the great chamber, the pages of the presence chamber; the mace-bearers, cup-bearers, carvers, musicians, &c. The master or keeper of the great wardrobe has under him a deputy, comptroller, clerk of the robes, brusher, &c.; and a number of tradesmen and artificers, who are all sworn servants to the king. The master of the horse has under his command the equerries, pages, footmen, grooms, coachmen, farriers, saddlers, and all the other officers and tradesmen employed in his majesty's stables. Next to the civil list of the king's court, is the military, consisting of the band of gentlemen pensioners, the yeomen of the guard, and the troops of the household.

HOUSE'HOLDER, *n. s.* From household. Master of a family.

A certain *householder* planted a vineyard.
Matt. xxi.

An *householder*, and that a grete was he.
Chaucer. Prologue to the Canterbury Tales.

HOUSE'HOLDSTUFF, *n. s.* Household and stuff. Furniture of house; utensils convenient for a family.

In this war that he maketh, he still flieth from his foe, and lurketh in the thick woods, waiting for advantages: his cloke is his bed, yea, and his *household-stuff*. *Spenser on Ireland.*

A great part of the building was consumed, with much costly *householdstuff*. *Bacon.*

A woman had her jest for her *householdstuff*.
L'Estrange.

HOUSE'KEEPER, *n. s.* House and keep. Householder; master of a family.

To be said an honest man and a good *housekeeper*, goes as fairly as to say a graceful man and a great scholar. *Shakspeare.*

If I may credit *housekeepers* and substantial tradesmen, all sorts of provisions and commodities are risen excessively. *Locke.*

One who lives in plenty; one that exercises hospitality.

The people are apter to applaud *housekeepers* than houseraisers. *Wotton.*

One who lives much at home.

How do you both? You are manifest *housekeepers*. What are you sewing there? *Shakspeare. Coriolanus.*

A woman servant that has the care of a family, and superintends the other maid servants.

Merry folks who want by chance
A pair to make a country-dance,
Call the old *housekeeper*, and get her,
To fill a place for want of better. *Swift.*

A house-dog. Not in use.

Distinguish the *housekeeper*, the hunter.
Shakspeare.

HOUSE'KEEPING, *adj.* House and keep. Domestic; useful to a family.

His house for pleasant prospect, large scope, and other *housekeeping* commodities, challengeth the pre-eminence. *Carew.*

HOUSE'KEEPING, *n. s.* Hospitality; liberal and plentiful table.

I hear your grace hath sworn out *housekeeping*.
Shakspeare.

His table was one of the last that gave us an example of the old *housekeeping* of an English nobleman: an abundance reigned, which shewed the master's hospitality. *Prior.*

HOUSE'LEEK, *n. s.* House and leek. A plant.

The acerbs supply their quantity of cruder acids; as juices of apples, grapes, the sorrels, and *houseleek*.
Floyer.

HOUSE'LESS, *adj.* From house. Wanting abode; wanting habitation.

Poor naked wretches,
How shall your *houseless* heads and unfed sides,
Your looped and windowed raggedness, defend you. *Shakspeare.*

This hungry, *houseless*, suffering, dying Jesus, fed many thousands with five loaves and two fishes.
West.

The stranger's step profaned his desolate halls
An exile, outcast, *houseless*, nameless object,
He fled for life, and scarce by flight did save it.
Maturin's Bertram.

HOUSE'MAID, *n. s.* House and maid. A maid employed to keep the house clean.

The *housemaid* may put out the candle against the looking-glass. *Swift.*

HOUSE'ROOM, *n. s.* House and room. Place in a house.

Houseroom that costs him nothing, he bestows;
Yet still we scribble on, though still we lose.
Dryden.

HOUSE'SNAIL, *n. s.* A kind of snail.

HOUSE'WARMING, *n. s.* House and warm. A feast of merry-making upon going into a new house.

HOUSE'WIFE, *n. s.* House and wife. This is now frequently written huswife, or hussy.

The mistress of a family.

You will think it unfit for a good *housewife* to stir in or to busy herself about her housewifery.
Spenser on Ireland.

I have room enough, but the kind and hearty *housewife* is dead. *Pope to Swift.*

A female economist.

Fitting is a mantle for a bad man, and surely for a bad *housewife* it is no less convenient; for some of them, that be wandering women, it is half a wardrobe.
Spenser on Ireland.

Let us sit and mock the good *housewife*, Fortune, from her wheel, that her gifts may henceforth be disposed equally. *Shakspeare.*

Farmers in degree,
He a good husband, a good *housewife* she.
Dryden.

Early *housewives* leave the bed,
When living embers on the hearth are spread. *Id.*

The fairest among the daughters of Britain shew themselves good stateswomen as well as good *housewives*. *Addison.*

One skilled in female business.

He was bred up under the tuition of a tender mother, till she made him as good an *housewife* as herself: he could preserve apricocks, and make jellies.
Addison.

HOUSE'WIFELY, *adv.* From housewife. With the economy of a careful woman.

HOUSE'WIFERY, *n. s.* From housewife. Skill in the arts becoming a housewife; domestic or female business; management becoming the mistress of a family.

You will think it unfit for a good housewife to stir in or to busy herself about her *housewifery*.
Spenser on Ireland.

He ordained a lady for his praise,
Generally praiseful; fair and young, and skilled in *housewiferies*. *Chapman's Iliad.*

Little butter was exported abroad, and that discredited by the *housewifery* of the Irish in making it up.
Temple.

Female economy.

Learn good works for necessary uses; for St. Paul expresses the obligation of Christian women to good *housewifery*, and charitable provisions for their family and neighbourhood. *Taylor.*

HOUS'EL, *n. s.* & *v. a.* Sax. þuſl, from Goth. *unsel*, a sacrifice; or Lat. *hostia*, dimin. *hostiola*. The holy eucharist: to give or receive the eucharist. Both the noun and verb are obsolete.

But for as moche as man and wife
Shuld shew hir parish priest hir life,
Once a yere, as saith the boke
Er any wight his *housel* toke
Than have I privileges large
That maie of mochel thing discharge.
Chaucer. Romaunt of the Rose.

And, certes, once a yere at the lest way it is lawful be *houseled*, for sothely ones a yere all thinges in erthe renoveten. *Id. The Persones Tale.*

HOUSING, or HOUSE-LINE, in the sea-language, small line, formed of three fine strands or twists of hemp, smaller than rope yarn. It is chiefly used to seize blocks into their strops, to bind the corners of the sails, or to fasten the bottom of a sail to its bolt-rope, &c. See BOLT ROPE.

HOUSING, among bricklayers, a brick which warped, or cast crooked or hollow in burning.

HOUSSA, or HAOUSSA, an extensive central kingdom of Africa, on the shores of the Niger, having a capital also of this name. It appears, from the accounts of Park and others, to be the most civilised of any of the native states of Africa; and the city is the great mart to the eastward of Tombuctoo, two days' journey to the north of the Niger. The African merchants speak of it as larger and more populous than Tombuctoo.

The country is said to be an extensive region, comprehending various inferior states; particularly Cano, Guber, Daura, Cabi, Nyffe, and Noro. The inhabitants are negroes, but not quite black, and the most intelligent people in the interior of Africa. They have an extraordinary delight in dancing and singing. Their agricultural system is remarkably perfect. They manufacture also a great quantity of cotton cloths, with which they supply Fezzan; and can dye all colors except scarlet. According to Mr. Bowdich, Houssa is situated some days journey to the north of the branch or tributary of the Niger called the Gambaroo.

HOU-TCHEOU, a city of China, in the province of Tche-kiang. It is a city of the first class, and is situated on a lake, from which it takes its name. The quantity of silk manufactured here is almost incredible. To give some idea of it, we shall only say, that the tribute paid by a city under its jurisdiction, named Tetsin-hiem, amounts to more than 500,000 ounces of silver. Its district contains seven cities, one of which is of the second, and six of the third class.

HOUTEVILLE (Claud Francis), a French author, born in 1689. He was secretary to the French Academy, and wrote a work entitled La Verité de la Religion Chretienne prouvée par les Faits. He died in 1743, aged fifty-four.

HOUTHOVE, a town of France, in the department of Lys, and late province of Austrian Flanders; six miles north-west of Bruges.

HOW, *adv.* } Sax. hu; Belgic and
HOWBE'IT, *adv.* } Teut. *wie*, *hoe*. 'These
HOW'BE, *adv.* } several words are adver-
HOWEV'ER, *adv.* } sative conjunctions: they
HOWSOEV'ER, *adv.* } join sentences together that stand more or less in opposition to each other.'—Crabb. How, to what degree; in what manner; for what reason; by what means; in what state. It is used in a sense marking proportion; it is used also in exclamation and affirmation. Howbeit and howbe, nevertheless; notwithstanding: they are nearly obsolete. However, whatsoever manner or degree; at all events; nevertheless. Howsoever, relates entirely to manner.

How is it thou hast found it so quickly?
Gen.. xxvii.

How long wilt thou refuse to humble thyself before me? *Exodus.*

How are the mighty fallen! *Sam.*

How doth the city sit solitary as a widow!
1 *Lam.*

How oft is the candle of the wicked put out! And *how* oft cometh their destruction upon them! *Job.*

O *how* I love thy law! it is my meditation.
Psalms.

How much better is it to get wisdom than gold! and to get understanding, rather to be chosen than silver! *Proverbs.*

Howe false was, eke, duke Theseus,
That as the storie telleth us,
How he betrayed Adriane.
Chaucer. The House of Fame.

Siker thou speakest like a lewd lorrel,
Of heaven to deemon so,
Howbe I am but rude and borrel,
Yet nearer ways I know. *Sponser.*

There is a knowledge which God hath always revealed unto them in the works of nature: this they honour and esteem highly as profound wisdom, *howbeit* this wisdom saveth them not. *Hooker.*

Things so ordained are to be kept, *howbeit* not necessarily, any longer than till there grow some urgent cause to ordain the contrary. *Id.*

Marked you not,
How that the guilty kindred of the queen
Looked pale when they did hear of Clarence's death?
Shakspeare.

This ring he holds
In most rich choice; yet in his idle fire,
To buy his will, it would not seem too dear,
Howe'er repented of. *Id.*

The man doth fear God, *howsoever*, it seems not in him. *Id.*

How now, my love? Why is your cheek so pale?
How chance the roses there to fade so fast? *Id.*

Berosus, who, after Moses, was one of the most ancient, *howsoever* he hath been since corrupted, doth in the substance of all agree. *Raleigh's History.*

Thick clouds put us in some hope of land, knowing *how* that part of the South Sea was utterly unknown, and might have islands or continents. *Bacon.*

There was no army transmitted out of England, *howbeit* the English colonies in Ireland did win ground upon the Irish. *Davies.*

A great division fell among the nobility, so much the more dangerous by *how* much the spirits were more active and high. *Hayward.*

How many children's plaints and mothers' cries!
How many woeful widows left to bow
To sad disgrace! *Daniel's Civil War.*

Prosecute the means of thy deliverance
By ransom, or *how* else. *Milton's Agonistes.*

To trace the ways
Of highest agents, deemed *however* wise.
Milton.

How could the Dutch but be converted when
The Apostles were so many fishermen. *Marvell.*

Consider into *how* many differing substances it may be analysed by the fire. *Boyle.*

Our chief end is to be freed from all, if it may be, *however*, from the greatest evils; and to enjoy, if it may be, all good, *however* the chiefest. *Tillotson.*

In your excuse your love does little say;
You might *howe'er* have took a fairer way.
Dryden.

Whence am I forced, and whither am I borne?
How, and with what reproach shall I return? *Id.*

We examine the why and the *how* of things.
L'Estrange.

'Tis much in our power *how* to live, but not at all *how* or when to die. *Id.*

Its views are bounded on all sides by several ranges of mountains, which are *however* at so great a distance, that they leave a wonderful variety of beautiful prospects. *Addison on Italy.*

It is pleasant to see *how* the small territories of this little republick are cultivated to the best advantage. *Id.*

I do not build my reasoning wholly on the case of persecution; *however* I do not exclude it. *Atterbury.*

By *how* much they would diminish the present extent of the sea, so much they would impair the fertility, and fountains and rivers of the earth. *Bentley.*

Few turn their thoughts to examine *how* those diseases in a state are bred, that hasten its end; which would, *however*, be a very useful enquiry. *Swift.*

Fain would I sing what transport stormed his soul
How the red current throbb'd his veins along,
When, like Pelides, bold beyond controul,
Without art graceful, without effort strong,
Homer raised high to heaven the loud, the impetuous song. *Beattie.*

Loud complaint, *however* angrily
It shakes its phrase, is little to be feared,
And less distrusted. *Byron.*

HOWAKIL, a bay on the coast of Abyssinia, containing several islands, the principal of which, also called Howakil, has its eastern point in lat. 15° 1′. Mr. Salt here found numerous portions of the opsian, or obsidian stone of the ancients, which he was told were more abundant up the country. He thinks it the bay which is noted for this mineral in the Periplus of the Erythrean Sea.

HOWARD (Charles), an able statesman and experienced seaman, was the son of lord William Howard, baron of Effingham, and born in 1536. He served under his father, who was lord high admiral of England, till the accession of queen Elizabeth. In January, 1573, he succeeded his father in title and estate: after which he became chamberlain of the household; and in 1585 was made lord high admiral, when the Spaniards were sending their armada to conquer England. When he received intelligence of the approach of the Spanish fleet, he the first night left the port with six ships. The next morning, though he had only thirty sail, and those the smallest of the fleet, he attacked the Spanish navy; but first despatched his brother-in-law, Sir Edward Hobby, to the queen, to desire her to make the proper disposition of her land forces for the security of the coast, and to hasten as many ships as possible to his assistance. His valor was conspicuously displayed in his repeated attacks of a superior enemy. The queen expressed her high sense of his merit, and granted him a pension for life. In 1596 he commanded the naval forces sent against Spain; and upon his return, in 1597, he was created earl of Nottingham. The next eminent service in which he was engaged was in 1599, when the Spaniards seemed to meditate a new invasion. The queen, however, drew together, in a fortnight's time, such a fleet, and army, as took away all appearance of success from her foreign and domestic foes; and she gave the earl the sole and supreme command of both the fleet and army, with the title of lord lieutenant general of all England, an office unknown in succeeding times. When age and infirmity had unfitted him for action he resigned his office, and spent the remainder of his life in retirement, till his decease; which happened in 1624, in the eighty-seventh year of his age.

Howard (Henry), earl of Surry, a soldier and a poet, the son and grandson of two lords treasurers, dukes of Norfolk, was born about 1520, and educated in Windsor Castle, with young Fitzroy, earl of Richmond, natural son to king

Henry VIII. Wood says, that he was for some time a student at Cardinal College, Oxford. In his youth he became enamoured of the fair Geraldine, whom his sonnets have immortalised; and whose superlative beauty he maintained, in the romantic spirit of the times, in various tournaments in the principal cities of Italy, 'against all comers, whether Christians, Jews, Saracens, Turks, or cannibals,' and was victorious in them all; as well as in one fought in 1540 at Westminster, against Sir John Dudley, Sir Thomas Seymour, and others. In 1542 he marched, under his father, against the Scots; but was, on his return, confined in Windsor Castle for eating flesh in Lent, contrary to the king's proclamation. In 1544, on the expedition to Boulogne, he was appointed field-marshal of the English army; and after taking that town, in 1546, made captain-general of the king's forces in France; but, attempting to intercept a convoy, he was defeated by the French, and soon after superseded in his command by the earl of Hertford. He married Frances, daughter of John, earl of Oxford; and, after her death, had the boldness to propose himself to the princess Mary. For this the Seymours, rivals of the Norfolk family, and now in favor with the king, accused him of aspiring to the crown. Accordingly Surry and his father, the duke, were committed to the tower in December, 1546; and, on the 13th of January following, Surry was tried at Guildhall, and beheaded on Tower Hill on the 19th, nine days before the death of the king. The accusations brought against this amiable and innocent young nobleman on his trial, were so extremely ridiculous, that one is astonished how it was possible, even in the most despotic reign, to find a judge and jury so pusillanimously villanous as to carry on the farce of justice on the occasion. Walpole speaks of him as 'an almost classic author, the ornament of a boisterous, yet not unpolished court; a man, as Sir Walter Raleigh says, no less valiant than learned, and of excellent hopes.' His poems were published in 1557, 12mo.; and in 1565, 1574, 1585, and 1587, 8vo.

Howard (John), esq., commonly characterised by the epithet of the philanthropist, was the son of an upholsterer in St. Paul's Church Yard. He was born at Hackney in 1726; and was put apprentice to a grocer in Watling Street. His father died in 1742, leaving only this son and a daughter, to both of whom he bequeathed handsome fortunes. His constitution being very weak, the remaining time of his apprenticeship was bought up, and he applied himself to the study of medicine and natural philosophy. Falling into a nervous fever, while he lodged with a widow lady, Mrs. Sarah Lardeau, he was nursed with so much care and attention, that he resolved to marry her out of gratitude. In vain did his friends expostulate with him upon the extravagance of such a proceeding, he being about twenty-eight and she about fifty-one years of age; nothing could alter his resolution, and they were privately married about 1752. She was possessed of a small fortune which he presented to her sister. His wife died November 10th, 1755, aged fifty-four, and about this time he was elected F. R. S. In 1756 he embarked in a Lisbon packet, to make the tour of Portugal, when the vessel was taken by a French privateer. 'Before we reached Brest,' says he in his Treatise on Prisons, p. 11, 'I suffered the extremity of thirst, not having for above forty hours one drop of water, nor hardly a morsel of food. In the castle at Brest I lay six nights upon straw; and observing how cruelly my countrymen were used there and at Morlaix, whither I was carried next, during the two months I was at Carhaix upon parole, I corresponded with the English prisoners at Brest, Morlaix, and Dinan; at the last of those towns were several of our ship's crew, and my servant. I had sufficient evidence of their being treated with such barbarity, that many hundreds had perished, and that thirty-six were buried in a hole at Dinan in one day. When I came to England, still on parole, I made known to the commissioners of sick and wounded seamen the sundry particulars, which gained their attention and thanks. Remonstrance was made to the French court; our sailors had redress; and those that were in the three prisons mentioned above were brought home in the first cartel ships. Perhaps,' adds Mr. Howard, 'what I suffered on this occasion increased my sympathy with the unhappy people whose case is the subject of this book.' He afterwards made the tour of Italy; and at his return settled at Brokenhurst, a pleasant villa in the New Forest, near Lymington, in Hampshire, having in 1758 married a daughter of Edward Leeds, esq., of Croxton, Cambridgeshire, king's serjeant. This lady died in 1765 in childbed, and after her death Mr. Howard left Lymington, and purchased an estate at Cardington, near Bedford. Being appointed, in 1773, sheriff of Bedfordshire, this office brought the distress of prisoners more immediately under his notice. He personally visited the county jail, where he observed such scenes of calamity as he had before no conception of. He inspected the prisons in some neighbouring counties, and, finding in them equal room for complaint, he determined to visit the principal prisons in England. The farther he proceeded the more shocking were the scenes he discovered, which induced him to exert himself to the utmost for a general reform in those places of confinement; considering it as of the highest importance, not only to the wretched objects themselves, but to the community at large. Upon this subject he was examined in the house of commons in March 1774, when he had the honor publicly to receive their thanks. This encouraged him to proceed. He revisited all the prisons in the kingdom, together with the principal houses of correction. In 1775 he enlarged his circuit by going into Wales, Scotland, and Ireland, where he found the same need of reformation. One of his principal objects was, to put a stop to the jail fever; which raged so dreadfully in many of the prisons as to render them to the last degree dangerous: a distemper by which more had been taken off than by the hands of the executioner; and which, in several instances, had been communicated from the prisoners into the courts of justice, and had proved fatal to the magistrates and judges, and to multitudes of persons

who attended the trials, as well as to the families of discharged felons and debtors. Another end he proposed was, to procure the immediate release of prisoners, who upon trial were acquitted, but who often continued long to be unjustly detained for not being able to pay the accustomed fees. But the greatest object was, to introduce a thorough reform of morals into our prisons; where he had found the most flagrant vices to prevail in such a degree, that they were become seminaries of wickedness and villany, and the most formidable nuisances to the community, in consequence of the promiscuous intercourse of prisoners of both sexes, and of all ages and descriptions; whereby the young and less experienced were initiated, by old and hardened sinners, into all the arts of villany and the mysteries of iniquity. For the attainment of these great objects, Mr. Howard spared neither pains nor expense, and cheerfully exposed himself to much inconvenience and hazard; particularly from that malignant distemper, of which he saw many dying in the most loathsome dungeons, into which none who were not obliged, besides himself, would venture. 'I have been frequently,' says Mr. Howard, 'asked what precautions I use to preserve myself from infection in the prisons and hospitals which I visit. I here answer, next to the free goodness and mercy of the Author of my being, temperance and cleanliness are my preservatives. Trusting in Divine Providence, and believing myself in the way of my duty, I visit the most noxious cells; and, while thus employed, I fear no evil. I never enter an hospital or prison before breakfast; and, in an offensive room, I seldom draw my breath deeply.' His laudable endeavours he had the pleasure to see, in some instances, crowned with success; particularly in regard to the healthiness of prisons, some of which were rebuilt under his inspection. With a view to a more general and happy regulation, and the reformation of criminals, Mr. Howard resolved to visit other countries, in hopes of collecting some information which might be useful in his own. For this purpose he travelled into France, Flanders, Holland, Germany, Switzerland, Prussia, and Austria, and visited Copenhagen, Stockholm, Petersburg, Warsaw, and some cities in Portugal and Spain. On his return, he published in 1777 The State of the Prisons in England and Wales, with Preliminary Observations, and an Account of some foreign Prisons, 4to. And in 1778 he took a third journey through the Prussian and Austrian dominions, and the free cities of Germany and Italy. The observations made in this tour were published in 1780 with remarks respecting the management of prisoners of war, and the hulks on the Thames. In 1781 he again revisited Holland, some cities in Germany, and the capitals of Denmark, Sweden, Russia, and Poland; and in 1783 some cities in Portugal and Spain, and returned through France, Flanders, and Holland. The substance of all these travels was afterwards thrown into one narrative, published in 1784. He also published a curious account of the Bastile, in 8vo. He next visited the lazarettos in France and Italy, to obtain information concerning the best methods to prevent the spreading of the plague. He then proceeded to Smyrna and Constantinople, where that most dreadful of human distempers prevailed, and, though he actually caught the plague, 'that merciful Providence,' as he remarks, 'which had hitherto preserved him, was pleased to extend his protection to him in this journey also, and to bring him home once more in safety.' In his return he revisited the chief prisons and hospitals in the countries through which he passed, and afterwards went again to Scotland; and thence to Ireland, where he inspected the Protestant Charter Schools, in some of which he had observed shameful abuses, which he had reported to a committee of the Irish house of commons. At Dublin he was created LL.D. by the university. At Glasgow and Liverpool he was enrolled among their honorary members. Upon his return, having again inspected the prisons in England, and the hulks on the Thames, to see what alterations had been made, he published the result of his last laborious investigations, in An Account of the principal Lazarettos in Europe with various Papers relative to the Plague, together with further Observations on some foreign Prisons and Hospitals, and additional remarks on the present State of those in Great Britain and Ireland, with a great number of plates. He also published the Grand Duke of Tuscany's New Code of Criminal Law, with an English Translation. He concluded his Account of Lazarettos with announcing his 'intention again to quit his country, revisit Russia, Turkey &c., and extend his tour to the East.' Accordingly, he set out in summer 1789 on this hazardous enterprise; the principal object of which was to administer James's Powder, a medicine in high repute in malignant fevers, under a strong persuasion that it would be equally efficacious in the plague. In this second tour in the East, having spent some time at Cherson, a Russian settlement on the Dnieper, he caught a malignant fever, in visiting the Russian hospital, which carried him off on the 20th of January, after an illness of about twelve days. He was buried, as he desired, in the garden of a villa, belonging to a French gentleman from whom he had received much kindness, by his faithful servant who had attended him in his former journeyings. While absent on his first tour to Turkey, &c., his character for active benevolence had so much attracted the public attention, that a subscription was set on foot to erect a statue to his honor, and in no long space above £1500 were subscribed for that purpose. But in consequence of two letters from Mr. Howard himself to the subscribers (inserted in the Gentleman's Magazine) the design was laid aside. The testimony of public respect, which he refused when living, has however been conferred on his memory, and his monumental statue was one of the first placed in the cathedral of St. Paul's. And surely if the devotion of time, strength, fortune, and finally life, to the sole service of his fellow creatures merits a token of public esteem, it was deserved by one who (to adopt the expressive words of Burke) visited all Europe and the East, 'not to survey the sumptuousness of palaces, or

the stateliness of temples; not to make accurate measurements of the remains of ancient grandeur, nor to form a scale of the curiosity of modern art; not to collect medals, or to collate MSS.; but to dive into the depth of dungeons; to plunge into the infection of hospitals; to survey the mansions of sorrow and of pain; to take the gauge and dimensions of misery, depression, and contempt; to remember the forgotten; to attend to the neglected; to visit the forsaken; and to compare and collate the distresses of all men in all countries. His plan is original; and it is as full of genius as it is of humanity. It is a voyage of discovery, a circumnavigation of charity; and already the benefit of his labor is felt more or less in every country.'

Howard (Sir Robert), an English historian and poet of the seventeenth century. He was a younger son of Thomas earl of Berkshire, and educated at Magdalen College, Oxford. He suffered much during the civil war, but on the Restoration was knighted, and elected M. P. for Stockbridge, in Hants, in 1661. He was afterwards appointed auditor of the Exchequer; but, upon James II.'s accession, became a zealous friend to the Revolution. He wrote, 1. The History of the reigns of Edward II. and Richard II. in 8vo. 1690. 2. The History of Religion; 8vo. 1694: and some Poems and Plays. He also translated Statius's Achilles, and the fourth book of Virgil's Æneid, 8vo. 1660. He died about 1699.

HOWDEN, a town in the East Riding of Yorkshire, 180 miles from London, on the north side of the Ouse. It has a market on Saturday, and four fairs. Here was formerly a collegiate church of five prebendaries, erected in the sixteenth century; adjacent to which the bishops of Durham have a palace. One of them built a very tall steeple to the church, whither the inhabitants might retire in case of inundations; to which it is very liable from the great freshes that come down the Ouse sometimes at ebb. It is sixteen miles south-east of York, and twenty-three west of Hull.

HOW'DYE. Contracted from how do ye. In what state is your health? A message of civility.

I now write no letters but of plain business, or plain *howd'ye's*, to those few I am forced to correspond with. *Pope.*

HOWE (John), a learned English nonconformist divine, born in 1630. He became minister of Great Torrington in Devonshire, and was appointed household chaplain to Cromwell; but finally offended him by preaching against the doctrine of particular faith. When Oliver died he continued chaplain to Richard; and, when Richard was deposed, he returned to Torrington, where he continued till the act of uniformity set him aside. He afterwards settled at Utrecht, until the declaration for liberty of conscience was published by king James II., under shelter of which he returned to London, where he died in 1705. He published a great number of sermons and religious works, which have been reprinted in 2 vols. folio.

Howe (John), esq. an eminent English statesman and writer, was the brother of Sir Scroop Howe, and born in Nottinghamshire. He was M. P. for Cirencester in the convention parliament 1688-9, and was re-elected for that town or for Gloucestershire in the three last parliaments of king William III., and the three first of queen Anne. He was a zealous friend of the Revolution, and wrote a panegyric on king William, but afterwards opposed his measures, and it was chiefly owing to Mr. Howe, that, in 1699, the house agreed to allow half-pay to the disbanded officers. In 1702 he was made a member of the privy-council, vice-admiral of Gloucester, and paymaster-general of the guards; in which last he was succeeded by Mr Walpole in 1714. He died at his seat of Stowell in 1721. He was author of several poems. His son was created lord Chidworth.

Howe (Richard), earl Howe, a late brave English admiral, born in 1725. He entered the naval service very young, and when only twenty was appointed captain of the Baltimore sloop of war, in which he attacked and beat off two French frigates of thirty guns each. In this action he was dangerously wounded in the head; but recovering was made a post-captain in the Triton frigate. After this he obtained the command of the Dunkirk of sixty guns, when he took a French sixty-four gun ship, off the coast of Newfoundland. In 1757 he served under admiral Hawke on the French coast, and in 1758 was appointed commodore of a squadron with which he destroyed a great number of ships and magazines at St. Malo. In August 6th 1759 he took Cherbourg, and destroyed the basin. At the unfortunate affair of St. Cas, he displayed equal courage and humanity, by saving the retreating soldiers at the risk of his life. By the death of his brother, in 1758, he became lord Howe, and soon after had a share in the glorious victory over Conflans; for which he received the thanks of king George II. In 1763 he was appointed first lord of the admiralty, and in 1765 treasurer of the navy. In 1770 he was made rear-admiral of the blue, and commander-in-chief of the Mediterranean. During the American war he commanded the fleet on that coast. In 1782 he was sent to the relief of Gibraltar, which he accomplished in sight of the enemy's fleet, which he in vain challenged to combat. In 1783 he was made first lord of the admiralty, and continued in that high station till 1788, when he was created an earl. In 1793 he commanded the channel fleet, and on June 1st, 1794, obtained a decisive victory over the most powerful fleet ever equipped by the French republic; for which he received the thanks of their majesties, who visited him on board of his ship at Spithead, when the king presented him with a magnificent sword, a gold chain and medal. He also received the thanks of both houses, and the freedom of the city of London. In 1795 he succeeded admiral Forbes as general of the marines, and in 1797 was made knight of the garter. He died in August 1799, aged seventy-four.

Howe's Island, or Lord Howe's Island, a small island in the neighbourhood of New South Wales, discovered February 17th, 1788. South lat. 31° 36′ E., long. 159° 4′. It is of an arched figure, lying from north-west to south-

east, the two extremities, including a space of about six miles, though, by reason of the curved figure of the island itself, it is near seven in length. It is deeply indented on the middle of the east part by a bay named Ross's Bay, and on the west has another named Prince William Henry's Bay; so that the whole appears like two islands joined together by an isthmus, in some places not above half a mile broad. On the south part of that division which lies most to the north are two considerable bays, named Callam's and Hunter's Bay; and on the south-west part of the other are two high mountains, the most southerly named Mount Gower, and the other Mount Lidgbird. The convex part of the island lies towards the north-east, and the concave side towards the south-west, is terminated by two points named Point King and Point Philip. No fresh water was found on the island; but it abounds with cabbage palms, mangrove, and manchineel trees, even up to the summits of the mountains; besides celery, spinach, and some other esculent plants. There are great numbers of gannets, and a land fowl of a dusky-brown color, with a bill about four inches long, and feet like those of a chicken. These were found to be fine meat, and were very fat. There are many large pigeons, and the white birds found in Norfolk Island were also met with in this one. The bill of this bird is red, and very strong, thick, and sharp pointed. Great numbers of fine turtles frequent this island in summer, but go northward in winter. The coast abounds with fish. About four leagues from this island is a remarkably high rock, named Ball's Pyramid. This island may be approached without danger; but about four miles from this pyramid there is a very dangerous rock, which appears above the surface of the water. The isthmus which joins the two parts has been formerly overflowed, and the island disjoined, as in the very centre large beds of coral rocks and great quantities of shells were seen. On the east, which seems in general to be the weather side, the sea has thrown up a bank of sand from twenty-five to thirty feet high, which serves as a barrier against future inundations. The island also appears to have suffered by volcanic eruptions, as great quantities of pumice stones were found upon it. Mr. Austin also found that the whole reef which shelters the west bay had been burnt up. The time he visited it was that of the incubation of the gannets, of which there were then prodigious numbers, their nests being only hollows made in the sand, there not being any quadrupeds on the island to disturb them. He also met with beautiful parrots and parroquets; a new species of coots, rails, and magpies; and a very beautiful small bird of a brown color with a yellow breast, and yellow on the wing, which seemed to be a species of humming bird. They found also a black bird like a sheerwater, having a hooked bill, and which burrows in the ground. The only insects met with were common worms and ants; which last were numerous.

Howe's Island, is also an island in the South Pacific Ocean, discovered by Wallis in 1767, who observed cocoa-nuts growing on it. It is about sixty miles long, and four broad. It was observed by captain Cook in 1774, who found it to be composed of several smaller islands, and appearing to have no inhabitants. By the natives it is called Mopetra. Long. 154° 7′ W., lat. 16° 46′ S.

HOWEL (Lawrence), a zealous nonjuring divine of the last century, was educated at Jesus College, Cambridge, and graduated M.A. in 1688. After keeping a school at Epping, he received ordination among the non-jurors from Dr. George Hickes, the titular bishop of Thetford. He published Synopsis Canonum SS. Apostolorum, Lond. 1708, folio; Synopsis Canonum Ecclesiæ Latinæ, 1710, folio; a View of the Pontificate to 1563, 1712, 8vo.; and a History of the Bible, with Engravings, by Sturt, 1716, 3 vols. 8vo. But he is chiefly remarkable as the author of a pamphlet, in 1716, entitled The Case of Schism in the Church of England. He was tried at the Old Bailey for this attack on the establishment, sentenced to be degraded from his clerical office, to pay a fine of £500, and to be twice whipped. The latter part of the sentence was afterwards remitted, in consideration of his clerical character, but the remainder was rigidly executed; he was stripped of his gown in open court, and, being unable to pay the fine, was detained in Newgate till his death, July 19th, 1720.

HOWITZ, or Howitzer, a kind of mortar, mounted upon a field carriage like a gun. The difference between a mortar and a howitz is, that the trunnions of the first are at the end, and at the middle in the last. The invention of howitzers is of much later date than mortars, and had their origin from them. The construction of howitzers is as various and uncertain as that of mortars, excepting the chambers which are cylindric. They are distinguished by the diameter of the bore; for instance, a ten inch howitz is the diameter of that which is ten inches; and so of the smaller ones.

HOWL, *v. n.* & *n. s.* Belg. *huglen* and *huil*, Lat. *ululo*. To cry as a wolf or a dog; to utter cries of distress or pain; to speak in a bellume cry or tone: it is used poetically of many noises loud and horrid. Howl, the cry of a wolf or dog, or of a human being in agony.

He found him in a desert land, and in the waste *howling* wilderness. *Deut.* xxxii. 10.

Therefore will I *howl*, and cry out for all Moab. *Jer.* xlviii.

Methought a legion of foul fiends
Environed me, and *howled* in mine ears
Such hideous cries, that with the very noise
I trembling waked. *Shakspeare. Richard III.*

If wolves had at thy gate *howled* that stern time,
Thou should'st have said, Go, porter, turn the key.
Shakspeare.

The damned use that word in hell,
Howlings attend it. *Id. Romeo and Juliet.*

Each new morn
New widows *howl*, new orphans cry, new sorrows
Strike Heaven on the face. *Id. Macbeth.*

I have words
That would be *howled* out in the desart air,
Where hearing should not catch them. *Id.*

Murther,
Alarmed by his sentinel the wolf,
Whose *howl*'s his watch. *Id.*

He and his monstrous route are heard to *howl*
Like stable woulves, or tigers at their prey.
Milton's Comus.

As when a sort of wolves infest the night,
With their wild *howlings* at fair Cynthia's light.
Waller.

She raves, she runs with a distracted pace,
And fills with horrid *howls* the public place.
Dryden.

The noise grows louder still,
Rattling of armour, trumpets, drums and atabelles;
And sometimes peals of shout that rend the heavens,
Like victory: then groans again, and *howlings*
Like those of vanquished men.
Dryden's Spanish Fryar.

Peace, monster, peace! Go tell thy horrid tale
To savages, and *howl* it out in desarts! *Phillips.*

These and the like rumours are no more than the last *howls* of a dog dissected alive. *Swift.*

Behold with berries smeared, with brambles torn,
The babes now famished lay them down to die;
Amidst the *howl* of darksome woods forlorne,
Folded in one another's arms they lie,
Nor friend nor stranger hears their dying cry.
Beattie.

The Hell of waters! where they *howl* and hiss
And boil in endless torture. *Byron. Childe Harold.*

HOWTH, a promontory and small town of Ireland, which forms the north entrance of the bay of Dublin. It belongs principally to the earl of Howth; and it has continued in possession of the family above 700 years. The shores off this hill are rocky and precipitous, affording, however, several harbours for small craft. It was formerly called Ben-hedar, i. e. the Birds' Promontory; and celebrated for having Dun Criomthan, or the royal palace of Criomthan, erected on it, he having been chief or king of this district, and memorable for making several successful descents on the coast of Britain against the Romans in the time of Agricola. Howth, now stripped of trees, was also formerly covered with venerable oaks, and a seat of the Druids, one of their altars still remaining in a sequestered valley on the east side of the hill. The town of Howth is seven miles east of the metropolis. On the top of the hill is a light-house, and another at the end of the new pier; the harbour is small, but has been recently improved at a great expense; steam-vessels, commanded by lieutenants in the navy, quit Howth daily for Holyhead. The town is extremely picturesque. Howth Castle or abbey is ancient, and stands in the middle of it. On the west shore are the ruins of St. Mary's church, with some ancient monuments of lord Howth's ancestors. See DUBLIN, COUNTY.

HOX, *v. a.* From Sax. þoȝ. To hough; to ham-string.

Lodronius, perceiving the old soldier's meaning, alighted, and with his sword *hoxed* his horse, saying aloud, This day, valiant soldiers, shall you have me both your general and fellow soldier, fighting on foot as one of yourselves. *Knolles.*

HOY, *n. s.* Old. Fr. *hou.* A large boat sometimes with one deck.

He sent to Germany strange aid to rear:
From whence eftsoons arrived here three *hoys*
Of Saxons, whom he for his safety employs.
Faerie Queene.

To define a barge and *hoy*, which are between a boat and a ship, is hard. *Watts's Logick.*

HOY, a considerable island of the Orkney groupe, lying south from the mainland of Scotland. It is about fifteen miles long from south-east to north-west, and six miles and a half at its greatest breadth. The peninsula of Walls, on the south-east, contains some fertile land; but the greater part of the island is mountainous and barren; encumbered with large rocks and almost inaccessible. The only crops are black oats, bear, and of late potatoes. The fishery and kelp-making add a little to the means of the inhabitants, but they are chiefly employed in the breeding and rearing of sheep. The dwarfie stone, a remarkable relic of antiquity found in this island, measures thirty-two feet in length, sixteen and a half in breadth, and seven and a half in height, hollowed in the inside into several apartments. Population between 500 and 600. Four miles west from Ronaldsay, and six north from Dunnet Head in Caithness.

HUAJOCINGO, or HUETJOCINGO, a large town of Mexico, in the intendancy of La Puebla de los Angelos. It once gave name to a small independent republic.

HUAHEINE, or AHEINE, which signifies woman, the easternmost of the groupe of the Society Islands. It is twenty-four miles in circumference, and divided into two peninsulas, by a narrow isthmus overflowed by the tides. In other parts of the island there are salt lakes. It has a very narrow stripe of fertile low land next the shore. The hills are strongly marked by volcanic fire, and in some parts cultivated. The productions are similar to those of Otaheite, but about a month earlier. Owharra, on the west coast, is a harbour of good anchorage in eighteen fathoms water, secure from winds. The inhabitants mix cocoa-nuts with yams, scraping both fine, and, having incorporated the powder, they put it into a wooden trough, with a number of hot stones, by which an oily kind of hasty pudding is made, called poe. They are larger and stouter than those of Otaheite. The women are also not so dark.

HUANTAJAYA, a mountain of Peru, in Arica, only two leagues from the Pacific Ocean, famous for its silver mines. They are surmounted with beds of rock-salt in a desert destitute of water; and furnish from 40,000 lbs. to 80,000 lbs. Troy, of native silver yearly.

HUAPENTE, a considerable river of Quito, in the province of Ambato. It rises in the mountains of Quelenda, covered with perpetual snow, and first runs due south; then it turns westward and joins the Ambato on the east, just before it enters the Pachantica.

HUB'BUB. *n. s.* Johnson conjectures from up up, or hob-nob. Mr. Thomson says, from Goth. *opa up*, to call out. See HOOP. A tumult; a riot.

People pursued the business with all contempt of the government; and in the *hubbub* of the first day there appeared nobody of name or reckoning, but the actors were really of the dregs of the people.
Clarendon.

Why wolves raise a *hubbub* at her,
And dogs howl when she shines in water. *Hudibras.*

An universal *hubbub* wild
Of stunning sounds, and voices all confused,
Borne through the hollow dark, assaults his ear
With loudest vehemence. *Milton's Paradise Lost.*

HUBELY, or HOOBLY, a populous town of the province of Bejapore, Hindostan, surrounded by a mud wall and ditch. It carries on a considerable trade with Goa, and has manufactures of both silk and cotton. Formerly the English East India Company had a factory here. It was plundered by the Mahrattas in 1673, at which time it belonged to the king of Bejapore. But in 1685 it was taken by the Moguls, under the command of Muayem, the son of Aurungzebe; but soon after the death of that monarch, in 1707, it was again taken by the Mahrattas, under whose dominion it still continues. Long. 75° 10′ E., lat. 15° 24′ N.

HUBER (Ulric), a celebrated civilian of the seventeenth century, was born at Dockum in 1636. He became professor of law at Franeker; and wrote, 1. A Treatise De Jure Civitatis; 2. Jurisprudentia Frisica; 3. Specimen Philosophiæ Civilis; 4. Institutiones Historiæ Civilis; 5. Dissertationes de genuino ætate Assyriorum et Regno Medorum; and other works which are much esteemed. He died in 1694.

HUBER (Zacharias), the son of the preceding, was born at Franeker in 1669, and succeeded his father in his professorship. He published, 1. De Vero Sensu Legis IXD. de lege Pompeia, 4to; Dissertationum Libri Tres, &c. He died in 1772.

HUBERT (St.), in heraldry, the name of an order of knighthood, instituted by Gerard V. duke of Juliers, in memory of a victory gained by him over Arnold of Egmont, on St. Hubert's day, in the year 1447. In 1709 it was revived by John William, elector-palatine of the Rhine. It was also used at Wurtemberg, where the reigning duke of Wurtemberg was grand master. The collar of the order is a chain of gold, to which a cross pattée, set with jewels, is suspended, from the angles of which issue rays of gold; on the centre is a medallion of gold enamelled, with a portrait of St. Hubert, kneeling before a crucifix, placed between the horns of a stag, all proper. The knights also wear, on the left side of their coat, a circle surrounded with rays, embroidered in gold; and, in the middle of it, a German motto, signifying, 'Keep firm in the Faith.' At all times, except festival days, they wear the cross tied to a red riband, which passes scarf-wise from the left shoulder to the right thigh.

HUBNER (John), a learned geographer of Germany, who taught geography at Leipsic and Hamburg with extraordinary reputation; and died at Hamburg in 1732, aged sixty-three. His principal works are, 1. Bibliotheca Historica, Hamburgensis; 2. Musæum Geographicum, printed at Basil in 1746, in 6 vols. 12mo.

HUCK'ABACK, *n. s.* A kind of linen on which the figures are raised.

HUCKLE'BACKED, HUCK'LEBONE. German *hocker*, a bunch; Dut. *hucken*. Crooked in the shoulders; the hip bone.

HUCK'STER, *n. s.* & *v. n.*, HUCK'STERER, *n. s.* Germ. *hoch*, a pedlar; *hockster*, a she pedlar. One who sells goods by retail: figuratively, a trickish mean fellow. Huckster, to deal in petty bargains.

And now the Ape wanting his *huckster* man,
That wont provide his necessaries, gan
To grow into great lacke, ne could upholde
His countenance in those his garments olde.
Spenser. Mother Hubberd's Tale.

God deliver the world from such guides, or rather such *hucksters* of souls, the very shame of religion. *South.*

There cannot be a more ignominious trade than the being *hucksters* to such vile merchandise. *Government of the Tongue.*

Should thy shoe wrench aside, down, down you fall,
And overturn the scolding *huckster's* stall;
The scolding *huckster* shall not o'er thee moan,
But pence expect for nuts and pears o'erthrown.
Gay.

There should be a confederacy of all servants, to drive those China *hucksters* from the doors. *Swift.*

Those *hucksterers* or money-jobbers will be found necessary, if this brass-money is made current. *Id.*

They must pay a shilling, for changing their piece into silver, to some *huckstering* fellow who follows that trade. *Id.*

HUDDERSFIELD, or HUTHERSFIELD, a market town of Yorkshire, sixteen miles from Leeds, thirty-nine from York, and 189 north-west from London. The manufactures consist chiefly of serges, kerseymeres, frieze, and narrow and broad cloths. The church is an ancient plain building. Here is a very extensive cloth-hall, erected by Sir J. Ramsden in 1765. It is built in a circular form, two stories high, divided into two courts. Over the entrance is a bell, placed in a handsome cupola,, to regulate the opening and closing of the market, which is held on Tuesday from seven till twelve A. M. Here is also a dispensary, established in 1814, and a national-school in 1819. This town has a canal navigation for three miles to the river Calder, whence the river navigation is continued to Wakefield; and the Huddersfield canal passes on to Ashton-under-Line, and finally enters the Peak-forest and other canals. Two miles south of the town, on Castle-hill, are still visible the remains of the ancient Roman city of Camelodunum. In the vicinity are several medicinal springs.

HUD'DLE, *v. a.*, *v. n.* & *n. s.* Etymology uncertain. Probably from hood; to dress up so close as not to be discovered; to cover up in haste; to perform in a hurry; to throw together in confusion; to come in a crowd: huddle is tumult; confusion; obscurity.

Glance an eye of pity on his losses,
That have of late so *huddled* on his back,
Enough to press a royal merchant down.
Shakspeare.

Brown answered after his blunt and *huddling* manner. *Bacon.*

Thyrsis, whose artful strains have oft delayed
The *huddling* brook to hear his madrigal,
And sweetened every muskrose of the dale. *Milton.*

Your carrying business in a *huddle*,
Has forced our rulers to new model. *Hudibras.*

That the Aristotelian philosophy is a *huddle* of words and terms insignificant, has been the censure of the wisest. *Glanville.*

Their eyes are more imperfect than others; for they will run against things, and, *huddling* forwards, fall from high places. *Browne's Vulgar Errours.*

I have given much application to this poem: this is not a play *huddled* up in haste. *Dryden.*

When continued rain
The labouring husband in his house restrain,
Let him forecast his work with timely care,
Which else is *huddled* when the skies are fair.
Id.

Nature doth nothing in a *huddle*. *L'Estrange.*

Our adversary, *huddling* several suppositions together, and that in doubtful and general terms, makes a medley and confusion. *Locke.*

The understanding sees nothing distinctly in things remote, and in a *huddle*. *Id.*

Several merry answers were made to my question, which entertained us 'till bed-time, and filled my mind with a *huddle* of ideas. *Addison.*

At twelve she rose with much ado;
Her cloaths were *huddled* on by two. *Prior.*
Now all in haste they *huddle* on
Their hoods, their cloaks, and get them gone.
Swift.

And reading what they never wrote,
Just fifteen minutes *huddle* up their work,
And with a well-bred whisper close the scene.
Cowper's Task.

HUDSON (Henry), an eminent English navigator, celebrated for his attempts, about the beginning of the seventeenth century, to find the north-west passage to India and China. This intrepid mariner, in searching after a north-west passage to the South Seas, discovered Hudson's straits, through which he hoped to find out a new way to Asia by America. He made altogether three voyages on this adventure; the first in 1607, and the second in 1608. In his third and last, in 1610, he entered the straits that lead into a new Mediterranean, and passing along the coast of Latrador, which he named New Britain, discovered a great part of the bay known by his name. His ardor for discovery not being abated by the difficulties he struggled with, in his empire of winter, he staid here till the ensuing spring, and prepared in the beginniug of 1611 to pursue his enterprize; but his crew, who suffered equal hardships, without the same spirit to support them, mutinied, seized upon him and seven of those who were most faithful to him, and committed them to the fury of the icy seas in an open boat. Hudson and his companions were either swallowed up by the waves, or gaining the inhospitable coast were destroyed by the savages, for they were never more heard of; but the ship and the rest of the men returned home.

Hudson (Jeffery). See Dwarf.

Hudson (John), a learned English critic, born in 1662. He distinguished himself by several editions of Greek and Latin authors; and, in 1701, was elected head keeper of the Bodleian library at Oxford. In 1712 he was appointed principal of St. Mary's Hall, through the interest of the famous Dr. Ratcliffe; and it is said that the university of Oxford is indebted for the most ample benefactions of that physician to Dr. Hudson's solicitations. He died in 1719, while he was preparing for publication a catalogue of the Bodleian library, which he had caused to be transcribed in six folio volumes.

Hudson, or North River, a river of the state of New York, which rises in a mountainous country west of Lake Champlain, in the counties of Essex and Montgomery, about lat. 44° N., and communicates with the Atlantic, below New York city. The distances of principal places on it are:—

	Miles.	Whole distance.
From its source to Sandy Hill, about	100	100
Waterford . .	42	142
Troy . . .	4	146
Albany . . .	6	152
Hudson . . .	30	182
Poughkeepsie .	55	237
Newburgh . .	10	247
New York . .	65	312
The Narrows . .	12	324

It is navigable for the largest ships to Hudson, and for sloops to Troy. The tide flows up as far as Troy. It is remarkably straight for 200 miles, and is, on the whole, one of the finest rivers in America. There are upon its banks a number of handsome and flourishing towns; and in passing up the river there is exhibited much fine and picturesque scenery.

Hudson, a city, port of entry, and the capital of Columbia county, New York. It stands on the east bank of the Hudson River, thirty miles south of Albany, 130 north of New York, and 336 miles from Washington. It was founded in 1784, and is pleasantly situated, regularly laid out, and well-built; the streets intersecting each other at right angles. It contains four houses of public worship; one for Presbyterians, one for Episcopalians, one for Quakers, and one for Methodists, an academy, and two banks. The city is considerable both for its trade and manufactures. The shipping owned here in 1816 amounted to 2761 tons. Claverack Creek, which flows on the eastern side of the town, and Abram's, or Factory Creek, on the northern side, afford good seats for various mills and manufactories. The woollen manufactory on Claverack Creek is said to be one of the most extensive in the state. Two weekly newspapers are published here.

Hudson's Bay, a large bay of North America, lying between 51° and 69° of N. lat., discovered in 1610 by Henry Hudson. See Hudson. The country lying round Hudson's Bay is called New Britain, or the country of the Esquimaux; comprehending Labrador, now New North and South Wales. See Labrador. The entrance of the bay from the ocean, after leaving to the north Cape Farewell and Davis's Straits, is between Resolution Isles on the north, and Button's Isles on the Labrador coast to the south, forming the eastern extremity of Hudson's Straits. The coasts are very high, rocky, and rugged at top; in some places precipitous, but sometimes exhibit large beaches. The isles of Salisbury, Nottingham, and Digges, are also very lofty and naked. The depth of water in the middle of the bay is about 140 fathoms. From Cape Churchill to the south end of the bay are regular soundings; near the shore shallow, with muddy or sandy bottom. To the north of Churchill the soundings are irregular, the bottom

rocky, and in some parts the rocks appear above the surface at low water. From Moose River, or the bottom of the bay, to Cape Churchill, the land is flat, marshy, and wooded with pines, birch, larch, and willows. From Cape Churchill to Wager's Water the coasts are high and rocky to the very sea, and woodless, except the mouths of Pockerekesko and Seal rivers. The hills on their back are naked, nor are there any trees for a great distance inland. The mouths of all the rivers are filled with shoals, except that of Churchill, in which the largest ships may lie; but ten miles higher the channel is obstructed with sand-banks; and all the rivers, as they have been navigated, are full of rapids and cataracts from ten to sixty feet perpendicular. Down these rivers the Indian traders find a quick passage; but their return is a labor of many months. As far inland as the company have settlements is flat, nor is it known how far to the eastward the great chain seen by our navigators from the Pacific Ocean branches off. The eastern boundary of the bay is Terra di Labrador; the northern part has a straight coast facing the bay, guarded with isles innumerable. A vast bay, called the Archiwinnipy Sea, lies within it, and opens into Hudson's Bay by means of Gulph Hazard, through which the Beluga whales dart in great numbers. Here the company had a settlement for the sake of the fishery, and for trading with the Esquimaux; but deserted it as unprofitable about 1758 or 1759. For the climate, animals, and phenomena of the country adjacent to Hudson's Bay, see LABRADOR, and AMERICA, NORTH.

HUDSON'S BAY COMPANY. About sixty years after the intrepid Hudson had penetrated the great gulf, known by this name, the British government granted to a party of merchants, called the Hudson's Bay Company, the chartered possession of extensive tracts near the shores of this sea. The territories claimed by this company are stated by some writers to extend from the seventieth to the 115th degree of west longitude, and as far south as the forty-ninth degree of latitude, thus comprehending a length of 1300 or 1400 geographical miles, by a medial breadth of 350 miles. Animated by a prospect of gain, the company have pushed their discoveries into the interior, and thus has a knowledge of these vast wilds been obtained, beyond what any other motives would possibly have supplied. Two of the principal journeys, performed by Messrs. Hearne and Mackenzie, have been mentioned in our article AMERICA. A rival body, called the North-west Company, has been recently established at Montreal. Both of them erect forts, and form settlements on the lakes and other favorable situations. Churchill Fort, or Fort Prince of Wales, on the west coast of Hudson's Bay, is the most northern settlement, while Hudson's Fort, on the river Suskashawan, in longitude 107 degrees west, is considered as the most western belonging to the Hudson's Bay Company.

HUDSON'S HOUSE, one of the Hudson's Bay Company's factories in North America, situated on the south-west side of Suskashawan River, 100 miles east of Manchester House, and 167 south-east by east of Buckingham House; in long. 106° 27′ 20″ W., lat. 53° 0′ 32″ N.

HUDSON'S STRAITS, the narrow sea between the Atlantic Ocean and Hudson's Bay, north of Labrador. See HUDSON'S BAY.

HUDSONIA, in botany, a genus of the monogynia order, and dodecandria class of plants: COR. none: CAL. is pentaphyllous and tubular: stamina fifteen: CAPS. unilocular, trivalvular, and trispermous. Species one only, a native of Virginia.

HUE, *n. s.* Sax. þiepe. Color; dye. This word is significant of 'modes of color; as a faint, or blended color.'—*Crabb.*

But thus moche I dare saine, that she
Was white, rody, freshe, lifely *hewed*;
And, every day, hire beaute newed.
Chaucer. Boke of the Duchesse.

For never in that land
Face of fair lady she before did view,
Or that dread lyon's look her cast in deadly *hue*.
Spenser.

To add another *hue* unto the rainbow,
Is wasteful and ridiculous excess.
Shakspeare. King John.

Drop, drop, you violets, change your *hues*,
Now red, now pale, as lovers use,
And on your death go out as well
As when you lived unto the smell;
That from your odour all may say
This is the shepherds' holiday. *Jonson.*

Flowers of all *hue*, and without thorn the rose.
Milton.

To whom the angel, with a smile that glowed
Celestial rosy red, love's proper *hue*,
Answered. *Id. Paradise Lost.*

And such appeared in *hue*, as when the force
Of subterranean wind transports a hill
Torn from Pelorus, or the shattered side
Of thundering Ætna, whose combustible
And fuelled entrails thence conceiving fire
Sublimed with mineral fury, aid the winds,
And leave a singed bottom all involved
With stench and smoke. *Milton.*

Yours is much of the cameleon *hue*,
To change the die with distant view. *Dryden.*

——— the snows above
The very Glaciers have his colours caught,
And, sun-set into rose-*hues*, sees them wrought
By rays which sleep there lovingly.
Byron. Childe Harold.

HUE, *n. s.* } Fr. *huée*, *huer*. A clamor; a
HUER, *n. s.* } legal pursuit; an alarm given to the country, as 'hue and cry:' huer, one whose business it is to give an alarm, or call out others.

Hue and *cry*, villain, go! Assist me, knight, I am undone: fly, run, *hue* and *cry!* villain, I am undone.
Shakspeare.

They lie hovering upon the coast, and are directed by a balker or *huer*, who standeth on the cliff-side, and from thence discerneth the course of the pilchard.
Carew's Survey.

Immediately comes a *hue* and *cry* after a gang of thieves, that had taken a purse upon the road.
L'Estrange.

If you should hiss, he swears he'll hiss as high;
And, like a culprit, join the *hue* and *cry*. *Addison.*

The *hue* and *cry* went after Jack, to apprehend him dead or alive, wherever he could be found.
Arbuthnot's John Bull.

HUE AND CRY, in law, the pursuit of a person who has committed felony on the highway. If a party robbed, or any in the company of one

murdered or robbed, come to the constable of the next town, and require him to raise hue-and-cry, or to pursue the offender, describing him, and showing, as near as he can, which way he is gone, the constable is forthwith to call for aid from the parish to seek the felon; and, if he is not found there, he is to give the next constable warning, till he be apprehended, or pursued to the sea-side.

And, that such hue-and-cry may more effectually be made, the hundred is bound by the same statute, cap. 3, to answer for all robberies therein committed, unless they take the felon, which is the foundation of an action against the hundred, in case of any loss by robbery. By stat. 27 Eliz. cap. 13, no hue-and-cry is sufficient, unless made with both horsemen and footmen. And, by stat. 8, Geo. II. cap. 16, the constable or like officer refusing or neglecting to make hue-and-cry, forfeits £5, and the whole district is still in strictness liable to be amerced, according to the law of Alfred, if any felony be committed therein, and the felon escape. Hue-and-cry may be raised either by precept of a justice of a peace, or by a peace-officer, or by any private man that knows of a felony.

HUEN, or HUENA, an island in the Baltic, with a village, three miles from the coast of Sweden, eight in circumference, and fourteen north by east of Copenhagen; famous for Tycho Brahe's observatory. See BRAHE.

HUER, a name given to certain fountains in Iceland, forming at times jets d'eau of scalding water arising out of cylindrical tubes of unknown depths. The largest is that which is called Geyer or Geyser, in a plain rising into small hills, and in the midst of an amphitheatre, bounded by the most magnificent and various-shaped icy mountains; among which the three-headed Hecla soars pre-eminent. Of this, as exemplifying the general appearance of these tremendous fountains, we extract the following description from the Travels of Dr. Henderson. 'On our approach, the first thing we observed,' says the doctor, 'was a large circular mound, formed of the decompositions of the fountain, justly distinguished by the appellation of the Great Geyser, from the middle of which a great degree of evaporation was visible. Ascending the rampart we had the spacious basin at our feet, more than half filled with the most beautiful hot crystalline water, which was just moved by a gentle ebullition, occasioned by the escape of steam from a cylindrical pipe or funnel in the centre. This pipe I ascertained, by admeasurement, to be seventy-eight feet in perpendicular depth. Its diameter is in general from eight to ten feet, but near the mouth it gradually widens, and opens almost imperceptibly with the basin, the inside of which exhibits a whitish surface, consisting of a siliceous incrustation, which has been rendered almost perfectly smooth by the incessant action of boiling water. The diameter of the basin is fifty-six feet in one direction, and forty-six in another; and, when full, it measures about four feet in depth, from the surface of the water to the commencement of the pipe. The borders of the basin, which form the highest part of the mound, are very irregular, owing to the various accretions of the deposited substances; and at two places are small channels equally polished with the interior of the basin, through which the water makes its escape when it has been filled to the margin. The declivity of the mound is rapid at first, especially on the north-west side, but instantly begins to slope more gradually, and the depositions are spread all around to different distances, the least of which is nearly 100 feet. On leaving the mound, the hot water passes through a turfy kind of soil, and, by acting on the peat, mosses, and grass, converts them entirely into stone, and furnishes the curious traveller with some of the finest specimens of petrifaction.

'On hearing a sound resembling the discharge of distant artillery,' continues our author, 'I ran to the mound, which shook violently under my feet, and I had scarcely time to look into the basin, when the fountain exploded, and instantly compelled me to retire to a respectful distance on the windward side. The water rushed up out of the pipe with amazing velocity; and was projected by irregular jets into the atmosphere, surrounded by immense volumes of steam, which, in a great measure, hid the column from the view. The first four or five jets were inconsiderable, not exceeding sixteen or twenty feet in height. These were followed by one about fifty feet; which was succeeded by two or three considerably lower; after which came the last, exceeding all the rest in splendor, which rose at least to the height of seventy feet. The large stones which we had previously thrown into the pipe were ejected to a great height, especially one, which was thrown much higher than the water. On the propulsion of the jets they lifted up the water in the basin nearest to the orifice of the pipe to the height of a foot, or a foot and a half, and on the falling of the column it not only caused the basin to overflow at the usual channel, but forced the water over the highest part of the brim, behind which I was standing, the great body of the column (at least ten feet in diameter), rose perpendicularly, but divided into a number of the most superb curvated ramifications; and several smaller spoutings were severed from it, and projected in oblique directions, to the no small danger of the spectator, who is apt to get scalded, ere he is aware, by the falling of the jet. On the cessation of the eruption, the water instantly sunk, but rose again directly to about half a foot above the orifice, where it remained stationary at the temperature of 183° of Fahrenheit. This fountain has, however, by other travellers been observed to throw its water to the amazing height of 360 feet.' Dr. H. observed the Stocker, another of these huers, form a jet of 200 feet. These huers rise in the very sea, and form scalding fountains amidst the waves. Their distance from land is unknown; but the new volcanic isle, twelve miles off Reickenes, proves that the subterraneous fires and waters extend to that distance.

HUESCA, an old fortified town in the north of Arragon, in Spain, situated in a plain on the Isuela. Its works have gone into ruins, but it is still a bishop's see, has a university, two large schools, a cathedral, and 6800 inhabitants, with

manufactures of cloth and leather. Thirty miles north-east of Saragossa.

HUET (Peter Daniel), a learned French writer, born at Caen in Normandy, February 8th, 1630. At an early age he began the study of philosophy, mathematics, the languages, and antiquities. He contracted a strict friendship with Bochart, and accompanied him to Sweden. Queen Christina would have engaged him in her service; but he, sensible of her inconstant temper, returned to France. All he brought with him was a copy of a MS. of Origen, which he transcribed at Stockholm. He refused several offers from Christina after she abdicated, and also from Charles X. her successor. In 1670, M. Bossuet being appointed preceptor to the dauphin, Louis XIV. chose M. Huet for his colleague, with the title of sub-preceptor. He formed the plan of the commentaries in usum Delphini, and directed the execution. He entered into holy orders at the age of forty-six; and soon after he was presented to the abbey of Aunay; and in 1685 to the bishopric of Soissons, which he exchanged for that of Avranches. After ten years he resigned, and was made abbot of Fontenay near Caen. He died in 1721, aged ninety-one. His principal works are, 1. De claris interpretibus, et de optimo genere interpretandi: 2. Origenis Commentaria; Gr. et Lat. cum notis: 3. A Treatise on the origin of the Romans: 4. Demonstratio Evangelica, fol.: 5. Questiones Alnetanæ de Concordia rationis et fidei: 6. Of the situation of the Terrestrial Paradise; in French: 7. A History of the Commerce and Navigation of the Ancients, which has been translated into English. 8. Commentarius de Rebus ad eum Pertinentibus: 9. Huetiana.

HUFF, *n. s.*, *v. a.* & *v. n.* } From hove, or
HUF'FER, *n. s.* } hoven, swelled. See
HUF'FISH, *adj.* } To HEAVE. So in
HUF'FISHLY, *adv.* } some provinces they
HUF'FISHNESS, *n. s.* } say the bread huffs

up, when it begins to heave or ferment: huff, therefore, may be ferment. To be in a huff is to be in a ferment. Sudden affront; anger, or arrogance; one swelled with a false opinion of his own value: huff, to swell; to puff; to treat with insolence; to bluster; storm; bounce about, and swell with indignation: a huffer is a bully; a blusterer; a petulant noisy person.

Quoth Ralpho, honour's but a word
To swear by, only in a lord;
In others it is but a *huff*,
To vapour with instead of proof. *Hudibras.*
His frowns kept multitudes in awe,
Before the bluster of whose *huff*
All hats, as in a storm, flew off. *Id.*
Nor have I hazarded my art
To be exposed i' the' end to suffer,
By such a braggadocio *huffer*. *Id.*
A thief and justice, fool and knave,
A *huffing* officer and slave. *Id.*
Huffing to cowards, fawning to the brave,
To knaves a fool, to credulous fools a knave.
Roscommon.

A *huffing*, shining, flattering, cringing coward,
A cankerworm of peace, was raised above him.
Otway.

Now what's his end? O charming glory, say!
What, a fifth act to crown his *huffing* play? *Dryden.*

As for you, colonel *huff-cap*, we shall try before a civil magistrate who's the greater plotter. *Id.*

We have the apprehensions of a change to keep a check upon us in the very *huff* of our greatness.
L'Estrange.

A Spaniard was wonderfully upon the *huff* about his extraction. *Id.*

What a small pittance of reason and truth is mixed with those *huffing* opinions they are swelled with!
Locke.

In many wild birds the diaphragm may easily be *huffed* up with air, and blown in at the wind-pipe.
Grew.

This senseless arrogant conceit of theirs made them *huff* at the doctrine of repentance, as a thing below them. *South.*

Lewd shallow-brained *huffs* make Atheism and contempt of religion the sole badge and character of wit.
Id.

No man goes about to ensnare or circumvent another in a passion, to lay trains, and give secret blows in a present *huff*. *Id.*

When Peg received John's message, she *huffed* and stormed like the devil.
Arbuthnot's History of John Bull.

HUG, *v. a.* & *n. s.* } Sax. þegian, to
HUG'GER-MUGGER, *n. s.* } hedge, to enclose; Germ. *hagen*. To press in close embrace; to fondle; to treat with tenderness; to hold fast; to gripe in wrestling: hug, a close embrace; a particular gripe, called a Cornish hug: hugger-mugger, corrupted perhaps from huger mocker, or hug in the dark. *Morcker*, in Danish, is darkness, whence our murky. It is written by Sir Thomas More hoker moker. Hôker, in Chaucer, is peevish, cross-grained, of which moker may only be a ludicrous reduplication. *Hooke* is likewise in German a corner, and moky is in English dark. We know not how to determine. Secrecy; bye-place.

Now hold in *huggermugger* in their hand,
And all the rest do rob of floods and land.
Hubberd's Tale.

And chalenge to ourselves our portions dew
Of all the patrimonie, which a few
Now hold in *hugger-mugger* in their hand,
And all the rest doo rob of good and land.
Spenser. Mother Hubberd's Tale.

He bewept my fortune,
And *hugged* me in his arms. *Shakspeare.*

I, under fair pretence of friendly ends,
And well placed words of glozing courtesy,
Baited with reasons not unplausible,
Wind me into the easy hearted man,
And *hug* him into snares. *Milton's Comus.*

But if I can but find them out,
Where e'er the' in *huggermugger* lurk,
I'll make them rue their handy work.
Hudibras.

What would not he do now to *hug* the creature that had given him so admirable a serenade!
L'Estrange.

There's a distinction betwixt what's done openly and bare-faced, and a thing that's done in *hugger-mugger*, under a seal of secrecy and concealment.
Id.

King Xerxes was enamoured upon an oak, which he would *hug* and kiss. *Harvey on Consumptions.*

We *hug* deformities, if they bear our names.
Glanville.

Admire yourself,
And, without rival, *hug* your darling book.
Roscommon.

Even in that urn their brother they confess,
And *hug* it in their arms, and to their bosom press.
Dryden.

Though they know that the flatterer knows the falsehood of his own flatteries, yet they love the impostor, and with both arms *hug* the abuse. *South.*

Mark with what joy he *hugs* the dear discovery.
Rowe.

Age makes us most fondly *hug* and retain the good things of life, when we have the least prospect of enjoying them. *Atterbury.*

How ever and anon awake the soul,
As with a peal of thunder, to strange horrors
In this long restless dream, which idiots *hug*,
Nay wise men flatter with the name of life.
Young's Brothers.

HUGE, *adj.* HUGE'LY, *adv.* HUGE'NESS, *n.s.* HU'GY, *adj.* } Belg. *hooghe*; Swed. *hoeg*. The primary idea here is high; but these words are peculiarly applicable to magnitude, as opposed to quantity and number: huge is vast; immense; great, even to deformity: it is used figuratively in the sense of greatly; very much.

That verely, anone I gan to fele
An *huge* parte relesed of my smerte.
Chaucer. Complaint of the Blache Knightes.

She caught in hand an *huge* great yron mace,
Wherewith she many had of life deprived.
Spenser. Faerie Queene.

In which his worke he had sixe servants prest,
About the andvile standing evermore
With *huge* great hammers, that did never rest
From heaping stroakes which thereon soused sore.
Id.

Let the estate of the people of God, when they were in the house of bondage, and their manner of serving God in a strange land, be compared with that which Canaan and Jerusalem did afford: and who seeth not what *huge* difference there was between them?
Hooker.

My mistress exceeds in goodness the *hugeness* of your unworthy thinking. *Shakspeare.*

Who cries out on pride,
That can therein tax any private party?
Doth it not flow as *hugely* as the sea? *Id.*

The patch is kind enough, but a *huge* feeder. *Id.*

This *hugy* rock one finger's force apparently will move. *Carew's Survey of Cornwall.*

Small Engines, lift *huge* weights; and we have heard
That one Wise man (though poore without regard)
May save a City, when the Men of Warre,
And all their Captaines, at a non plusare.
George Withers.

Incensed with indignation, Satan stood
Unterrified, and like a comet burned,
That fires the length of Ophiuchus *huge*,
In the' arctic sky, and from his horrid hair
Shakes pestilence and war.
Milton's Paradise Lost.

There leviathan,
Hugest of living creatures, on the deep,
Stretched like a promontory, sleeps or swims,
And seems a moving land, and at his gills
Draws in, and at his trunk spouts out, a sea. *Id.*

I am *hugely* bent to believe, that whenever you concern yourselves in our affairs, it is for our good.
Swift.

Through forests *huge*, and long untravelled heaths,
With desolation brown he wanders waste.
Thomson.

HUGHES, (John), an English poet, born in 1677. In the earliest parts of his youth he cultivated poetry and music, in both of which he made great progress. Lord chancellor Cowper made him secretary for the commissioners of the peace, which he held till 1719, when he died on the same night in which his tragedy of The Siege of Damascus was first acted. He was then forty-two. He translated Fontenelle's Dialogues of the Dead, Vertot's revolutions of Portugal, and the letters of Abelard and Eloisa. He gave a very accurate edition of Spenser's works, with his life, glossary, and remarks; and wrote several papers in the Spectator, Tatler, and Guardian.

HUGHES (Jabez), younger brother of the preceding, was born in 1685. He published, in 1714, a translation of Claudian's Rape of Proserpine, and Lucan's Sextus and Erictho: also Suetonius's twelve Cæsars, and some of Cervantes's novels. He died in 1731.

HUGHES (Griffith), Rev. F. R. S., an English naturalist, minister of Lacy's parish, in the island of Barbadoes, circulated in 1749 proposals for publishing the natural history of that island. He appears to have been highly esteemed by Dr. Stephen Hales, and other men of science in England. The work appeared in 1750, in a folio volume, in ten books, with twenty-four engravings; and it was republished, with a larger number of plates, in 1760. This production contains a good account of the zoophytes, which here grow on the rocks by the sea side. Mr. Hughes also published a paper in the Philosophical Transactions on this subject.

HUGONIA, in botany, a genus of the decandria order and monadelphia class of plants; natural order malvaceæ.—Jussieu: cor. pentapetalous: fruit a plum with a striated kernel. Species three, tropical plants.

HUGONOTS, or HUGUENOTS, an appellation given to the Reformed Churches, or Protestants of France. The name had its first rise in 1560; but authors are not agreed as to its origin. One of the two following seems to be the least forced derivation. One of the gates of the city of Tours is called the gate Fourgon, by corruption from feu Hugon, i. e. the late Hugon. This Hugon was once count of Tours. Davila and others pretend, that the nickname of Huguenots was first given to the French Protestants, because they used to meet in the night-time in subterraneous vaults near this gate of Hugon; and what seems to countenance this opinion is, that they were first called Huguenots at Tours. Others say that the leaguers gave this name to the reformed, because they were for keeping the crown in the royal line of Hugh Capet; whereas the leaguers were for giving it to the house of Guise, as descended from Charlemagne. Others derive it from a faulty French pronunciation of the German word eidgnosser, signifying confederates, originally applied to that valiant part of the citizens of Geneva, who entered into an alliance with the Swiss cantons, to main their liberties against the tyrannical attempts of Charles III. duke of Savoy. These confederates were called Eignots, whence Huguenots. The persecution

which the Huguenots underwent has scarcely its parallel in civil or ecclesiastical history: though they obtained a peace from Henry III. in 1576, it was of short continuance; and their sufferings, mitigated by the famous edict of Nantes, granted to them in 1598 by Henry IV., were again renewed, after the revocation of this edict, by Louis XIV. in 1685. See FRANCE.

HUKE, *n. s.* Fr. *huque;* Belg. *huik.* A cloak.

As we were thus in conference, there came one that seemed to be a messenger, in a rich *huke.*
Bacon's New Atlantis.

HULK, *n. s.* & *v. a.* Sax. þulc; Dut. *hulcke;* Teut. and Swed. *holk.* The body of a ship; any thing bulky or unwieldy: hulk, to exenterate, as to hulk a hare, that is, to take out its viscera.

And Harry Monmouth's brawn, the *hulk* Sir John,
Is prisoner to your son. *Shakspeare.*

There's a whole merchant's venture of Bourdeaux stuff in him: you have not seen a *hulk* better stuffed in the hold. *Id.*

The custom of giving the colour of the sea to the *hulks,* sails, and mariners of their fly-boats, to keep them from being discovered, came from the Veneti.
Arbuthnot.

They Argo's *hulk* will tax,
And scrape her pitchy sides for wax. *Swift.*

The sooty *hulk*
Steered sluggish on. *Thomson.*

Ah grievance sore, and listless dull delay,
To waste on sluggish *hulks* the sweetest breeze!
Byron. Childe Harold.

A HULK is an old ship of war, fitted with an apparatus, to fix or take out the masts of the king's ships, as occasion requires. The mast is extremely high, and properly strengthened by shrouds and stays, to secure the sheers, which serve, as the arm of a crane, to hoist out or in the masts of any ship lying alongside. These sheers are composed of several long masts, whose heels rest upon the side of the hulk, and having their heads declining outward from the perpendicular, so as to hang over the vessel whose masts are to be fixed or displaced. The tackles, which extend from the head of the mast to the sheer-heads, are intended to pull in the latter towards the mast-head, particularly when they are charged with the weight of a mast after it is raised out of any ship, which is performed by strong tackles depending from the sheer-heads. The effect of these tackles is produced by two capsterns, fixed on the deck for this purpose.

HULL, *n. s.* & *v. n.* } Goth. *hulga;* Belg. *hue;*
HUL'LY, *adj.* } Scot. *hule.* The husk or integument; the outer covering; the body of a ship: it is now confounded with hulk, otherwise it properly signifies the mere skeleton of a vessel. The verb signifies to float; to drive to and fro without sails or rudder: hully is husky.

Will you hoist sail, sir? here lies your way.
—No, good swabber, I am to *hull* here a little longer.
Shakspeare.

He looked, and saw the ark *hull* on the flood. *Milton.*

They saw a sight full of piteous strangeness; a ship, or rather the carcase of a ship, or rather some few bones of the carcase, *hulling* there, part broken, part burned, and part drowned. *Sidney.*

Deep in their *hulls* our deadly bullets light,
And through the yielding planks a passage find.
Dryden.

People walking down upon the shore, saw somewhat come *hulling* toward them. *L'Estrange.*

So many arts hath the Divine Wisdom put together, only for the *hull* and tackle of a thinking creature.
Grew.

The tree will wither long before its fall;
The *hull* drives on, though mast and sail be torn.
Byron. Childe Harold.

HULL, or Kingston upon Hull, a borough, sea-port, and market town of the East Riding of Yorkshire, thirty-six miles south-east of York, and 170 from London, situate at the conflux of the Hull and Humber. The town is large and populous, containing two churches, several meeting houses, a free school, a charity school, and some hospitals. Among the latter is one called Trinity House, in which are maintained many distressed seamen, both of Hull and other places, that are members of its port. It is governed by twelve elder brethren and six assistants; and out of the former are chosen annually two wardens, and out of the younger brethren two stewards; and these have authority to determine questions between masters and seamen. A handsome infirmary is erected without the town to the north. Here are also an exchange and a custom-house, and over the Hull a stone bridge, consisting of fourteen arches. A good harbour was made here by Richard II. This town has not only the most considerable inland traffic of any port in the north of England, but a foreign trade superior to any in the kingdom, excepting the ports of London, Bristol, Liverpool, and Yarmouth. By means of the many large rivers that fall into the Humber, it trades to almost every part of Yorkshire, as well as to Lincolnshire, Nottinghamshire, Staffordshire, Derbyshire, and Cheshire; the commodities of which counties are brought hither, and exported to Holland, Hamburgh, France, Spain, the Baltic, and other parts of Europe. In return for those, are imported iron, copper, hemp, flax, canvas, Russia linen and yarn, besides wine, oil, fruit, and other articles. Quantities of corn are also brought hither by the navigable rivers. The trade of Hull with London, particularly for corn, lead, and butter, and with Holland and France, for those commodities, as well as for cloth, kerseys, and other manufactures of Yorkshire, is very considerable. But in the town itself there are no manufactures of any consequence, except several oil-mills in the neighbourhood worked by steam, and such as are attached to the marine for rope, tar, block-making, &c. This town returns two members to parliament, the right of election being in the burgesses, which right is held either by the sons of burgesses, or by having served seven years' apprenticeship to a freeman, by purchase, or from donation for public service. The entire civil authority over the town, and what is denominated the county, a district of more than eighteen miles in circumference, is, by various royal charters, particularly those of king Henry VII. and king Charles II., vested in the corporation, which consists of the mayor, the recorder, twelve aldermen, the sheriff, two chamberlains, a town clerk, a water-bailiff, and other officers, besides a high steward, who is generally some nobleman of rank. The mayor is admiral of the

Humber, and possessed of the power of life and death over criminals within his jurisdiction. The mayor of Hull has two swords, one given by king Richard II. the other by Henry VIII. but only one is borne before him at a time; also a cap of maintenance, and an oar of lignum vitæ, as a badge of his admiralty jurisdiction within the limits of the Humber.

HULME (Nathaniel), F. R. S. and F. A. S., was a native of Yorkshire, and served an apprenticeship to an apothecary. He was afterwards a surgeon in the navy; and on the peace of 1763 became a student of medicine at Edinburgh, where he graduated as M.D. in 1765. He settled in London, and at first devoted his attention to midwifery; but in 1775 was, through the influence of lord Sandwich, elected physician to the Charter-house, which situation he retained till his death, in April, 1807, at the age of seventy-five. In 1800 he published, in the Philosophical Transactions, an account of a series of experiments on light spontaneously emitted. Some other papers, and several medical tracts, also proceeded from his pen. Among the latter are a treatise on a Puerperal Fever, and another on the Stone and Scurvy, which were translated into German.

HUL'VER, *n. s.* Holly.

This herber was all full of floures gendes;
Into the whiche as I beholde began—
Betwixt an *hulfere* and a wodè bende,
As I was ware—I saw where laie a man
In blacke. *Chaucer. Complaint of Blacke Knight.*
Save *hulver* and thorn, thereof flail for to make.
Tusser.

HUM, *v. a.*, *n. s.* & *interj.* } Goth. and Swed.
HUM'-BIRD, *n. s.* } *hum*; Dut. *homelan.*
HUM'DRUM, *adj.* } To make the noise
HUM'MER, *n. s.* } of bees; to make an

inarticulate and buzzing sound; to pause in speaking with an audible emission of breath; to make a dull heavy noise; to sing low; to applaud, because approbation in public assemblies was formerly expressed by a hum. In Hudibras it appears to be used for ham. The interjection is an expression of doubt or deliberation: humbird, the humming bird: hum-drum, dull; dronish; stupid: hummer, an applauder.

To black Hecat's summons
The shard-born beetle, with his drowsy *hums*,
Hath rung night's yawning peal.
Shakspeare. Macbeth.

Let not your ears despise the heaviest sound
That ever yet they heard.
—*Hum!* I guess at it. *Id.*

From camp to camp, thro' the foul womb of night,
The *hum* of either army still resounds. *Shakspeare.*

These shrugs, these *hums* and haws,
When you have said she's goodly, come between,
Ere you can say she's honest. *Id. Winter's Tale.*

I think he'll hear me: yet to bite his lip,
And *hum* at good Cominius, much unhearts me.
Shakspeare.

Upon my honour, Sir, I heard a *humming*,
And that a strange one too, which did awake me. *Id.*

The cloudy messenger turns me his back,
And *hums*; as who should say, You'll rue. *Id.*

The *humming* of bees is an unequal buzzing. *Bacon.*

Towered cities please us then,
And the busy *hum* of men. *Milton.*

Shall we, quoth she, still *humdrum*,
And see stout Bruin all alone,
By numbers basely overthrown? *Hudibras.*

Having pumped up all his wit,
And *hummed* upon it, thus he writ. *Id.*

I still acquiest,
And never *hummed* and hawed sedition,
Nor snuffled treason. *Id.*

And though his countrymen the Huns,
Did stew their meat between their *hums*,
And the horses' backs, on which they straddle,
And every man eat up his saddle. *Id.*

All ages have conceived the wren the least of birds, yet our own plantations have shewed one far less; that is, the *humbird*, not much exceeding a beetle. *Browne.*

One theatre there is of vast resort,
Which whilom of requests was called the court;
But now the great exchange of news 'tis hight,
And full of *hum* and buz from noon 'till night.
Dryden.

Your excuses want some grains to make 'em current: *hum* and ha will not do the business. *Id.*

An airy nation flew,
Thick as the *humming* bees that hunt the golden dew
In Summer's heat. *Id.*

So weary bees in little cells repose;
But if night-robbers lift the well-stored hive,
An *humming* through their waxen city grows. *Id.*

The man lay *humming* and hawing a good while; but, in the end, he gave up himself to the physicians.
L'Estrange.

You hear a *hum* in the right place. *Spectator.*

I was talking with an old *humdrum* fellow, and, before I had heard his story out, was called away by business. *Addison.*

Who sat the nearest, by the words o'ercome,
Slept fast: the distant nodded to the *hum*. *Pope.*

See Sir Robert—*hum!*
And never laugh for all my life to come. *Id*
Nor undelightful is the ceaseless *hum*,
To him who muses through the woods at noon.
Thomson.

And oh the little warlike world within!
The well-reeved guns, the netted canopy,
The hoarse command, the busy *humming* din,
When, at a word, the tops are manned on high.
Byron. Childe Harold.

HU'MAN, *adj.* } Fr. *humain*; Lat. *humanus*. Having the qualities of man as contradistinguished from brutes; belonging to man: humane, kind; civil; benevolent; good-natured: humanist, a philologer; a grammarian: humanity, the nature and feelings of man; the collective body of mankind: grammatical studies are called *literæ humaniores*, perhaps because they conduce to enlighten the mind and polish the manners: humanly, after the notions, and according to the power, of men; kindly; but this more properly belongs to humanity.
HUMANE', *adj.*
HUMANE'LY, *adv.*
HU'MANIST, *n. s.*
HUMAN'ITY, *n. s.*
HU'MANISE, *v. a.*
HU'MAN-KIND, *n. s.*
HU'MANLY, *adv.*

O noble Markis! your *humanitee*
Assureth us, and yeveth us hardinesse
As oft as time is of necessitee,
That we to you now tell our hevinesse.
Chaucer. The Clerkes Tale.

The king is but a man as I am: the violet smells to him as it doth to me; all his senses have but *human* conditions. *Shakspeare.*

If they would yield us the superfluity, while it were wholesome, we might guess they relieved us *humanely*.
Id.

A rarer spirit never did steer *humanity*. *Shakspeare.*

The middle of *humanity* thou never knewest, but the extremity of both ends. *Id.*

Love of others, if it be not spent upon a few, doth naturally spread itself towards many, and maketh men become *humane* and charitable. *Bacon.*

For man to tell how *human* life began
Is hard; for who himself beginning knew?
Milton.

Thee, serpent, subtilest beast of all the field
I knew; but not with *human* voice indued. *Id.*

If he can untie those knots, he is able to teach all *humanity*, and will do well to oblige mankind by his information. *Glanville.*

To preserve the Hebrew intire and uncorrupt, there hath been used the highest caution *humanity* could invent. *Browne.*

Look to thyself: reach not beyond *humanity*. *Sidney.*

All men ought to maintain peace, and the common offices of *humanity* and friendship, in diversity of opinions. *Locke.*

Intuitive knowledge needs no probation, nor can have any, this being the highest of all *human* certainty. *Id.*

Envy, malice, covetousness, and revenge, are abolished: a new race of virtues and graces, more divine, more moral, more *humane*, are planted in their stead. *Sprat.*

How few, like thee, enquire the wretched out,
And court the offices of soft *humanity?*
Like thee reserve their raiment for the naked,
Reach out their bread to feed the crying orphan,
Or mix their pitying tears with those that weep?
Rowe.

Death is the privilege of *human* nature;
And life, without it, were not worth our taking.
Id. Fair Penitent.

Was it the business of magick to *humanize* our natures with compassion, forgiveness, and all the instances of the most extensive charity? *Addison.*

Here will I paint the characters of woe,
And here my faithful tears in showers shall flow
To *humanize* the flints whereon I tread. *Wotton.*

Thus the present happy prospect of our affairs, *humanly* speaking, may seem to promise. *Atterbury.*

Though learned, well bred; and though well bred, sincere;
Modestly bold, and *humanely* severe. *Pope.*

Blest with a taste exact, yet unconfined;
A knowledge both of books and *humankind*. *Id.*

It will never be asked whether he be a gentleman born, but whether he be a *human* creature? *Swift.*

Affliction is the wholesome soil of virtue;
Where patience, honor, sweet *humanity*,
Calm fortitude, take root, and strongly flourish.
Mallet and Thomson's Alfred.

Some grudged the savage land her sacred dust;
Stamped the cursed soil;—and with *humanity*
(Denied Narcissa) wished them all a grave.
Young's Narcissa.

Fierce as the tiger, madder than the seas,
Desperate, and armed with more than *human* strength.
Armstrong.

I have ten thousand names, and twice
As many attributes; but as I wear
A *human* shape, will take a *human* name.
Byron. Deformed Transformed.

——————— a far hour shall wreak
The deep prophetic fulness of this verse,
And pile on *human* heads the mountain of my curse.
Id. Childe Harold.

HUMBER, a river formed by the Trent, Ouse, Derwent, and several other streams. By the inland navigation it has a communication with the Mersey, Dee, Ribble, Severn, Thames, Avon, &c., which navigation, including its windings, extends above 500 miles, in the counties of Lincoln, Nottingham, York, Lancaster, Westmoreland, Chester, Stafford, Warwick, Leicester, Oxford, Worcester. The Humber divides Yorkshire from Lincolnshire, and falls into the German Ocean near Holderness.

HUM'BLE, *adj.* & *v. a.*
HUM'BLEBEE, *n. s.*
HUM'BLEBEE-EATER, *n. s.*
HUM'BLENESS, *n. s.*
HUM'BLER, *n. s.*
HUM'BLE-MOUTHED, *adj.*
HUM'BLE-PLANT, *n. s.*
HUM'BLES, *n. s.*
HUMBLESS', *n. s.*
HUM'BLY, *adv.*
HUMILIA'TION, *n. s.*
HUMIL'ITY, *n. s.*

Fr. *humble, humilité*; Lat. *humilis, humus*, the ground. Humble, and humility, are opposed to pride and self-conceit, and imply, not arrogant; low; modest; timid; submissive: humble is applicable to persons, and stations; humility, to disposition: to humiliate is to degrade; to mortify; to humble with external circumstances of contempt, displeasure, or degradation: humblebee, and humblebee-eater; the former is a buzzing wild bee, also the name of a herb; the latter, a fly that eats the bee. What is the true etymology of this word is rather doubtful. The humblebee is known to have no sting. The Scotch call a cow without horns an humble cow; so that the word seems to signify *inermis*, wanting the natural Dr. Beattie. Humbler, one that submits, or subdues himself to others: humble-mouthed, mild and meek in speech: humble-plant, a sensitive plant: humbless, an obsolete expression for humility: humiliation, condescension; degradation or disgrace: 'humility is opposed to arrogance or assumption.'—*Crabb.*

Yet, sith I have mine owne penaunce isought,
With *humble* spirite shal I it receve,
Though that the king of Love my life bereve.
Chaucer. The Court of Love.

'My Lorde,' quod she, 'I beseche you in alle *humblesse*, that ye wol not wilfully replie agein my resons, ne distempre your herte, though I speke thing that you displese.' *Id. Tale of Melibeus.*

Lady! thy bountee, thy magnificence,
Thy vertue, and thy gret *humilitee*,
Ther may no tongue expresse in no science.
Id. The Prioresses Tale.

And with meek *humbless*, and afflicted mood,
Pardon for thee, and grace for me intreat. *Spenser.*
And mighty proud to *humble* weak does yield. *Id.*

When we make profession of our faith, we stand; when we acknowledge our sins, or seek unto God for favour, we fall down; because the gesture of constancy becometh us best in the one, in the other the behaviour of *humility*. *Hooker.*

The former was an *humiliation* of Deity, the latter an *humiliation* of manhood; for which cause there followed upon the latter an exaltation of that which was humbled; for with power he created the world, but restored it by obedience. *Id.*

They were used to bend,
To send their smiles before them to Achilles,
To come *humbly* as they used to creep to holy altars.
Shakspeare.

The honey bags steal from the *humblebees*,
And for night tapers crop their waxen thighs. *Id.*
Now we have shewn our power,
Let us seem *humbler* after it is done,
Than when it was a-doing. *Id. Coriolanus.*
Thy *humble* servant vows obedience,
And faithful service 'till the point of death.
Shakspeare.
I do not know that Englishman alive
With whom my soul is any jot at odds,
More than the infant that is born to-night;
I thank my God for my *humility*.
Id. Richard III.
The executioner
Falls not the axe upon the *humbled* neck,
But first begs pardon. *Id. As You Like It.*
You are meek and *humblemouthed:* but your heart
Is crammed with arrogancy, spleen, and pride.
Shakspeare.
It was answered by us all, in all possible *humbleness*, but yet with a countenance, that we knew he spoke it but merrily. *Bacon.*
What the height of a king tempteth to revenge, the *humility* of a Christian teacheth to forgive.
King Charles.
A grain of glory, mixed with *humbleness*,
Cures both a fever and lethargickness. *Herbert.*
In process of time the highest mountains may be *humbled* into vallies; and again, the lowest vallies exalted into mountains. *Hakewill on Providence.*
The' example of the heavenly lark,
Thy fellow-poet, Cowley, mark!
Above the skies let thy proud musick sound,
Thy *humble* nest build on the ground. *Cowley.*
We should be as *humble* in our imperfections and sins, as Christ was in the fulness of the spirit, great wisdom, and perfect life.
Taylor's Rule of Holy Living.
There are some that use
Humility to serve their pride, and seem
Humble upon their way, to be the prouder
At their wished journey's end. *Denham's Sophy.*
The *humility* of the style gained them many friends.
Clarendon.
Yearly injoined, some say, to undergo
This annual *humbling* certain numbered days,
To dash their pride and joy, for man seduced.
Milton.
Thy *humiliation* shall exalt
With thee thy manhood also to this throne. *Id.*
Why do I *humble* thus myself, and, suing
For peace, reap nothing but repulse and hate?
Id.
With tears
Watering the ground, and with our sighs the air
Frequenting, sent from hearts contrite, in sign
Of sorrow unfeigned, and *humiliation* meek. *Id.*
I am rather with all subjected *humbleness* to thank her excellencies, since the duty thereunto gave me rather heart to save myself, than to receive thanks.
Sidney.
With how true *humbleness*
They looked down to triumph over pride! *Id.*
John fared poorly, according unto the apparel he wore, that is, of camel's hair; and the doctrine he preached was *humiliation* and repentance. *Browne.*
Write him down a slave, who, *humbly* proud,
With presents begs preferments from the crowd.
Dryden.
As high turrets for their airy steep
Require foundations in proportion deep;
And lofty cedars as far upwards shoot,
As to the nether heavens they drive the root;
So low did her secure foundation lye,
She was not *humble*, but *humility*. *Id.*
You, if an *humble* husband, may request,
Provide and order all things for the best. *Id.*
This would not be to condescend to their capacities, when he *humbles* himself to speak to them, but to lose his design in speaking. *Locke.*
The *humbleplant* is so called, because, as soon as you touch it, it prostrates itself on the ground, and in a short time elevates itself again: it is raised in hot-beds. *Mortimer.*
It is an easy matter to extol *humility* in the midst of honour, or to begin a fast after dinner. *South.*
Ah! prince, hadst thou but known the joys which dwell
With *humbler* fortunes, thou wouldst curse thy royalty!
Rowe.
We are pleased, by some implicit kind of revenge, to see him taken down and *humbled* in his reputation, who had so far raised himself above us. *Addison*
The mistress of the world, the seat of empire,
The nurse of heroes, the delight of gods,
That *humbled* the proud tyrants of the earth. *Id.*
In midst of dangers, fears, and death,
Thy goodness I'll adore;
And praise thee for thy mercies past,
And *humbly* hope for more. *Id.*
Ten thousand trifles light as these,
Nor can my rage nor anger move:
She should be *humble* who would please;
And she must suffer, who can love. *Prior.*
Let the sinner put away the evil of his doings, and *humble* himself by a speedy and sincere repentance; let him return to God, and then let him be assured that God will return to him. *Rogers.*
This puts us in mind once again of the *humblebees* and the tinder-boxes. *Atterbury.*
Fortune not much of *humbling* me can boast:
Though double taxed, how little have I lost! *Pope.*
It may serve for a great lesson of *humiliation* to mankind, to behold the habits and passions of men trampling over interest, friendship, honour, and their own personal safety, as well as that of their country.
Swift.
Humble love,
And not proud reason, keeps the door of Heaven;
Love finds admission, when proud science fails.
Young.
How *humble* now
Lies that ambition which was late so proud!
Smollet's Regicide.
'O pity great Father of Light!' then I cried,
'Thy creature who fain would not wander from thee,
Lo *humble* in dust I relinquish my pride:
From doubt and from darkness thou only canst free.'
Beattie.
——— 'Vengeance is mine alone!'
So saith the Lord, and with all *humbleness*
His servant echoes back the awful word.
Byron. Manfred.
——— many a night on the earth,
On the bare ground, have I bowed my face,
And strewed my head with ashes; I have known
The fulness of *humiliation*, for
I sunk before my vain despair, and knelt
To my own desolation. *Id.*

HUMBLE BEE. See BOMBYLIUS.

HUME (David), a celebrated historian, born in Edinburgh, April 20th, 1711. He was destined for the bar, and passed through his academical courses in the university of Edinburgh: but never put on the gown, nor even took the introductory steps for that purpose. The writings of Locke and Berkeley had directed the attention of the generality of learned men towards metaphysics; and Mr. Hume, having early

applied himself to studies of this kind, published in 1739 the first two volumes of his Treatise of Human Nature, and the third the following year. He had the mortification, however, to find his book generally decried; and to perceive that the taste for systematic writing was now on the decline. In 1742 he published two small volumes, consisting of Essays moral, political, and literary. These were better received; but contributed little to his reputation as an author, and still less to his profit; and, his small patrimony being now almost spent, he accepted an invitation from the marquis of Annandale to visit him in England. With this nobleman he staid a year, and then received an invitation from general St. Clair, to attend him as secretary to his expedition against the coast of France. In 1747 he attended this general in the same station in his embassy to Vienna and Turin. In 1749 he returned to Scotland, and spent two years with his brother; where he composed the second part of his essays, entitled Political Discourses, which were published at Edinburgh in 1752. The same year also he brought out, in London, his Enquiry Concerning the Principles of Morals, which he esteemed the best of his performances. This year also he was appointed librarian to the Faculty of Advocates at Edinburgh; which office gave him the command of a large library. He then planned his History of England; which he at first confined to that of Britain under the house of Stuart. This was almost universally condemned on its publication, but soon after seemed to sink in oblivion. Dr. Herring, archbishop of Canterbury, and Dr. Stone, primate of Ireland, were the only literati of the author's acquaintance who approved of the work. He next published his Natural History of Religion; to which an answer was speedily published, in the name of bishop Hurd, of which, however, he was not the sole author. In 1756 the second volume of the History of the Stuarts appeared. This was better received, and in some degree helped to retrieve the character of the former volume. Three years after his History of the House of Tudor appeared; which was, however, but little admired. But the author continued to finish at his leisure the more early part of the English history. This was published in 1761 with tolerable success. Mr. Hume being now above fifty, and having obtained by his works an independent fortune, retired to Scotland. He, however, soon after attended the earl of Hertford as secretary on his embassy to Paris in 1763. In 1765, the earl being appointed lord lieutenant of Ireland, Mr. Hume was entrusted with the management of the business of the state till the arrival of the duke of Richmond in the end of the year. In 1767 he returned to Edinburgh, with a great increase of fortune, and again resolved on retirement. Once more he was disappointed in this by an invitation from general Conway, to become an under secretary of state. In 1769 he returned to Edinburgh, possessed of an income of about £1000 a year. In spring 1775 he was struck with a disorder in the bowels; which at first gave him no alarm, but eventually proved incurable. He died on the 25th August, 1776; and was interred in the Calton burying-ground, Edinburgh, where a plain monument was erected to his memory. 'In point of style,' says lord Gardenstone, 'Mr. Hume may be studied as a perfect model. Pure, nervous, eloquent, he is simple without weakness, and sublime without effort. In the art of telling a humorous story he can never be excelled; and, when he chose to exert himself, he was even a considerable master of the pathetic; but it was his misfortune to despise accuracy of research, and fidelity of citation. He was a bitter Tory; and, while detection flashed in his face, he commonly adhered to whatever he had once written. His account of the house of Stuart is not the statement of an historian, but the memorial of a pleader in a court of justice. He sometimes asserts a positive untruth, contradicted by the very author whom he pretends himself to be quoting; but more commonly gains his purpose by suppressing the whole evidence on the opposite side of the question.'

HUMECT' *v. a.*, HUMEC'TATE, *v. a.*, HUMECTA'TION, *n. s.*, HU'MID, *adj.*, HUMID'ITY, *n. s.* Fr. *humecter*; Lat. *humecto*; Fr. *humide*; Lat. *humidus*. Humect is to wet; to moisten: humectation, the act of moistening: humidity, a state of dampness and moisture; also, that quality which we call moisture, or the power of wetting other bodies. It differs from fluidity, depending altogether on the congruity of the component particles of any liquor to the pores or surfaces of such particular bodies as it is capable of adhering to.

We'll use this unwholesome *humidity*, this gross watery pumpion. *Shakspeare.*

O blessing-breeding sun, ward from the earth
Rotten *humidity*: below thy sister's orb
Infect the air! *Id. Timon of Athens.*

Plates of brass applied to a blow, will keep it down from swelling: the cause is repercussion, without *humectation*, or entrance of any body. *Bacon's Natural History.*

Her rivers are divided in sluices, to *humectate* the bordering soil. *Howel's Vocal Forest.*

Iris there, with *humid* bow,
Waters the odorous banks that blow
Flowers of more mingled hue
Than her purpled scarf can shew. *Milton.*

The Nile and Niger do not only moisten and contemperate the air by their exhalations, but refresh and *humectate* the earth by their annual inundations. *Browne.*

That which is concreted by exsiccation, or expression of *humidity*, will be resolved by *humectation*, as earth and clay. *Id.*

The queen, recovered, rears her *humid* eyes,
And first her husband on the poop espies. *Dryden.*

If they slip easily, and are of a fit size to be agitated by heat, and the heat is big enough to keep them in agitation, the body is fluid; and if it be apt to stick to things, it is *humid*. *Newton's Opticks.*

The medicaments are of a cool *humecting* quality, and not too much astringent. *Wiseman's Surgery.*

Young animals have more tender fibres, and more *humidity*, than old animals, which have their juices more exalted and relishing. *Arbuthnot.*

The modest virtues mingled in her eyes,
Still on the ground dejected, darting all
Their *humid* beams into the blooming flowers.
Thomson.

HU'MERAL, *adj.* Fr. *humeral*, from Lat. *humerus*. Belonging to the shoulder.

The largest crooked needle should be used, with a ligature, in taking up the *humeral* arteries in amputation. *Sharp.*

HUMERI Os, or HUMERUS, in anatomy, the uppermost bone of the arm, popularly called the shoulder-bone; extending from the scapula, or shoulder-blade, to the upper end of the cubitus, or elbow. See ANATOMY.

HUMICUBATION, *n. s.* Lat. *humi* and *cubo*. The act of lying on the ground.

Fasting and sackcloth, and ashes and tears, and *humicubations*, used to be companions of repentance. *Bramhall.*

HUMILIATI, a congregation of religious in the church of Rome, established by some Milanese gentlemen on their release from prison, where they had been confined under the emperor Conrad, or, as others say, under Frederick I., in 1162. This order, which acquired great wealth, and had no fewer than ninety monasteries, was abolished by Pope Pius V. in 1570, for luxury and cruelty, and their houses given to the Dominicans and Cordeliers.

HU'MORAL, *adj.*
HU'MORIST, *n. s.*
HU'MOROUS, *adj.*
HU'MOROUSLY, *adv.*
HU'MOROUSNESS, *n. s.*
HU'MORSOME, *adj.*
HU'MORSOMELY, *adv.*
HU'MOR, *n. s.* & *v. a.*

Fr. *humeur*; Ital. *humoristo*; Lat. *humor*. The radix of all these words is humor, which literally signifies moisture or fluid: it is applied to the fluids of the human body; and, as these were formerly considered to be immediately connected with the state of temper, and the disposition of the animal spirits and moral feelings, it is figuratively used in a good and bad sense, for pleasurable feelings; jocularity; merriment; petulance; peevishness; a trick; caprice, or inclination: humoral retains only a literal signification, as proceeding from humors: humorist, one who gratifies his humor; has odd conceits, or peculiar passions: humorous, pleasant; jocose; full of odd images;—also, capricious; whimsical: humorsome, peevish; fickle; petulant: humor, to gratify; sooth by compliance; to indulge: the humor of a person is his present disposition or temper of mind.

The thridde spice of glotonie is whan a man devoureth his mete, and hath not rightful maner of eting. The fourthe is whan thurgh the gret abundance of his mete, the *humours* in his body ben distempered. *Chaucer. The Persones Tale.*

And with fayre words, fit for the time and place,
To feede the *humour* of her maladie,
Promist, if she would free him from that case,
He wold, by all good means, he might deserve such grace. *Spenser. Faerie Queene.*

I am known to be a *humorous* patrician; said to be something imperfect, in favouring the first complaint; hasty and tinder-like, upon too trivial motion. *Id. Coriolanus.*

He's *humorous* as Winter, and as sudden
As flaws congealed in the spring of day. *Shakspeare. Henry IV.*

I like not the *humour* of lying: he hath wronged me in some *humours*: I should have borne the *humoured* letter to her. *Shakspeare.*

If I had a suit to master Shallow, I would *humour* his men; if to his men, I would curry with master Shallow. *Id.*

King James, as he was a prince of great judgment, so he was a prince of a marvellous pleasant *humour*; as he was going through Lusen, by Greenwich, he asked what town it was? They said Lusen. He asked, a good while after, what town is this we are now in? They said still it was Lusen: then said the king, I will be king of Lusen. *Bacon's Apophthegms.*

By a wise and timeous inquisition the peccant *humours* and *humorists* must be discovered and purged, or cut off: mercy in such a case, in a king, is true cruelty. *Id. to Villiers.*

In private, men are more bold in their own *humours*; and, in consort, men are more obnoxious to others' *humours*; therefore it is good to take both. *Bacon.*

O you awake then: come away,
Times be short, are made for play;
The *humorous* moon too will not stay:
What doth make you thus delay? *Ben Jonson.*

Another thought her noble *humour* fed. *Fairfax.*

This sort of fever is comprehended under continual *humoral* fevers. *Harvey on Consumptions*

To after age thou shalt be writ the man,
That with smooth air could *humour* best our tongue. *Milton.*

Believe not these suggestions, which proceed
From anguish of the mind and *humours* black,
That mingle with thy fancy. *Id.*

Their *humours* are not to be won,
But when they are imposed upon. *Hudibras.*

As there is no *humour* to which impudent poverty cannot make itself serviceable, so were there enow of those of desperate ambition, who would build their houses upon others' ruins. *Sidney.*

There came a young lord, led with the *humour* of youth, which ever thinks that good whose goodness he sees not. *Id.*

Examine how your *humour* is inclined,
And which the ruling passion of your mind. *Roscommon.*

In conversation *humour* is more than wit, easiness more than knowledge. *Temple.*

He denied himself nothing that he had a mind to eat or drink, which gave him a body full of *humours*, and made his fits of the gout frequent and violent. *Id.*

Tempt not his heavy hand;
But one submissive word which you let fall,
Will make him in good *humour* with us all. *Dryden.*

'Tis my part to invent, and the musicians to *humour* that invention. *Id. Preface to Albion.*

Vast is his courage, boundless in his mind,
Rough as a storm, and *humorous* as the wind. *Dryden.*

They, who were acquainted with him, know his *humour* to be such, that he would never constrain himself. *Id.*

The aqueous *humour* of the eye will not freeze, which is very admirable, seeing it hath the perspicuity and fluidity of common water. *Ray on the Creation.*

Fountainbleau is situated among rocks and woods, that give a fine variety of savage prospects: the king has *humoured* the genius of the place, and only made use of so much art as is necessary to regulate nature. *Addison.*

A cabinet of medals Juvenal calls, very *humorously* concisum argentum in titulos facieque minutas. *Id.*

The wit sinks imperceptibly into an *humorist*. *Spectator.*

In cases where it is necessary to make examples, it is the *humour* of the multitude to forget the crime, and to remember the punishment. *Addison.*

Some of the commentators tell us that Marsyas was a lawyer who had lost his cause; others, that this

passage alludes to the story of the satyr Marsyas, who contended with Apollo, which I think is more *humorous*. *Id. on Italy.*

Is my friend all perfection, all virtue and discretion? Has he not *humours* to be endured, as well as kindness to be enjoyed? *South.*

Thy *humorous* vein, thy pleasing folly,
Lies all neglected, all forgot;
And pensive, wavering, melancholy,
Thou dreadest and hopest thou knowest not what.
Prior.

We resolve by halves, and unadvisedly; we resolve rashly, sillily, or *humorously*, upon no reasons that will hold. *Calamy.*

You *humour* me, when I am sick;
Why not when I'm splenetick? *Pope.*

Good *humour* only teaches charms to last,
Still makes new conquests, and maintains the past.
Id.

Obedience and subjection were never enjoined by God to *humour* the passions, lusts, and vanities, of those who are commanded to obey our governours. *Swift.*

It has been *humorously* said, that some have fished the very jakes for papers left there by men of wit. *Id.*

Our science cannot be much improved by masquerades, where the wit of both sexes is altogether taken up in continuing singular and *humorsome* disguises. *Id.*

Children are fond of something which strikes their fancy most, and sullen and regardless of every thing else, if they are not *humoured* in that fancy. *Watts's Logick.*

He that would learn to pass a just sentence on persons and things, must take heed of a fanciful temper of mind, and an *humorous* conduct in his affairs. *Id.*

The notion of the *humorist* is one that is greatly pleased, or greatly displeased, with little things; his actions seldom directed by the reason and nature of things. *Watts.*

The child had a *humour* which was cured by the waters of Glastonbury. *Fielding.*

HUMP, *n. s.* } Goth. and Swed. *hump;*
HUMP'BACK, *n. s.* } Belg. *homp.* The pro-
HUMP'BACKED, *adj.* } tuberance formed by a crooked back.

These defects were mended by matches; the eyes were opened in the next generation, and the *hump* fell. *Tatler.*

The chief of the family was born with a *humpback* and very high nose. *Id.*

HUMPHREY (Dr. Lawrence), a celebrated English divine of the sixteenth century, who, on the persecutions of Mary, retired, with other Protestant refugees, to Zurich. He returned on the accession of queen Elizabeth; and was made president of Magdalen College, Oxford, dean of Gloucester, and dean of Winchester. He was an able linguist, and published, 1. De Religionis Conservatione et Reformatione, deque Primatu Regum. 2. De Ratione Interpretandi Auctores. 3. Optimates; sive de Nobilitate, Ejusque Origine. 4. Sermons, and other works. He died in 1590.

HUMULUS, the hop, a genus of the pentandria order, and dicœcia class of plants; natural order fifty-third, scabridæ: MALE CAL. pentaphyllous: COR. none: FEMALE CAL. monophyllous, patent obliquely, and entire: COR. none; styles two: SEED one within the calyx, the latter consisting of one large leaf. There is only one species, viz. H. lupulus, sometimes found wild in hedges near houses and gardens, but probably not indigenous. The stalk is weak and climbing; it creeps up the support in a spiral, ascending always from the right hand to the left. The stalks and the leaves are rough to the touch; the upper leaves are heart-shaped, the lower ones divided into three lobes serrated on the edges, and grow in pairs on long foot-stalks. The male flowers grow on a distinct plant on branched peduncles; the females on peduncles in pairs of the form of a strobilus, or cone, composed of large imbricated calyces, containing each one or two seeds. See HOP.

HUNCH, *v. a.* } Germ. *husch;* Teut.
HUNCH'BACKED, *adj.* } *hocker.* To strike or punch with the fists; to crook the back: hence the substantive means crook-backed.

But I more fear Creon!
To take that *hunchbacked* monster in my arms,
The' excrescence of a man. *Dryden's Oedipus.*

Thy crooked mind within *hunched* out thy back,
And wandered in thy limbs. *Dryden*

His person deformed to the highest degree, flat-nosed, and *hunchbacked*. *L'Estrange.*

Jack's friends began to *hunch* and push one another: why don't you go and cut the poor fellow down? *Arbuthnot.*

The second daughter was peevish, haggard, pale, with saucer-eyes, a sharp nose, and *hunchbacked*. *Id. History of John Bull.*

HUN'DRED, *adj.* & *n. s.* } Sax. þunꝺ, and
HUN'DREDTH, *adj.* } þunꝺɼeꝺ; Dut. *honderd;* Goth. *hund*, ten; perhaps, as Mr. Thomson conjectures, from *haund*, *haunder*, the hands. The number consisting of ten multiplied by ten: hundredth, the tenth part ten times told; the ordinal of a company consisting of a hundred: a hundred, a canton or division of a county, perhaps once containing a hundred manors. Old Fr. *hundrede;* low Lat. *hundredum.*

An *hundrede* thousand bodies of mankind
Han rockes slain, al be they not in mind.
Chaucer. The Frankeleines Tale.

We shall not need to use the *hundredth* part of that time, which themselves bestow in making invectives. *Hooker.*

Imposts upon merchants do seldom good to the king's revenue; for that that he wins in the *hundred*, he loseth in the shire. *Bacon.*

For justice they had a bench under a tree, where Ket sat, and with him two of every *hundred* whence their companies had been raised: here complaints were exhibited. *Hayward*

——— One, bestowes
On pious-workes, the *hundredth* part, of those
Ill-gotten goods, which from the poore he seazed,
And thinkes his God in that his highly pleased.
George Withers.

A *hundred* altars in her temple smoke,
A thousand bleeding hearts her power invoke.
Dryden's Æneid.

Very few will take this proposition, that God is pleased with the doing of what he himself commands, for an innate moral principle: whosoever does so, will have reason to think *hundreds* of propositions innate. *Locke.*

Many thousands had seen the transactions of our Saviour, and many *hundred* thousands received an account of them from the mouths of those who were eye-witnesses. *Addison.*

If this medium is rarer within the sun's body than at its surface, and rarer there than at the *hundredth* part of an inch from its body, and rarer there than at the orb of Saturn, I see no reason why the increase of density should stop. *Newton.*

Lands, taken from the enemy, were divided into centuries or *hundreds*, and distributed amongst the soldiers. *Arbuthnot.*

HUNDRED was anciently so called either from its containing 100 families, or from its furnishing 100 able men for the king's wars. After king Alfred divided England into counties, and gave the government of each county to a sheriff, these counties were divided into hundreds, of which the constable was the chief officer. The grants of hundreds were at first made by the king to particular persons: but they are not now held by grant or prescription, their jurisdiction being devolved to the county court; a few only excepted, that have been by privilege annexed to the crown, and still remain in the nature of a franchise.

A HUNDRED COURT is only a larger court baron, being held for all the inhabitants of a particular hundred instead of a manor; and resembling the former in all points, except that it is of a greater jurisdiction. This is said by Sir Edward Coke to have been derived out of the county court for the ease of the people, that they might have justice done them at their own doors, without any charge or loss of time: but its institution was probably coeval with that of hundreds themselves, which were formerly observed to have been introduced, though not invented, by Alfred, being derived from the policy of the ancient Germans. The centeni were the principal inhabitants of a district composed of different villages, originally in number 100, but afterwards only called by that name; and who probably gave the same denomination to the district out of which they were chosen. Tacitus, who had examined their constitution still more attentively, informs us not only of the authority of the lords, but that of the centeni, the hundredors or jury; who were taken out of the common freeholders, and had themselves a share in the determination. 'Eliguntur in conciliis et principes qui jura per pagos vicosque reddunt: centeni singulis, ex plebe comites, consilium simul et auctoritas adsunt.' This hundred court was denominated hæreda in the Gothic constitution. But this court, as causes are equally liable to removal from hence as from the common court baron, and by the same writs, and may also be reviewed by writ of false judgment, is therefore fallen into equal disuse with regard to the trial of actions.

HUNDSRUCK, a district of Germany, in the circle of the Upper Rhine, between the Rhine, the Moselle, and the Nahe; formerly belonging to the elector of Treves, the elector Palatine, and the prince; afterwards annexed to the French republic by the treaty of Luneville; but now included in the dominions of the king of Prussia.

HUNG, the *preterite* and *part. pass.* of hang.

A murderer yonder was *hung* in chains,
The sun and the wind had shrunk his veins;
I bit off a sinew, I clipped his hair,
And brought off his rags, that danced i' the air.
Jons n.

**A wife so *hung* with virtues, such a freight,
What mortal shoulders can support?**
Dryden's Juvenal.

On two near elms, the slackened cord I *hung*;
Now high, now low, my Blouzelinda swung. *Gay.*

A room that is richly adorned, and *hung* round with a great variety of pictures, strikes the eye at once. *Watts.*

HUNGARY, a kingdom of Europe, forming an important part of the Austrian dominions. At different periods of the history of this country this name has been applied with a very different signification. In the fourteenth and fifteenth centuries Hungary comprised part of modern Poland and European Turkey, and was divided into ten separate governments, or kingdoms, viz. Hungary Proper, Croatia, Sclavonia, Dalmatia, Bosnia, Bulgaria, Moldavia, Galicia, and Lodomeria, besides the principality of Transylvania. Several of these provinces have long since been detached from Hungary; but that country has still a close political and military connexion with the Austrian provinces of Sclavonia, Croatia, and Dalmatia. Our article, however, will only have reference to Hungary properly so called.

This kingdom, for such it is still termed, is of a compact heptagonal figure, its length being about 370 miles, and its general breadth about 300. It is surrounded by mountains, except on the south, where its frontier is along the Danube and the Drave. It is bounded west by part of Germany, on the north by Galicia, on the east by Transylvania and Wallachia, on the south by Turkey, Sclavonia, and Croatia. It lies between 16° 5′ and 27° 6′ E. long., and 44° 13′ and 49° 26′ N. lat., and has a territorial extent of 84,500 square miles, which is greater than England and Scotland together. Its population, including Sclavonia and Croatia, has been thus stated:—

	Extent in English Square Miles.	Population (1805.)
1. Circle this side the Danube,	23,595	2,194,390
2. Circle beyond the Danube,	16,896	1,662,239
3. Circle this side the Theisa,	15,510	1,442,626
4. Circle beyond the Theisa,	26,946	1,919,284
5. Province of Sclavonia,	3,570	287,868
6. Province of Croatia,	2,262	260,829
	88,779	7,767,236

But this is the conscription list; and excludes therefore the nobility and clergy: Blumenbach takes the population in 1817 at 8,500,000. The circles above enumerated have superseded the old political division of Upper and Lower Hungary; they are divided into counties, of which there are thirteen in the first circle, and eleven in each of the others.

The *mountains* of Hungary constitute its principal geographical peculiarity. The Carpathians form a semicircle, extending from the south-east portion of the kingdom till it meets the Danube on the western frontier: but, in the course of the circle they describe, many projecting ranges extend themselves into level land. On the western side the Carinthians cover a considerable portion of the kingdom. The highest points in the Car-

pathian Mountains are the Lomnitzer Spitze, 8545 feet; the great Krywan, 8218; the Caesmark 8194; and the Uinacke 7597 feet above the level of the sea. The loftiest of the Carinthian range is the Terklou, elevated to 10,485 feet. To the eastward of this extend the Norischen and Rhetian Alps, the highest of whose summits within the Austrian dominions reaches the height of 14,814 feet. The greatest expanse of level land in Hungary is to the eastward of the Theisa, forming a rich plain of 20,000 square miles. Another level, called the Three Cornered Plain, is to the eastward of the Danube, beginning near Presburgh; its base line extends 150 miles in length.

First amongst the *rivers* of Hungary, though it has its source out of the kingdom, is the noble Danube; and next may be ranked the Drave, the Marosch, the March, the White Koresch, and the Izamos. In the Carpathian range originate the Theyss, the Waag, the Gran, the Poprace, and the Temes, which all fall into the Danube. The principal lakes are Balaton and Nieusiedl, west; Palitsch on the south-west, and Grunsee or the Gun lake among the Carpathians. There are also several extensive marshes here, as that of the Isle of Schut on the west, and that of Saxetje on the east of the kingdom. A great part of the county of Torontal on the frontier of the Bannat is composed of marshes, overflowed by the Danube and its tributaries.

The *climate* among the mountains is of course bleak; but in the south it is in general mild; in the sandy districts extremely hot; on the banks of the rivers and near the marshes there is much humidity: indeed it is a prevailing characteristic of the climate of the level part of Hungary. After the hottest days of summer, a copious and chilling dew falls. Rain is not, however, very frequent in the plains, through the prevalence of high winds. On the other hand, rain and hail occur frequently in the mountainous provinces. Except in the Bannat and other marshy parts, the inhabitants are healthy; but here agues and inflammatory diseases are frequent, and in some places the plica of Poland appears.

The *mineral* products of the mountains form an important part of the riches of Hungary. It is divided into four mining districts, viz. Upper and Lower Hungary, Nagy Banya, and the Bannat; each having its particular court for the decision of all questions relative to the mines. In the first the chief towns are Schemnitz, Cremnitz, New Sohl, Uj Banya, Herrengrund, and Libetho Banya. In the second most of the mines are in the county of Zyps, and the produce is chiefly copper. The district of Nagy-Banya adjoins Transylvania, and has several gold mines; but their produce is inconsiderable. Of the Bannat district the chief town is Oravitza. The whole annual produce of these mines is about 21,000 marks (each of 8oz.) of gold; 93,000 marks (ditto) of silver; 23,000 cwt. of lead; 48,500 cwt. of copper; 41,000 cwt. of forged iron; and 500 cwt. of zinc. Gold is occasionally found in the sand of rivers, and is washed by the gypsies. Various precious stones are also discovered in the mountains; and in the county of Marmarosch are sometimes found small crystals of great beauty. A more substantial description of mineral wealth consists in salt mines, which are abundant in Hungary, particularly in the counties of Saros and Marmarosch; and which belong exclusively to the government.

The *soil* of Hungary varies with its remarkable diversities of elevation. The mountains, and many tracts amongst them, are dry, sterile, and sandy, often exhibiting neither living creature, shrub, nor tree, for many miles; yet terraces bordering on them have fine pasturage; and the plains are of luxurious vegetation.

In the north, clay, stone, and gravel, prevail: and the ground produces at best but a scanty return for labor. In the south there are also many tracks unfit for agriculture. The extensive heaths of Debreczin and Ketszkemet are covered either with sand or the most scanty vegetation, and several other tracks are moving sands. To the north, corn is not produced in a sufficient quantity for the consumption of the inhabitants, and barley, common rye, and ikritza (a productive species of rye from Moravia), are most frequently sown; in the south, wheat, maize, millet, and, in the marshes of the Bannat, rice. From the south, wheat is exported in considerable quantity. Oats are cultivated throughout the kingdom. Potatoes are also raised by the Sclavonians and Germans, and pulse by the followers of the Greek church. Hemp, flax, tobacco, and saffron, are also cultivated. The climate is favorable to various kinds of fruit, but its culture is very little attended to. Agriculture indeed throughout Hungary is in an extremely backward state. The ground is ill-ploughed and ill-sown; a bundle of sticks or branches serve for the harrow, and the roller is unknown. Enclosure, drainage, and the irrigation of meadows, are also scarcely thought of here. When it is necessary to store corn, a hole, of sufficient width to admit a man, and to let it down, is dug to a certain depth, and the ground is then scooped out, so as to form a cavern of some size. When damp is apprehended, the bottom and sides are covered with straw, after which the corn is put in, and the neck, or opening, filled with earth. The north of Hungary, on the whole, though mountainous, is better cultivated than the fertile tracks in the south.

The extent of land employed in vineyards is very considerable; amounting, it is said, to nearly 1,000,000 acres; and the produce amounts to many hundred thousand hogsheads. But the Hungarian wines vary both in taste and strength: Tokay is the best, then come the wines of Rust, Odenburg, Menes, St. George, Buda, and Erlau. Hungary also abounds in wood: resinous trees are common in the north; in the south oak is plentiful. Here again, however, is great diversity in the different parts of the kingdom. The forest of Rakony, in the western counties of Veszprim and Szala, is more than seventy miles in length; and the counties of Tolna, Baranya, and Schumeg, in the west, are almost covered with forests; while a large track, extending from Pest to Debreczin on one side, and on the other into the Bannat, is totally destitute of wood. In

some places are immense woods of plum-trees: the inhabitants distil from the fruit a liquor called slivavicza.

Grellman makes the extent of land in Hungary 39,329,000 jochs, which are nearly equal to an English acre. Of this 23,905,126 jochs only are in cultivation; the remainder is sandy deserts, lakes, morasses, or mountains. The productive lands are thus divided:—4,897,218 arable, 638,767 gardens, 911,176 vineyards, 2,129,225 meadows, 5,536,000 pastures, 850,000 ponds, and 8,940,740 woods.

Breeding *cattle* is a very important branch of the rural economy. The horses are active and hardy, but small, and inferior to those of most other parts of the Austrian empire. They have, however, improved of late years. The whole number of them does not exceed 480,000. The horned cattle are much valued in other countries. The steppes between Debretzen, Temeswar, Neusatz, and Pest, are their native homes, and here their number has been taken at 886,900 oxen, and 1,508,100 cows, which, by sale to the surrounding countries, have produced annually nearly £500,000 sterling. The sheep are stated to be upwards of 8,000,000. There are prodigious flocks between the Danube and the Theisa. The wool is coarse, and the owners reckon on the cheese, milk, and flesh, more than the fleeces. In Western Hungary the flocks have been much improved of late years, by crosses with the Merino and the sheep of Padua. Wool to the value of £500,000 is here exported. Swine are reared in abundance; there are yearly from 200,000 to 250,000 exported. Goose feathers are also largely exported by the Jews; and in the Bannat, where the mulberry-tree flourishes, the breeding of silk-worms has been a good deal attended to of late.

Hungary is not a manufacturing country, such occupations being greatly disdained, and except for the preparation, in the first stage, of its minerals, tobacco, or potash, or such articles as essential oils from the resinous trees, or leather from the hide, there are very few establishments worth notice. At Sassin, in the north-west, is a cotton manufacture, which in 1800 gave employment to 20,000 persons; but is now in a neglected state; and at Caschau, in the north, there is a manufacture of coarse cloth; but the only place where fine cloth is prepared is Oedenburg. In the large towns indeed there are workmen in various departments, but few establishments of any importance, and manufactured goods are therefore imported in large quantities, from the other Austrian states. The *commerce* of the country is fettered by no internal taxes, a circumstance of which the Hungarians are very proud, but the Austrian government has environed it with custom houses, where a duty of 1½ per cent. is gathered on all goods that pass into it from the other Austrian states. We may thus see that the encouragement of manufactures within the kingdom, will never, voluntarily, become the policy of that government. The external commerce of Hungary is carried on principally with Silesia, Poland, and the North of Italy: the first two drawing their wine, and the latter large supplies of corn from hence. Fiume is the only good port of the kingdom: while the central point of all its commerce is Pest, which has four great fairs annually that regulate in a great degree the prices for the year throughout the kingdom. Other places which have considerable trade are Presburg, Raab, Koman, and Oedenburg toward the German dominions of Austria; Kaschau, Eperies, and Leutschau towards Galicia; Debreczin, Ezegedin, and Temeswar toward Moldavia and Wallachia; and Semlin and Neutsatz toward Turkey.

The *nobles*, though differing in titles and rank, have all equal privileges; that is, the Magnates having personally a seat and vote in the diet; and the other nobles their representatives. The higher clergy are considered as nobles; and the nobility alone can possess free lands, or those enjoying the jus dominale, and they are exempt from taxes, tithes, and the quartering of soldiers; but, on the other hand, they are bound to perform personal military service, when the diet decrees the levy en masse.

The *citizens*, or burghers, are the inhabitants of those cities which own no superior lord under the monarch. They have similar privileges to the nobility, by which they are exempted from taxes and tithes, and from the quarterings of the military; and their deputies have seats in the diet. They are also governed by their own magistrates. They cannot, however, hold estates out of their cities, nor institute a suit against the nobles, except in the name of the corporation to which they belong.

The peasants are *slaves* generally, with a greater or less degree of servitude; but some few are qualified colonists, and free. The lot of this class has been of late years much improved. They are allowed to acquire property, to leave their estates to their heirs, and to become burghers, if they can do so. They are still, however, incapable of commencing suits against either the nobility or burghers. The majority of the Hungarians are Catholics, but other sects are established upon nearly an equality, and have their independent revenues and discipline. In 1805 the Catholics, including the Greek church and Armenians who had united with them, were 4,647,832. The independent Greek church were 1,161,138; the Calvinists, or Reformed, 1,002,490; the Lutherans 624,776; and the Jews 75,128 in number. The Catholic clergy consist of three archbishops, seventeen diocesan and nineteen titular bishops; besides abbots, priors, &c. The Greek church has one archbishop, seven bishops, eighteen deans, several abbots, and nearly 3000 priests. The Reformed have, in four superintendencies, 1300 ministers; and the Lutherans, in four superintendencies, 480 pastors. Each of the sects have their separate institutions, also, for educating those of their confession. The Catholics one university, five academies, one lyceum, two philosophical institutes, fifty-five gymnasia, six grammar-schools, and nine schools for preparing teachers for the villages, whose number is 2690. The Greeks in union with the Catholics have 380 schools, and the same number of teachers The independent Greeks 1230 schools, and two gymnasia. The reformed three colleges, six gymnasia, and 1600 schools. The Lutherans one lyceum, one college, ten gymnasia, and 630 schools.

The *constitution* of Hungary is a mixed monarchy, in which the king, as the great executive magistrate, has ample prerogatives. He appoints to all the archbishoprics, bishoprics, and high ecclesiastical offices of the Catholic church, without any interference of the pope, though these dignitaries do not enter on their functions till confirmed in them at Rome. They cannot bequeath their property without the royal consent; and, if they die intestate, the crown is heir. The king has the farther power of suppressing monasteries, or religious orders, entirely. He is also regarded as the protector of the Protestants in their privileges. The executive government is administered by the Vienna chancery, in connexion with the statthalterey, or council of state, at Buda; and subordinate to it are the comitatus, or county meetings, held under a lord lieutenant. The great officers of state are, 1. The palatine, who is nominated by the diet out of four candidates proposed by the king, and whose office is for life; his powers as protector of the throne during a minority, and as occasional mediator between the king and the diet, are very great. 2. The locum tenens regius, or viceroy, who is now frequently the same person as the palatine. 3. The judex curiæ regiæ, a law officer of great influence. 4. The bannus, or governor of Croatia, Sclavonia, and Dalmatia. 5. The tavernicus, formerly director of the royal revenue, but now president of the sedes tavernicalis, or court of exchequer. These, and the inferior officers of state, such as the chamberlains, &c., are called barons of the kingdom, and they rank among the maginates.

The *revenue* is derived from the regalia, enjoyed by the crown in its own right, and the contributions or taxes granted by the diet. The regalia are, the crown lands; a monopoly of salt; the coinage; mines; tolls on imports and exports; fines and penalties; the income of the vacant bishoprics; the taxes paid by the Jews and the free towns; 5 per cent. on the salaries of certain pensions of office; the contributions of bishoprics and abbeys towards repairing of fortresses; the post-office; the lotteries; monti di pieta; and some others. The taxes voted periodically by the diet are on cattle, land, trades, the poll-tax, &c. For the collection of these, the country is divided into 621 opforten, or petty districts; and the produce of this part of the revenue is about £500,000; its total produce between £3,000,000 and £4,000,000 sterling, or nearly one-third of the whole revenue of the Austrian empire.

The *military force* of Hungary has also always been very important to the empire: it consists of twelve regiments of infantry of 3857 men each, and ten complete hussar regiments of 1698 men each, making together 63,364 regulars, recruited from time to time among the peasantry, and much increased in time of war, or when what is termed the *insurrectio* is called forth. In 1797 this irregular force was 18,000 cavalry and 35,000 infantry; in 1800 it was 11,000 horse and 26,000 foot; and in 1809, when the national spirit was fully roused, 18,000 horse and 21,000 foot. On the boundaries of the Turkish empire is a military colony which hold the land to cultivate upon the terms of being always ready for active service when a war breaks out with that power. They are all regimented, and have been drilled.

Though Hungary has a *language* of its own, it is not generally spoken, nor supposed to be understood by more than one-third of the people. Until within a very late period the only written language was Latin, and it is still the most common medium of communication. But when Maria Theresa formed her Hungarian guards, a number of young men of noble families were drawn to Vienna, and taught to feel the inferiority of their native country in not possessing a national literature. This stimulated them to the cultivation of the vernacular tongue, which was further promoted by the attempt of the emperor Joseph to introduce the German into their public transactions; and since that period the study of this language has produced some good poets and miscellaneous writers.

From the period of the settlement of the Magyars in this country, in the ninth century, we find it for a length of time governed by a duke, the elected head of various independent principalities. One of the last of these dukes was Geysa: who, becoming a proselyte to Christianity, was baptised; after which he resigned the government to his son Stephen, who took the title of king, A. D. 1000. The disposal of the crown was now disputed between the Turkish and German emperors for nearly 200 years: but after 1527, when Ferdinand, archduke of Austria, was advanced to the throne, the Austrians found means to influence the elections in such a manner, as to keep the crown in their family till 1687, when it was settled hereditarily on their heirs-male; and now, in consequence of an act of the diet of Presburg in 1723, in case of the failure of heirs-male, it is to descend to females.

The present division of the kingdom into counties was introduced by Bela III., who died in 1196. His son Andrew II., infected with the rage of the crusades, allowed the nobles to deprive him of a considerable part of his prerogative; and the privileges which they thus obtained were incorporated under his successor, in 1222, into what is called the Golden Bull. Mary, grand-daughter of Bela IV., having married a prince of the royal family of France, the house of Anjou derived from her their claims to the crown of Hungary. Accordingly, a brother of Louis IX. of France, named Charles, was crowned king of Hungary in 1310, and raised that country to its highest splendor. Having married a sister of Casimir, king of Poland, one of his sons succeeded to that crown; but the successors of this great prince were far inferior to him in talent: and for a century the history of Hungary presents little else than a series of disturbances. At last the archduke of Austria, having married the only daughter of king Sigismund, succeeded to the crown in 1437; and the house of Austria has ever since reigned in Hungary.

Of the *manners and customs* of this interesting people we cannot present a more faithful summary than from the pen of Dr. Bright.

The Hungarians, according to this writer, exhibit the martial spirit of their Sclavonian ancestors, and are, in all the ranks above the peasantry, very jealous of their peculiar privileges.

They are tall and well made; and fond of athletic exercises. The dress of the higher classes consists generally of a fur cap, a close coat, girded with a sash, and covered with a mantle or cloak; this gives them an air of dignity, while the practice of not shaving the upper lip adds to it a sort of military effect. The females are in general handsome, and dress in dark colors with long sleeves.

The peasant appears in general void of 'all stimulus to invention, all excitement to extraordinary exertion. No one has proceeded in the arts of life and civilisation a step farther than his neighbour. When you have seen one you have seen all. From the same little hat covered with straw, falls the same matted long black hair, negligently plaited, or tied in knots; and over the same dirty jacket and trowsers is wrapped on each a cloak of coarse woollen cloth, or sheepskin, still retaining its wool. Whether it be winter or summer, week-day or sabbath, the Sclavonian of this district never lays aside his cloak, or is seen but in heavy boots. Their instruments of agriculture are throughout the same, and in all their habitations is observed a perfect uniformity of design. A wide muddy road separates two rows of cottages, which constitute a village. From amongst them there is no possibility of selecting the best or the worst; they are absolutely uniform. In some villages the cottages present their ends, in others their sides, to the road; but there is seldom this variety in the same village. The interior of the cottage is generally divided into three small rooms on the ground floor, and a little space in the roof destined for lumber. The roof is commonly covered with a very thick thatch, the walls are whitewashed, and pierced towards the road by two small windows. The cottages are usually placed a few yards distant from each other. The intervening space defended by a rail and gate, or a hedge of wickerwork towards the road, forms the farm-yard, which runs back some way, and contains a shed or out-house for the cattle. Such is the outward appearance of the peasant and his habitation.'

The Austrian government has, as we have stated, mitigated the lot of the peasants in some degree: this good work was commenced by Maria Theresa, who fixed the quantity of land upon each estate (called a *session*) which a peasant should possess, and the services he should render his lord in return. The peasants are not absolutely fixed to the soil, but may be dismissed if the superior finds cause; nor does the son always succeed the father, though this is usual; nor has the peasant any absolute claim to a whole session, but, if one-half or one third is awarded to him by the lord, only that proportion of the stipulated service can be required.

The services required of the father of a family, for the whole session, are 104 days of labor during the year, if he work without cattle, or fifty-two days if he bring two horses or oxen, or four, if necessary, with ploughs and carts. In this work he may either employ himself, or, if he prefer and can afford it, may send a servant. Besides this, he must give four fowls and twelve eggs, and one pfund and a half of butter; and every thirty peasants must give one calf yearly. He must also pay a florin for his house—must cut and bring home a klafter of wood—must spin in the family six pfund of wool or hemp, provided by the landlord—and, among four peasants, the proprietor claims what is called a long journey, that is, they must transport twenty centners, each 100 lbs. French weight, the distance of two days' journey out and home; and, besides all this, they must pay one-tenth of all their products to the church, and one-ninth to the lord.

Dr. Bright gives the following description of the interior of a Hungarian cottage:—'The door opens in the side of the house into the middle room or kitchen, in which is an oven constructed of clay, well calculated for baking bread, and various implements for household purposes, which generally occupy this apartment fully. On each side of the room is a door, communicating on one hand with the family dormitory, in which are the two windows that look into the road. This chamber is usually small, but well arranged; the beds in good order, piled upon each other to be spread out on the floor at night, and the walls covered with a multiplicity of pictures and images of our Saviour, together with dishes, plates, and vessels of coarse earthenware. The other door from the kitchen leads to the store-room, the repository of a great part of the peasant's riches, consisting of bags of grain, of various kinds, both for consumption and for seed, bladders of tallow, sausages, and other articles of provision, in quantities which would astonish us to find in an English cottage. We must, however, keep in mind, that the harvest of the Hungarian peasant anticipates the income of the whole year; and, from the circumstances in which he is placed, he should rather be compared with our farmer than our laborer. The yards or folds between the houses are usually much neglected, and are the dirty receptacles of a thousand uncleanly objects. Light carts and ploughs, with which the owner performs his stated labor, his meagre cattle, a loose rudely formed heap of hay, and half a dozen ragged children, stand there in mixed confusion, over which three or four noble dogs, of a peculiar breed, resembling in some degree the Newfoundland dog, keep faithful watch.'

For the following delineation of the people assembled at a Hungarian fair, by a native writer, we are indebted to the industry of Mr. Myers, and his valuable Geography:—

'The manner in which the Hungarian peasant conducts himself in the sale of his produce, is, when compared to that of the Sclavonian, the German, and the Jew, with whom he is surrounded, remarkable and interesting. The Sclavonian enlarges on the excellence and cheapness of his ware, with palpable and suspicious eagerness. The German dresses out his merchandise, turns it from one side to the other, and presents himself to the purchasers with a commanding self-sufficiency The Jew swears with heart and soul that he will injure no man—and the Raitzer is stern, silent, and unaccommodating; but, on that account, his characteristic and fiery eye pleads with the greater eloquence. The Hungarian alone keeps himself perfectly passive in his dealings He allows his goods to be inspected · answers shortly and directly to the

question, and attempts not to impose either by words or artifice. You perceive by his embarrassment that he is unaccustomed to low arts, his good temper evidently counteracts the feeling of poverty, which is therefore borne with ease and content. Shirt and skin, and little else, are to be seen, except his long hair, which hangs loosely over his shoulders; and all these are scarcely to be distinguished from each other, so disguised are they by filth and negligence. The appearance in drizzling weather of the Konigs-strass, which is the district of the Jews, is little more attractive than the quarter frequented by the peasants. Whoever feels inclined to study the character of this people will now find an ample opportunity. Here they swarm together like bees, fix themselves on the passenger who appears likely to trade with them, or traffic amongst themselves with affected grimaces and assumed appearance of activity; while they look with their eyes turned both towards the right and towards the left, on a hundred objects at a time.'

HUN'GER, *n. s.* & *v. n.* / HUN'GERBIT, *adj.* / HUN'GERBITTEN, *adj.* / HUN'GERLY, *adj.* & *adv.* / HUN'GERSTARVED, *adj.* / HUN'GRED, *adj.* / HUN'GRILY, *adv.* / HUN'GRY, *adj.* Sax. þunȝeꝛ; Swed. *hunger*; Belg. *honger*. Desire of food; the pain felt from fasting; figuratively, any violent desire: hungerbitten, pained, or weakened by hunger: hungerly, with keen appetite: hungry, in a figurative sense, is, not fat; not prolific; fruitful, or more disposed to draw from other substances than to impart to them.

Thou shalt serve thine enemies in *hunger* and in thirst. *Deut.* xxviii. 48.

His strength shall be *hungerbitten*. *Job* xviii. 12.

And in his herte anon, ther fell a thought,
That they for *hunger* wolden do him dien;
Alas! quod he, alas that I was wrought.
Chaucer. The Monkes Tale.

Then came the autumne, all in yellow clad,
As though he ioyd in his plentious store,
Laden with fruits that made him laugh, full glad
That he had banisht *hunger*, which tofore
Had by the belly oft him pinched sore.
Spenser. Faerie Queene.

Dost thou so *hunger* for my empty chair
That thou will needs invest thee with my honours,
Before thy hour be ripe? O, foolish youth,
Thou seek'st the greatness that will overwhelm thee,
Stay but a little. *Shakspeare. Henry IV.*

That face of his the *hungry* cannibals
Would not have touched, would not have stained with blood. *Shakspeare.*

My more having, would be as a sauce
To make me *hunger* more. *Shakspeare. Macbeth.*

All my followers to the eager foe
Turn back, and fly like ships before the wind,
Or lambs pursued by *hungerstarved* wolves.
Shakspeare.

His beard
Grew thin and *hungerly*, and seemed to ask
His sops as he was drinking. *Id.*

They are all but stomachs, and we all but food;
They eat as *hungerly*, and, when they're full,
They belch us. *Id.*

You have saved my longing, and I feed
Most *hungerly* on your sight. *Id.*

Odours do in a small degree nourish, and we see men an *hungered* love to smell hot bread. *Bacon.*

The more fat water will bear soap best; for the *hungry* water doth kill its unctuous nature. *Id.*

Widely they gape, and to the eye they roar,
As if they *hungered* for the food they bore.
Cowley.

Yea, povertie and *hunger* did produce,
The best inventions, and, of chiefest use.
G. Withers.

I content me,
And from the sting of famine fear no harm,
Nor mind it, fed with better thoughts that feed
Me *hung'ring* more to do my Father's will.
Milton.

Thyself
Bred up in poverty and straits at home;
Lost in a desert here, and *hungerbit*. *Id.*

And when your loose desires once get dominion,
No *hungry* churl feeds coarser at a feast:
Every rank fool goes down. *Otway's Orphan.*

Thus much to the kind rural gods we owe,
Who pitied suffering mortals long ago;
When on harsh acorns *hungrily* they fed,
And gave e'm nicer palates, better bread.
Dryden.

For *hunger* of my gold I die. *Id.*

As to some holy house the afflicted came,
The *hungersturved*, the naked, and the lame,
Want and diseases, fled before her name. *Id.*

The subacid part of the animal spirits, being cast off by the lower nerves upon the coats of the stomach, vellicates the fibres, and thereby produces the sense we call *hunger*. *Grew.*

But when the sun displays his glorious beams,
And shallow rivers flow with silver streams,
Then the deceit the scaly breed survey,
Bask in the sun, and look into the day;
You now a more delusive art must try
And tempt their *hunger* with a curious fly.
Gay's Rural Sports.

Something viscous, fat, and oily, remaining in the stomach, destroys the sensation of *hunger*.
Arbuthnot on Aliments.

She knew that the best feelings must have victual,
And that a shipwrecked youth would *hungry* be;
Besides being less in love she yawned a little,
And felt her veins chilled by the neighbouring sea;
And so she cooked their breakfast to a tittle.
Byron. Don Juan.

HUNGER is occasioned by long abstinence from food when the body is in health. See ABSTINENCE. In famine life may be protracted, with less misery, by a moderate allowance of water. For the acrimony and putrefaction of the humors are obviated by such dilution, the small vessels are kept permeable, and the lungs are furnished with that moisture which is essential to the performance of their functions. Redi, who made many experiments to ascertain the effects of fasting on fowls, observed that none were able to support life beyond the ninth day to whom drink was denied; whereas one indulged with water lived more than twenty days. Hippocrates has observed, that children are more affected by abstinence than young persons; these more than the middle-aged; and the middle-aged more than old men. The power to endure famine, however, must depend no less upon the state of health and strength than on the age of the sufferer.

To those who by their occupations are exposed to such dreadful calamities, it is of serious importance to be instructed in the means of al-

leviating them. The American Indians are said to use a composition of the juice of tobacco and the shells of snails, cockles, and oysters, calcined, whenever they undertake a long journey, and are likely to be destitute of provisions. It is probable the shells are not burnt into quicklime, but only so as to destroy their tenacity, and to render them fit for levigation. The mass is dried and formed into pills, of a proper size to be held between the gum and lip, which, being gradually dissolved and swallowed, obtund the sensations both of hunger and of thirst. Tobacco, by its narcotic quality, seems well adapted to counteract the uneasy impressions which the gastric juice makes on the nerves of the stomach when it is empty; and the combination of testaceous powders with it may tend to correct the secretion that is supposed to be the chief agent in digestion, and which, if not acid, is always united with acidity. To prevent the calamity of famine, at sea, it has been proposed by Dr. Lind, that the powder of salep should constitute part of the provisions of every ship's company. This powder and portable soup, dissolved in boiling water, form a rich thick jelly; and an ounce of each of these articles furnishes one day's subsistence to a healthy full-grown man. Indeed, from Dr. Percival's experiments, it appears that salep contains more nutritious matter, in proportion to its bulk, than any other vegetable production now used as food. The following composition is greatly extolled by Avicenna, the celebrated Arabian physician:—'Take sweet almonds and beef suet, of each 1 lb.; of the oil of violets 2 oz.: and of the roots of marsh mallows 1 oz.: bray these ingredients together in a mortar, and form the mass into boluses, about the size of a common nut.' Gum Arabic might be a good substitute for salep, in the composition already recommended; and, as it gives such firmness to the mass as to require manducation, the saliva, by these means separated and carried into the stomach, would further contribute to assuage the sensations both of hunger and of thirst.

With respect to the cause of hunger, it has been, by turns, attributed to the direct impulse of the vital principle, to the frictions of the sides of the stomach against each other, to the dragging of the liver upon the diaphragm, to the action of the gastric juice upon the stomach, to the acrimony and acidity of the gastric juice, to fatigue of the contracted fibres of the stomach, to compression of the nerves of this viscus, &c. &c.

Hunger arises, like all other internal sensations, from the action of the nervous system; it has no other seat than this system itself, and no other causes than the general laws of organisation. It very well proves the truth of this assertion that it sometimes continues though the stomach is filled with food; that it cannot be produced though the stomach has been some time empty; lastly, that it is so subject to habit as to cease instantaneously after the habitual hour of repast is past. This is true not only of the feeling which takes place in the region of the stomach, but also of the general weakness that accompanies it, which, consequently, cannot be considered as real, at least in the first instant in which it is manifested.

In attempting to recover those who have suffered from famine, great circumspection is required. Warmth, cordials, and food, are the means to be employed; and these may prove too powerful in their operation, if not administered with judgment. For the body, by long fasting, is reduced to a state of more than infantile debility; the minuter vessels of the brain, and of the other organs, collapse for want of fluids to distend them; the stomach and intestines shrink in their capacity; and the heart languidly vibrates, having scarcely sufficient energy to propel the scanty current of blood. Under such circumstances a proper application of heat seems an essential measure, and may be effected by placing on each side a healthy man in contact with the patient. Pediluvia or fomentations may also be used with advantage. The temperature of these should be lower than that of the human body, and gradually increased according to the effects of their stimulus. New milk, weak broth, or water gruel, ought to be employed both for the one and the other; as nutriment may be conveyed into the system this way, by passages probably the most pervious in a state of fasting, if not too long protracted. Wine whey will answer a good purpose, and afford an easy and pleasant nourishment. When the stomach has been a little strengthened an egg may be mixed with the whey, or administered under some other agreeable form. The yolk of one was, to Cornaro, sufficient for a meal; and the narrative of this noble Venetian, in whom a fever was excited by the addition of only two ounces of food to his daily allowance, shows, that the return to a full diet should be conducted with great caution, and by slow gradations.

HUNGERFORD, a market town of Berkshire, seated on the Kennet, in a low and watery soil. It is a great thoroughfare in the Bath and Bristol road, sixty-four miles from London; and was formerly called Ingleford Charnham Street. The constable of this town, who is chosen annually, is lord of the manor, which he holds immediately of the crown. They have a horn here which holds about a quart, and appears by an inscription on it to have been given by John of Gaunt, together with a grant of the royal fishery, in a part of the river which abounds with good trout and craw-fish. Here is a market on Wednesday, and a fair in August.

HUNINGUE, or HUNINGUEN, a small, and not long since a very strong, town of the department of the Upper Rhine (Alsace, France), the chief place of a canton, in the arrondissement of Altkirch. It is a post town, and contains about 1000 inhabitants. This town is very advantageously situated on the left bank of the Rhine, near the frontiers of Switzerland, about a mile and a half from Bâle. It was dismantled in 1815. by order of the allied powers, and is now comparatively a heap of ruins: the inhabitants, discouraged by the injustice with which they regard their town as having been treated, have to a great extent abandoned it. The houses, which were burned and demolished during the siege, still remain in the same state as they were left by that terrible event. The last days previous to the destruction of Huninguen were marked by one of

the most astonishing deeds of arms (say the French) that has been witnessed in our age, so fertile in transactions of this kind. 'Blockaded by 25,000 Austrians, its feeble garrison consisting of 140 men, united with a few of the inhabitants, defended the place with the greatest courage. It was not until twelve days siege, and after having lost half of its defenders, that it made an honorable capitulation, by which the garrison was allowed to retire to the army of the Loire. The next day a platoon of infantry, two platoons of artillery, and five gendarmes, headed by general Barbarègre, with the officers of his staff, and followed by the wounded, came out of the place, with drums beating, in the presence of the enemy's army and an immense crowd of spectators, astonished that so feeble a company, which did not comprise more than fifty effective men, could have made so extraordinary a defence, and treated on equal terms with an army of 25,000.' Huninguen is twenty-one miles east of Altkirch, and twenty-seven south-east of Mulhausen.

HUNKS, *n. s.* Isl. *hunsker*, sordid. A covetous sordid wretch; a miser; a curmudgeon.

She has a husband, a jealous, covetous, old *hunks*. *Dryden.*

The old *hunks* was well served, to be tricked out of a whole hog for the securing of his puddings. *L'Estrange.*

Irus has given all the intimations of being a close *hunks*, worth money. *Addison.*

HUNNIADES (John Corvinus), waywode of Transylvania, a general of the Hungarian armies, who was the terror of the Turks, and repeatedly defeated them under Amurath II. and Mahomet II. He forced both these bloody conquerors to raise the siege of Belgrade; but died, to the great grief of all Christendom, in 1456. See CONSTANTINOPLE,

HUNNS, or HUNS, an ancient race, who formerly inhabited that part of Sarmatia bordering on the Palus Mæotis and the Tanais, the ancient boundary between Europe and Asia. Their country, as described by Procopius, lay north of Mount Caucasus, which, extending from the Euxine to the Caspian Seas, parts Asiatic Sarmatia from Colchis, Iberia, and Albania; lying on the isthmus between the two seas. Here they resided unknown to other nations, and themselves ignorant of other countries, till the year 376. At this time a hind pursued by the hunters, or, according to some authors, an ox stung by a gadfly, having passed the marsh, was followed by some Hunns to the other side, where they discovered a country much more agreeable than their own. On their return, having acquainted their countrymen with what they had seen, the whole nation passed the marsh, and falling upon the Alans, who dwelt on the banks of the Tanais, almost exterminated them. They next fell upon the Ostrogoths, whom they drove out of their country, and forced to retire to the plains between the Borysthenes and the Tanais, now known by the name of Podolea. Then, attacking the Visigoths, they obliged them to shelter themselves in the most mountainous parts of their country; till at last the Gothic nations, finding it impossible to withstand such an inundation of barbarians, obtained leave from the emperor Valens to settle in Thrace. The Hunns thus became masters of all the country between the Tanais and Danube in 376, where they continued quietly till 388, when great numbers of them were taken into the pay of Theodosius I. They frequently passed the Danube, committing the greatest ravages in the western empire: sometimes they fell upon the eastern provinces, where they put all to fire and sword. They were often defeated and repulsed by the Romans, but the empire was now too weak to subdue or prevent them from making incursions; so that they continued to make daily encroachments, and became every day more formidable than before. In 441 the Hunns, under Attila, threatened the western empire with total destruction. This monarch, having made himself master of all the northern countries, from the confines of Persia to the banks of the Rhine, invaded Mæsia, Thrace, and Illyricum; and the emperor, not thinking himself safe in Constantinople, withdrew into Asia. Attila then attacked Gaul, where he destroyed several cities, massacring the inhabitants. At last he was driven out by Aetius the Roman general and Theodoric king of the Goths, and could never afterwards make any progress. About A. D. 452, or 453, Attila died, and his kingdom was split into a number of small states by his numerous children, who waged perpetual war with each other. The Hunns then ceased to be formidable, and became daily less able to cope with the other barbarous nations whom Attila had kept in subjection. Still, however, their dominion was considerable; and in the time of Charles the Great they were masters of Transylvania, Walachia, Servia, Carniola, Carinthia, and the greater part of Austria, together with Bosnia, Sclavonia, and that part of Hungary which lies beyond the Danube. In 776, while Charles was in Saxony, two princes of the Hunns, Caganus and Juganus, sent ambassadors to him, requesting an alliance with him. Charles received them with extraordinary marks of friendship, and readily complied with their request. However, they entered, not long after, into an alliance with Taffila of Bavaria, who had revolted from Charles. Accordingly Charles, having assembled a very numerous army, divided it into two bodies, one of which he commanded himself, and the other he committed to the care of his generals. The two armies entered the country of the Hunns at different places, ravaged their country far and near, burnt their villages, and took all their strong holds. This he continued for eight years, till the people were almost totally extirpated; nor did the Hunns ever afterwards recover themselves, or appear as a distinct nation.

The Hunns according to Marcellinus were a very savage and barbarous nation. They begin to practise their cruelty, says Jornandes, upon their own children, the very first day they come into the world, cutting and mangling the cheeks of their males, to prevent the growth of hair, and to strike terror into the enemy with their countenances, thus deformed and covered with scars. Their food was roots and raw meat, they being quite unacquainted with the use of fire, and having no houses, nor even huts; but living in the woods, and on the mountains, where,

from their infancy, they were inured to hunger, thirst, and all kinds of hardships; nay, they had such an aversion to houses, which they called the sepulchres for the living, that, when they went into other countries, they could hardly be prevailed upon to come within the walls of any house, not thinking themselves safe. They used even to eat and sleep on horseback, scarce ever dismounting; which induced Zosimus to assert that the Hunns could not walk. Day and night were indifferent to them as to buying, selling, eating, and drinking. They had no law, nor religion; but complied with their inclinations, without the least restraint. In war they began the battle with great fury, and a hideous noise: if they met with a vigorous opposition, their fury abated after the first onset; and, when once put into disorder, they never rallied, but fled in the utmost confusion. They were quite unacquainted with the art of besieging towns; and never attacked an enemy's camp. They were a faithless nation, and thought themselves no longer bound by the most solemn treaties than they found their advantage in observing them. Hence we often find them breaking into the Roman empire, in defiance of the most solemn engagements. Several corps of Hunns, after their coming into Europe, served in the Roman armies against the Goths and other barbarous nations; nay, they were ready, for hire, to fight against each other.

HUNNS, NEPHTHALITE, or the White Hunns, inhabited a rich country, bordering on the north of Persia, and a considerable distance from the Sarmatian or Scythian Hunns above described, with whom they had no intercourse nor the least resemblance either in their persons or manners. They were a powerful nation, and often served against the Romans in the Persian armies; but, in the reign of the emperor Zeno, being provoked by Perozes king of Persia laying claim to part of their country, they defeated the Persians in two pitched battles, slew their king, overran all Persia, and held it in subjection for two years, obliging Cabades, the son and successor of Perozes, to pay them a yearly tribute. These Hunns did not wander, like the others, from place to place; but, contented with their own country, which supplied them with all necessaries, they lived under a regular government, subject to one prince, and seldom made inroads, unless provoked, into either the Persian or Roman territories. They lived according to their own laws, and dealt uprightly with one another, as well as with the neighbouring people. Each of their great men used to choose twenty or more companions to enjoy with him his wealth, and partake of all his diversions; but, upon his decease, they were all buried with him in the same grave. The Nephthalites were, however, a far more civilised nation than the Scythian Hunns, who, breaking into the empire, ...ed most of the provinces of Europe with blood and slaughter.

HUNT, *v. a.*, *v. n.*, & *n. s.*
HUN'TER, *n. s.*
HUN'TING-HORN, *n. s.*
HUN'TRESS, *n. s.*
HUN'TSMAN, *n. s.*
HUNTS'MANSHIP, *n. s.*

Sax. þuntian, from þundð, a dog. The leading idea in this word is searching after; and in the strictest sense for objects not within sight: as to chase wild animals; to pursue; search for direct, or manage hounds; to follow the chase; hunt is a pack of hounds; a chase; a pursuit: hunter, either the individuals who are engaged in the chase, or the dog that scents the game: hunting-horn, a bugle: huntress, a woman that follows the chase: huntsman, one who delights in the chase, or the servant who manages it: huntsmanship, the qualifications of a hunter.

Wilt thou *hunt* the prey for the lion, or fill the appetite of the young lions? *Job* xxxviii. 39.

Evil shall hunt the violent man to overthrow him. *Psalm* cxl.

Within a lodge out of the way,
Beside a well in a forest,
Where after *hunting* I toke rest,
Nature and kind so in me wrought,
That halfe on slepe they me ybrought.
Chaucer's Dreame

Methought, I herde an *hunter* blowe
T'essay his gret horne.
Chaucer. Boke of the Duchesse.

And therwithall Diane gan appeare
With bowe in hond right as an *hunteresse.*
Id. The Knightes Tale.

Not certainly affirming any thing, but by conferring of times and monuments, I do *hunt* out a probability. *Spenser*

Like as a *huntsman*, after weary chace,
Seeing the game escape from him away,
Sits down to rest him. *Id. Sonnets.*

And thou, thrice crowned queen of night, survey
With thy chaste eye, from thy pale sphere above,
Thy *huntress'* name, that my full life doth sway.
Shakspeare.

The *hunt* is up, the morn is bright and gray;
The fields are fragrant, and the woods are green.
Id.

The man that once did sell the lion's skin,
While the beast lived, was killed in *hunting* him.
Id.

I've heard myself proclaimed;
And by the happy hollow of a tree,
Escaped the *hunt.* *Id. King Lear.*

Of dogs, the valued file
Distinguishes the swift, the slow, the subtle,
The housekeeper, the *hunter.* *Id. Macbeth.*

At court your fellows every day
Give the art of rhiming, *huntsmanship*, or play.
Donne.

The heart strikes five hundred sorts of pulses in an hour, and is *hunted* into such continual palpitations, through anxiety, that fain would it break.
Harvey on Consumptions.

Down from a hill the beast that reigns in woods,
First *hunter* then, pursued a gentle brace,
Goodliest of all the forest, hart and hind. *Milton.*

Shall I call
Antiquity from the old schools of Greece,
To testify the arms of chastity?
Hence had the *huntress* Dian her dread bow,
Fair silver-shafted queen, for ever chaste. *Id.*

Such game, whilst yet the world was new,
The mighty Nimrod did pursue:
What *huntsman* of our feeble race,
Or dogs, dare such a monster chace? *Waller.*

The common *hunt*, though from their rage restrained
By sovereign power, her company disdained,
Grinned as they passed.
Dryden. Hind and Panther.

Another's crimes the unhappy *hunter* bore,
Glutting his father's eyes with guiltless gore.
Id. Æneid.

Apply this moral rather to the *huntsman*, that managed the chace, than to the master. *L'Estrange.*

One followed study and knowledge, and another hawking and *hunting*. *Locke.*

Very much of kin to this is the *hunting* after arguments to make good one side of a question, and wholly to neglect and refuse those which favor the other side. *Id.*

This was the arms or device of our old Roman *hunters*; a passage of Manilius lets us know the pagan *hunters* had Meleager for their patron.
Addison.

He *hunts* a pack of dogs better than any, and is famous for finding hares. *Id.*

We should single every criminal out of the herd, and *hunt* him down, however formidable and overgrown; and, on the contrary, shelter and defend virtue. *Id.*

On the old pagan tombs, masks, *hunting* matches, and Bacchanals are very common. *Id. on Italy.*

Whilst a boy, Jack ran from school,
Fond of his *hunting-horn* and pole. *Prior.*

In vain malignant streams and winter fogs
Load the dull air, and hover round our coasts;
The *huntsman* ever gay, robust, and bold,
Defies the noxious vapor and confides
In this delightful exercise to raise
His drooping head, and cheer his heart with joy.
Somerville's Chase.

Bold Nimrod first the savage chace began,
A mighty *hunter*, and his game was man. *Pope.*

Let old Arcadia boast her ample plain,
The immortal *huntress*, and her virgin train;
Nor envy Windsor. *Id.*

Would Edwin this majestic scene resign
For aught the *huntsman's* puny craft supplies?
Ah! no: he better knows great nature's charms to prize. *Beattie.*

Mild was the morn, the sky serene,
The jolly *hunting* band convene,
The beagle's breast with ardour burns,
The bounding steed the champaign spurns,
And fancy oft the game descries
Through the hound's nose and huntsman's eyes.
Id.

Behold me, earth, what is the life he *hunts* for,
Come to my cave, thou human *hunter* come.
Maturin.

What is here?
Who seems not of my trade, and yet hath reached
A height which none even of our mountaineers,
Save our best *hunters* may attain.
Byron. Manfred.

Hunt (Thomas), D. D., a learned oriental scholar of the last century, was born in 1696, and graduated at Oxford in 1721 as A. M. In 1738 he was elected Arabic professor in that university; and his inauguration address on this occasion has been printed. In 1744 he took his doctor's degree, and three years after became regius professor of Hebrew and canon of Christchurch. He wrote also Observations on the Proverbs, which with his Sermons were edited by Dr. Kennicott in 1774.

Hunter (Dr. William), a celebrated anatomist and physician, was born in 1718, at Kilbride in Lanarkshire. At fourteen his father sent him to the college of Glasgow, where he spent five years; and by his prudent behaviour and diligence acquired the esteem of the professors. His father had designed him for the church; but, becoming acquainted with the celebrated Dr. Cullen, he resolved to devote himself to the profession of physic. His father having consented, he, in 1737, went to reside with Dr. Cullen, and at the end of three years it was agreed that he should prosecute his medical studies in Edinburgh and London. He accordingly set out for Edinburgh in November 1740; where he attended the lectures of the medical professors. Dr. Douglas soon after invited him into his family to assist in his dissections, and to superintend the education of his son; and by his friendly assistance enabled him to enter as a surgeon's pupil at St. George's Hospital under Mr. James Wilkie, and as a dissecting pupil under Dr. Frank Nichols. He soon became expert in dissection, and Dr. Douglas was at the expense of having several of his preparations engraved. In 1743 he communicated to the Royal Society an Essay on the Structure and Diseases of articulating Cartilages. At length an opportunity occurred for the display of his abilities as a teacher of anatomy. A society of navy surgeons had an apartment in Covent Garden, where they engaged the late Mr. Samuel Sharpe to deliver a course of lectures on the operations of surgery. Mr. Sharpe continued to repeat this course, till, finding that it interfered too much with his other engagements, he declined the task in favor of Mr. Hunter; who gave the society so much satisfaction, that, in the winter of 1746, they requested him to extend his plan to anatomy, and gave him the use of their room for his lectures. In 1747 he was admitted a member of the corporation of surgeons; and in the spring of 1748, soon after the close of his lectures, he set out in company with his pupil, Mr. James Douglas, on a tour through Holland to Paris. He returned to London early enough to begin his winter course of lectures about the usual time. Dr. Douglas had now acquired considerable reputation in midwifery; which induced Mr. Hunter to direct his views chiefly to the same practice; and he was elected surgeon, first to the Middlesex, and soon afterwards to the British Lying-in Hospital. In 1750 he obtained the degree of M. D. from the university of Glasgow, and began to practise as a physician; when he quitted the family of Mrs. Douglas and went to reside in Jermyn Street. In 1756 he was admitted a licentiate of the Royal College of Physicians. Soon after he was elected a member of the Medical Society; and to the Observations and Enquiries, published by that society, he at different periods contributed several valuable papers. In 1762, when the queen became pregnant, Dr. Hunter was consulted; and in 1764 he was appointed physician extraordinary to her majesty. In 1767 Dr. Hunter was elected F. R. S.; and in 1768 communicated to that learned body observations on the bones, commonly supposed to be elephants' bones, which have been found near the Ohio in America. In 1768 he became a fellow of the Society of Antiquaries; and, at the institution of a Royal Academy of Arts, he was appointed by his majesty to the office of professor of anatomy. In

January 1781 he was unanimously elected president of the Medical Society. His name and talents were now known and respected in every part of Europe. In 1780 the Royal Medical Society at Paris elected him one of their foreign associates; and in 1782 he received a similar mark of distinction from the Royal Academy of Sciences in that city. The most splendid of his medical publications was the Anatomy of the Human Gravid Uterus. This great work, which had been begun so early as 1751, was delayed till 1775, by the author's desire of sending it into the world as perfect as possible. In 1755 he communicated to the Royal Society an Essay on the Origin of the Venereal Disease. In 1777 he joined with Mr. Watson in presenting to it a short account of the late Dr. Maty's illness, and of the appearances on dissection; and in 1778 he published his Reflections on the Section of the Symphysis Pubis. We must now notice the formation of the celebrated Hunterian Museum. Before Mr. Hunter had practised midwifery many years, he found he had acquired a fortune sufficient to place him in easy and independent circumstances. This he set apart as a resource, whenever age or infirmities should oblige him to retire from business. As his wealth continued to accumulate, he formed a laudable design of engaging in some scheme of public utility, and resolved to erect an anatomical academy. For this purpose he purchased a spot of ground in Great Windmill Street, where he erected a spacious house, to which he removed from Jermyn Street in 1770. He had formed already one of the finest anatomical museums ever seen, and he now extended his views to fossils, and to the promotion of literature. In a short time he became possessed of 'the most magnificent treasure of Greek and Latin books that has been accumulated by any person since the days of Mead.' A cabinet of ancient medals contributed likewise much to the richness of his museum. In 1781 it received a valuable addition of shells, corals, and other curious subjects of natural history, which had been collected by the late Dr. Fothergill, who had directed by his will, that his collection should be appraised after his death, and that Dr. Hunter should have the offer of it at £500 under the valuation. Accordingly Dr. Hunter purchased it for £1200. About two years after, 17th of March, 1783, he was seized with a violent attack of gout and nausea. On the 20th he found himself so much recovered, that he determined to give the introductory lecture to the operations of surgery. He accordingly delivered it, but was seized in consequence with a paralytic stroke, and died on Sunday the 30th. By his will, the use of his museum, under the direction of trustees, devolved to his nephew Matthew Baillie, B. A., and, in case of his death, to Mr. Cruikshank for thirty years, at the end of which period the whole collection was bequeathed to the university of Glasgow. The collection is now in Glasgow, and an elegant building has been erected for its reception. The sum of £8000 is left as a fund for the support and augmentation of it.

HUNTER (John), a celebrated anatomist, brother to the Dr. of that name, was born at Long Calderwood in 1728. He was at first apprenticed to a carpenter; but, hearing that his brother was then the most celebrated teacher of anatomy in London, he expressed a desire to assist him in his researches. The Dr., willing to serve him, invited him to London, where he arrived in September, 1748; and from this period he was seriously engaged in anatomy, under the instruction of his brother, and his assistant, Mr. Symonds. In the summer of 1749 he attended Mr. Cheselden, at Chelsea Hospital, where he learned the first rudiments of surgery. In 1751 he became a pupil at St. Bartholomew's. In 1752 he went to Scotland; and the following year entered, as a gentleman commoner, at St. Mary Hall, Oxford. In 1754 he became a surgeon's pupil at St. George's Hospital, where he continued during summer; and in 1756 was appointed house-surgeon. In 1755 his brother admitted him to a partnership in his lectures. The forming of anatomical preparations was at this time a new art, and little known; every preparation, therefore, skilfully made, was proportionably valuable, and in the construction of these Mr. J. Hunter was particularly clever. He studied human anatomy for ten years, during which period he traced the ramifications of the olfactory nerves upon the membranes of the nose, and discovered the course of some of the branches of the fifth pair of nerves. In the gravid uterus, he traced the arteries to their termination in the placenta. He was also the first who discovered the existence of the lymphatic vessels in birds. So eagerly did he attach himself to comparative anatomy, that he embraced every means of prosecuting it to advantage. He applied to the keepers of wild beasts for the bodies of those which died, and purchased all rare animals which he heard of. In October 1760 Mr. Adair, inspector-general of hospitals, appointed him a surgeon on the staff; and in spring 1761 he went with the army to Belleisle. On his return he settled in London; where he taught anatomy and surgery for several winters, and resumed his researches in comparative anatomy. On the 5th of February, 1767, he was chosen F. R. S. In 1768 he became a member of the corporation of surgeons; and in 1769 was elected one of the surgeons of St. George's Hospital. In May 1771 his Treatise on the Natural History of the Teeth was published: and in July he married Miss Home, daughter of Mr. Home, surgeon to Burgoyne's regiment. In 1776 he was appointed surgeon extraordinary to his majesty, and in 1783 was chosen a member of the Royal Society of Medicine, and the Royal Academy of Surgery in Paris. About this time he erected, at the expense of £3000, a building for his collection, in which there was a room fifty-two feet long, by twenty-eight feet wide, lighted from the top, and having a gallery all round, for containing his preparations. Under this were two apartments; one for his lectures, and the other for weekly meetings of medical friends during winter, under the title of Lyceum Medicum Londinense. At this period Mr. Hunter was at the height of his chirurgical career; his mind and body were both in full vigor.

Some instances of his extraordinary skill may be added. He removed a tumor from the side of the head and neck of a patient at St. George's Hospital, as large as the head to which it was attached; and, by bringing the cut edges of the skin together, the whole was nearly healed by the first intention. He also discovered the present mode of performing the operation for the popliteal aneurism, by taking up the femoral artery on the thigh. In 1786 Mr. Hunter was appointed deputy surgeon-general to the army. He now published his work upon the Venereal Disease, which had a very rapid sale; and another entitled, Observations on certain Parts of the Animal Economy. Upon the death of Mr. Adair, in 1792, he was appointed inspector-general of hospitals, and surgeon-general to the army. He was also elected a member of the Royal College of Surgeons in Ireland. In 1792 he was elected an honorary member of the Chirurgo-Physical Society of Edinburgh, and was chosen one of the vice-presidents of the Veterinary College, then first established in London. The collection of comparative anatomy which Mr. Hunter has left, must be allowed to be a proof of talents, assiduity, and labor, which cannot be contemplated without admiration. It remains an unequivocal test of his perseverance and abilities, and an honor to the country. Mr. Hunter for many years of his life had been subject to attacks of angina pectoris particularly when irritated by any little accident. On October 16th 1793, when in his usual state of health, he went to St. George's Hospital, and, some of the minor arrangements irritating his mind, endeavoured to restrain his vexation, but turning round to Dr. Robertson, one of the physicians of the hospital, gave a deep groan and dropt down dead; being then in his sixty-fifth year.

Hunter (Robert), esq., an English gentleman, author of the famous Letter on Enthusiasm, which, on its first appearance, was ascribed by some to lord Shaftesbury, and by others to dean Swift. In 1708 he was appointed governor of Virginia, but was made prisoner by the French on his voyage thither. In 1710 he was appointed governor of New York, and sent with 2700 Palatines to settle there. He returned to England in 1719, and on the accession of George II. was continued governor of New York and New Jersey. He was appointed governor of Jamaica in February, 1727, 1728, where he died March 31st, 1734. He also wrote a farce entitled Androboros.

Hunter (Henry), D. D., a presbyterian divine was born at Culross in Perthshire in 1741, and at the age of thirteen sent to the university of Edinburgh. At seventeen be became tutor to a gentleman who was afterwards one of the lords of the session. The illness and death of his father having prevented him from retaining that situation, he now accepted one of the same kind in the family of lord Dundonald, at Culross. In 1764 he obtained a license to preach, and in 1766 was ordained minister of South Leith; but removed in 1771 to London, to become pastor to the Scottish church London Wall. His popular Sacred Biography, commenced in 1788, and was extended to seven volumes, octavo. During the progress of this work Dr. Hunter became a convert to the physiognomical system of Lavater, and in 1787 made a visit to Switzerland, for the purpose of procuring intelligence from the author preparatory to an English translation of his works. In 1790 he became secretary to the corresponding board of the Society for Propagating Christian Knowledge in the Highlands of Scotland. In 1795 appeared his Sermons preached on various Occasions, to which were subjoined illustrative memoirs and anecdotes; and in 1798 his Lectures on the Evidences of Christianity, in conjunction with those of the Rev. John Fell. He died at Bristol Hot Wells, October 27th, 1802. Dr. Hunter also translated from the French Euler's Letters on Natural Philosophy; St. Pierre's Studies of Nature; Saurin's Sermons; Sonnini's Travels; and Castera's Memoirs of Catharine II. of Russia. Two volumes of his Sermons, &c., with a biographical memoir, were published posthumously.

Hunter, in the manege, signifies a horse qualified to carry a person in the chase. The hunter ought to have great care and indulgence in the stable; he ought to have much rest and quiet, and to be well supplied with good food, clean litter, and fresh water; he should be often dressed, and suffered to sleep as much as he pleases. He should be so fed, that his dung may be rather soft than hard, and of a bright color. Some sportsmen are for keeping their horses out at grass all the buck-hunting season, never taking them into the stable at all, but allowing them in the field as much oats with their grass as they will eat. The horse may be thus rid three days in the week for the whole season, and never injured by it. The whole shape of a horse intended for a hunter should be this:—the ears should be small, open, and pricked; or, though they be somewhat long, yet if they stand erect like those of a fox, it is a sign of hardiness. The forehead should be long and broad, not flat; or, as it is usually termed, mare-faced, but rising in the middle like that of a hare; the feather should be placed above the eye, the contrary being thought by some to threaten blindness. The eyes should be full, large, and bright; the nostrils not only large, but looking red and fresh within; for an open and fresh nostril is always esteemed a sign of a good wind. The mouth should be large, deep in the wicks, and hairy. The wind-pipe should be large, and appear straight when he bridles his head; for if, on the contrary, it bends like a bow on his bridling, it is not formed for a free passage of the breath. The head should be set on to the neck, that a space may be felt between the neck and the chine; when there is no such space, the horse is said to be bull-necked; and this is not only a blemish in the beauty of the horse, but also occasions his wind not to be so good. The crest should be strong, firm, and well risen; the neck should be straight and firm; the breast should be strong and broad; the ribs round like a barrel; the fillets large; the buttocks rather oval than broad; the legs clean, flat, and straight; the mane and tail ought to be long and thin;

when short and bushy, they are counted marks of dulness. When a hunter is thus chosen, and has been taught such obedience that he will readily answer to the rider's signals of the bridle, hand, voice, calf of the leg, and spurs; that he knows how to make his way forward; has gained a true temper of mouth, and a right placing of his head; and has learned to stop and turn readily: if his age be sufficiently advanced, he is ready for the field. It is a rule with all staunch sportsmen, that no horse should be used in hunting till he is full five years old; some hunt them at four, but the horse at this age is not come up to his full strength and courage, and will not only fail at every tough trial, but will be much more subject to strains and accidents, than if he were a year older, when his strength would be confirmed. When he is five years old, he may be put to grass from May till August, for the weather between these is so hot, that it will be proper to spare him. When the horse has evacuated all his grass, and has been properly shod, and the shoes have had time to settle to his feet, he may be ridden abroad. During the time that he is used to hunting he must be allowed a more strengthening food, mixing some old split beans at every feeding with his oats.

HUNTERDON, a county of New Jersey, United States, forty miles long and thirty-two broad; bounded on the east by Somerset, south-east by Burlington, south-west and west by the Delaware, and north-west by Sussex county. It is divided into ten townships. On Muskonetcong Mountain, in this county, is a chalybeate spring much frequented. It falls into an artificial reservoir made so as to accomodate both bathers and drinkers. Trenton is the capital.

HUNTING, the diversion of pursuing four-footed beasts of game. These are hunted in the fields, woods, and thickets, in various ways. We find that among the earliest civilised nations hunting made one of their diversions; and, among the wild and barbarous, it supplied them with food. The Roman jurisprudence established it as a law, that, as the natural right of things which have no master belongs to the first possessor, wild beasts, birds, and fishes, are the property of those who can take them first. But the northern barbarians who over-ran the Roman empire, bringing with them a stronger taste for the diversion, and the people being now possessed of other and more easy means of subsistence from the lands and possessions of those they had vanquished, their chiefs began to appropriate the right of hunting, and, instead of a natural right, to make it a royal one.

The hunting used by the ancients was much like that now practised for the rein-deer; which is seldom hunted at force, or with hounds; but only drawn with a blood hound, and taken with nets and engines. Thus they did with all beasts; whence a dog is never commended by them for opening before he has discovered where the beast lies. Their huntsmen, indeed, were accustomed to shout and make a great noise, as Virgil observes in his Georgics,

Ingentem clamore premes ad retia cervum.

But this was only to bring the deer to the nets laid for him. Among the Sicilians of the middle ages this diversion was greatly practised. The hunters, when informed which way a herd of deer passed, gave notice to one another, and every one brought with him a cross-bow or long bow, and a bundle of staves shod with iron, the heads bored, with a cord passing through them all: thus provided they came to the herd, and forming a large ring surrounded the deer. Then each, taking his stand, unbound his faggot, set up his stake, and tied the end of the cord to that of his next neighbour, ten feet from each other. Then taking feathers dyed in crimson, and fastened on a thread, they tied them to the cord; so that with the least breath of wind they would whirl round. Those who kept the stands then withdrew, and hid themselves in the next covert. Then the chief ranger entering within the line, with hounds to draw after the herd, roused the game with their cry; which flying towards the line were turned off, and still gazing on the shaking and shining feathers wandered about as if kept in with a real wall. The ranger still pursued, and calling every person by name as he passed by their stand, commanded him to shoot the first, third, or sixth as he pleased: and if any of them missed, or singled out another than that assigned him, it was counted disgrace. By these means, as they passed by the several stations, the whole herd was killed by the several hands. Hunting formed the chief employment of the ancient Germans, and probably of the Britons also, when not engaged in war. Ancient historians tell us, that this was the case even so late as the third century with those unconquered Britons who lived beyond Adrian's wall; and that they subsisted chiefly by the prey that they took in this way. The great attachment shown by all the Celtic nations to hunting, however, proceeded most probably from its being a preparation for war. By it their youth acquired that courage, strength, swiftness, and dexterity in handling their arms, which made them so formidable to their enemies. By it, too, they freed their country from those mischievous animals which abounded in the forests, and furnished themselves with materials for those feasts which seem to have constituted their greatest pleasure. So strong and universal was the passion for hunting among the ancient Britons, that even young ladies of the highest rank and greatest beauty spent much of their time in the chase. They employed much the same weapons in hunting that they did in war, viz, long spears, javelins, and bows and arrows; having also great numbers of dogs to assist them in finding and pursuing their game. These dogs were much admired among other nations, on account of their swiftness, strength, fierceness, and exquisite sense of smelling.

Hunting was a favorite diversion of the celebrated Jenghiz Khan, and the East Indian princes still show the same inclination to the chase; and the Mogul princes were celebrated for their hunting expeditions. A circuit of between 400 and 600 miles was generally made; the hunters bending their course towards the skirts of the northern mountains, where the country is wild and uncultivated. The vizier took along with

him not only his court and seraglio, but a great part of the inhabitants of his capital, he was also followed by 500 or 600 horse, and several battalions of regular sepoys with their field pieces: 400 or 500 elephants also accompanied him; of which some were used for riding, others for fighting, and some for clearing the jungles and forests of the game. A great number of wheel carriages, drawn by bullocks, likewise attended for the convenience of the women. The animals used in the sport were principally about 300 greyhounds, 200 hawks, and a few trained leopards for hunting deer. A vast number of matchlocks were carried along with the company, with many English pieces of various kinds; and every article that could contribute to luxury or pleasure was likewise carried along with the army. Wild boars were sometimes started, and either shot, or run down by the dogs and horsemen. Hunting the tiger, however, was looked upon as the principal diversion, and the discovery of one of these animals was accounted a matter of great joy. The cover in which he is found is commonly long grass, or reeds of such a height as frequently to reach above the elephants; and it is difficult to find him in such a place, as he commonly endeavours either to steal off, or lies so close to the ground that he cannot be roused till the elephants are almost upon him. He then roars and skulks away, but is shot at as soon as he can be seen. If he be not disabled, he continues to sculk along, followed by the elephants. The elephants themselves are very much afraid of this terrible animal, and discover their apprehensions by shrieking and roaring as soon as they begin to smell him or hear him growl; generally attempting to turn away from the place where he is. When the tiger can be traced to a particular spot, the elephants are disposed of in a circle round him; in which case he will at last make a desperate attack, springing upon the elephant that is nearest, and attempting to tear him with his teeth or claws. Some, but very few, of the elephants, can be brought to attack the tiger; and this they do by curling up their trunks under their mouths, and then attempting to toss, or otherwise destroy him with their tusks, or to crush him with their feet and knees. It is considered as good sport to kill one tiger in a day; though sometimes, when a female is met with her young ones, two or three will be killed. The other objects of pursuit in these excursions are wild elephants, buffaloes, and rhinoceroses. An English traveller was present at the hunting of a wild elephant of vast size and strength. An attempt was first made to take him alive by surrounding him with tame elephants, while he was kept at bay by crackers and other fire-works; but he constantly eluded every effort of this kind. Sometimes the drivers of the tame elephants got so near him, that they threw strong ropes over his head, and endeavoured to detain him by fastening them around trees; but he constantly snapped the ropes like pack-threads, and pursued his way to the forest. Some of the strongest and most furious of the fighting elephants were then brought up to engage him; but he attacked them with such fury that they were all obliged to desist. In his struggle with one of them he broke one of his tusks, and the broken piece, which was upwards of two inches in diameter, of solid ivory, flew up into the air several yards above their heads. Orders were now given to kill him, as it appeared impossible to take him alive; but even this was not accomplished without the greatest difficulty. He twice turned and attacked the party who pursued him; and in one of these attacks struck the elephant obliquely on which the prince rode, threw him upon his side, but then passed on without offering further injury. At last he fell dead, after having received, as was supposed, upwards of 1000 balls into his body.

Among the Mexicans also were similar hunting-matches, sometimes appointed by the king; at others to provide victims for sacrifices. A large wood, generally that of Zacatapec, near the capital, was pitched upon as the scene of these grand hunting-matches. Here they chose the place best adapted for setting a number of snares and nets. The wood was enclosed by some thousands of hunters, forming a circle of six, seven, or eight miles, according to the number of animals they intended to take. Fire was then set to the grass in a great number of places, and a terrible noise made with drums, horns, shouting, and whistling. The hunters gradually contracted their circle, continuing the noise till the game were enclosed in a very small space. They were then killed or taken in snares, or with the hands of the hunters. The first Spanish viceroy of Mexico, resolving to hunt in this manner, chose out a great plain in the country of the Otomies, lying between the villages of Xilotepec and S. Giovani del Rio; the Indians being ordered to proceed according to their usual custom. The viceroy, attended by a vast retinue of Spaniards, repaired to the place appointed, where accommodations were prepared for them in houses of wood erected for the purpose. A circle of more than fifteen miles was formed by 11,000 Otomies, who started such a quantity of game on the plain, that the viceroy was quite astonished, and commanded the greater part of them to be set at liberty, which was accordingly done. The number retained, however, consisted of upwards of 600 deer and wild goats, 100 cojotes, with an innumerable number of hares, rabbits, and other smaller animals. The plain still retains the Spanish name Cazadero (the place of the chase).

Chamois HUNTING is carried on principally for the sake of the leather formed from the hide of the chamois (cervus rupicapra of Linné); which is only found on the high peaks of the Alps. The chamois hunter generally sets out in the night, that he may reach by break of day the most elevated pastures where the goats come to feed before they arrive. As soon as he discovers the place where he hopes to find them, he surveys it with his glass. If he finds none of them there, he proceeds always ascending: whenever he descries any, he endeavours to get above them, either by stealing along some gully, or getting behind some rock or eminence. When he is near enough to distinguish their horns, which is the mark by which he judges of the distance, he rests his piece on a rock, takes his

aim with great composure, and rarely misses. This piece is a rifle-barrelled carabine, into which the ball is thrust. If he has wounded the chamois, he runs to his prey, and for security hamstrings it; if the road home is difficult, he skins the chamois, and leaves the carcase; but, if it is practicable, he throws the animal on his shoulders, and bears him to his village, though at a great distance, and often over frightful precipices: he feeds his family with the flesh, which is excellent, especially when the creature is young, and he dries the skins for sale. But if, as is the most common case, the vigilant chamois perceives the approach of the hunter, he immediately takes flight among the glaciers, through the snows, and over the most precipitous rocks. It is particularly difficult to get near these animals when there are several together; for then one of them, while the rest are feeding, stands as sentinel on the point of some rock that commands a view of the avenues leading to the pasture; and, as soon as he perceives any object of alarm, he utters a sort of hiss, at which the others instantly gather round him to judge for themselves of the nature of the danger; if it is a wild beast, or hunter, the older ones put themselves at the head of the flock, and away they fly, ranged in a line, to the most inaccessible retreats. It is here that the fatigues of the hunter begin: instigated by his passion for the chase, he is insensible to danger; he passes over snows, without thinking of the horrid precipices they conceal; he entangles himself among the most dangerous paths, and bounds from rock to rock, without knowing how he is to return. Night often surprises him in the midst of his pursuit; but he does not for that reason abandon it; he hopes that the same cause will arrest the flight of the chamois, and that he shall next morning overtake them. Thus he passes the night, not at the foot of a tree, like the hunter of the plain, nor in a grotto, softly reclined on a bed of moss, but at the foot of a rock, and often on the bare points of shattered fragments, without the smallest shelter. There, alone, without fire, without light, he draws from his bag a bit of cheese, with a morsel of oaten bread, which make his common food: bread so dry, that he is sometimes obliged to break it between two stones, or with the hatchet he carries with him to cut out steps in the ice. Having thus made his solitary and frugal repast, he puts a stone below his head for a pillow, and goes to sleep, dreaming on the route which the chamois may have taken. But soon he is awakened by the freshness of the morning; he gets up, benumbed with cold; surveys the precipices which he must traverse to overtake his game; drinks a little brandy, of which he is always provided with a small portion, and sets out to encounter new dangers. Hunters sometimes remain in these solitudes for several days together, during which time their families, their unhappy wives in particular, experience a state of the most dreadful anxiety: and yet the hunters are much attached to this kind of life. I knew, says M. Saussure, a well-made, handsome man, who had just married a beautiful woman:—'My grandfather,' said he to me, 'lost his life in the chase; so did my father; and I am persuaded, that I too shall die in the same manner: this bag which I carry with me when I hunt I call my grave-cloaths, for I am sure I shall have no other; yet if you should offer to make my fortune on condition of abandoning the chase of the chamois, I could not consent.' I made some excursions on the Alps with this man: his strength and address were astonishing; but his temerity was greater than his strength; and I have heard, that, two years afterwards, he missed a step on the brink of a precipice, and met with the fate he had expected.

HUNTING THE FOX makes a very pleasant exercise, and is either above or below ground. To hunt a fox with hounds, you must draw about groves, thickets, and bushes near villages. When you find one, stop up his earth the night before you design to hunt, about midnight; while he is out to prey. This may be done by laying two white sticks across in his way, which he will imagine to be some trap laid for him; or they may be stopped up with black thorns and earth mixed. The pack should consist of twenty-five couple. The hounds should be at the cover at sun-rising. The huntsman should then throw in his hounds as quietly as he can, and let the two whippers-in keep wide of him on either hand; so that a single hound may not escape them; let them be attentive to his halloo, and let the sportsmen be ready to encourage or rate as that directs. The fox ought on no account to be hallooed too soon, as in that case he would most certainly turn back, and spoil all the sport. Two things Mr. Beckford particularly recommends, viz. the keeping all the hounds steady, and making them all draw. Many huntsmen, says he, are fond of having them at their horse's heels; but they never can get so well or soon together as when they spread the cover; besides, I have often known, when there have been only a few finders, that they have found their fox gone down the wind, and been heard of no more that day. Much depends upon the first finding of your fox: for I look upon a fox well found to be half killed. People are generally in too great a hurry on this occasion. There are but few instances where sportsmen are not too noisy, and too fond of encouraging their hounds, which seldom do their business so well as when little is said to them. The huntsman ought to begin with his foremost hounds, and keep as close to them as he can. No hounds can then slip down the wind and get out of his hearing; he will also see how far they carry the scent, a necessary requisite; for without it he never can make a cast with any certainty. You will find it not less necessary for your huntsman to be active in pressing his hounds forward when the scent is good, than to be prudent in not hurrying them beyond it when it is bad. It is his business to be ready at all times to lend them that assistance which they so frequently need, and which, when they are first at a fault, is the most critical. A hound at that time will exert himself most; he afterwards cools, and becomes more indifferent about his game. Those huntsmen who do not get forward enough to take advantage of this eagerness and impetuosity, and direct it pro-

perly, seldom know enough of hunting to be of much use to them afterwards. Though a huntsman cannot be too fond of hunting, a whipper-in easily may. His business will seldom allow him to be forward enough with the hounds to see much of the sport. His only thought therefore should be to keep the hounds together, and to contribute as much as he can to the killing of the fox: keeping the hounds together is the surest means to make them steady. When left to themselves they seldom refuse any blood they can get; they become conceited; learn to tie upon the scent; and besides this they frequently get a trick of hunting by themselves, and are seldom good for much afterwards. Every country is soon known; and nine foxes out of ten, with the wind in the same quarter, will follow the same track. It is easy therefore for the whipper-in to cut short and catch the hounds again. With a high scent you cannot push on hounds too much. Screams keep the fox forward, at the same time that they keep the hounds together, or let in the tail hounds: they also enliven the sport; and, if discreetly used, are always of service; but in cover they should be given with the greatest caution. Halloos seldom do any hurt when you are running up the wind, for then none but the tail hounds can hear you: when you are running down the wind, you should halloo no more than may be necessary to bring the tail-hounds forward; for a hound that knows his business seldom wants encouragement when he is upon a scent. Most fox hunters wish to see their hounds run in a good style. A pack of harriers, if they have time, may kill a fox, but I defy them to kill him in the style in which he ought to be killed; they must hunt him down. If you intend to tire him out, you must expect to be tired also yourself; I never wish a chase to be less than one hour, or to exceed two: it is sufficiently long if properly followed, it will seldom be longer unless there be a fault somewhere, either in the day, the huntsman, or the hounds. Changing from the hunted fox to a fresh one is as bad an accident as can happen to a pack of fox-hounds, and requires all the ingenuity and observation that man is capable of to guard against it. Could a fox-hound distinguish a hunted fox as the deer hound does the deer that is blown, fox-hunting would then be perfect. A huntsman should always listen to his hounds while they are running in cover; he should be particularly attentive to the headmost hounds, and he should be constantly on his guard against a skirter; for, if there be two scents, he must be wrong. Generally speaking, the best scent is least likely to be that of the hunted fox: and, as a fox seldom suffers hounds to run up to him as long as he is able to prevent it, so, nine times out of ten, when foxes are hallooed early in the day, they are all fresh foxes. The hounds most likely to be right are the hard-running line-hunting ones; or such as the huntsman knows had the lead before there arose any doubt of changing. With regard to the fox, if he break over an open country, it is no sign that he is hard run; for they seldom at any time will do that unless they are a great way before the hounds. Also, if he run up the wind; they seldom or never do that when they have been long hunted and grow weak; and when they run their foil, that also may direct him. All this requires a good ear and nice observation; and indeed in that consists the chief excellence of huntsmen. When the hounds divide in two parts, the whipper-in, stopping, must attend to the huntsman and wait for his halloo, before he attempts to stop either: for want of proper management in this, I have known the hounds stopped at both places, and both foxes lost. If they have many scents, and it is uncertain which is the hunted fox, let him stop those that are farthest down the wind; as they can hear the others, and will reach them soonest: in such a case there will be little use in stopping those that are up the wind. When hounds are at a check, let every one be silent and stand still. Whippers-in are frequently at this time coming on with the tail-hounds. They should never halloo to them when the hounds are at fault; the least thing does them harm at such a time, but a halloo more than any other. The huntsman, at a check, had better let his hounds alone, or content himself with holding them forward, without taking them off their noses. Should they be at a fault, after having made their own cast (which the huntsman should always first encourage them to do), it is then his business to assist them farther; but, except in some particular instances, I never approve of their being cast as long as they are inclined to hunt. Gentlemen, when hounds are at fault, are too apt themselves to prolong it. They should always stop their horses some distance behind the hounds; and, if it be possible to remain silent, this is the time. They should be careful not to ride before the hounds or over the scent; nor should they ever meet a hound in the face unless to stop him. Should you at any time be before the hounds, turn your horse's head the way they are going, get out of their track, and let them pass by you. In dry weather, and particularly in heathy countries, foxes will run the roads. If gentlemen at such times will ride close upon the hounds, they may drive them miles without any scent. High-mettled fox-hounds are seldom inclined to stop whilst horses are close at their heels. No one should ever ride in a direction which, if persisted in, would carry him amongst the hounds, unless he be at a great distance behind them. The first moment that hounds are at fault is a critical one. Those who look forward may perhaps see the fox; or the running of sheep, or the pursuit of crows, may give them some tidings of him. Those who listen may sometimes take a hint which way he is gone from the chattering of a magpie; or perhaps be at a certainty from a distant halloo: nothing that can give any intelligence at such a time ought to be neglected. Gentlemen are too apt to ride all together: were they to spread more, they might sometimes be of service; particularly those who, from a knowledge of the sport, keep down the wind: it would then be difficult for either hounds or fox to escape their observation. You should, however, be cautious how you go to a halloo. The halloo itself must in a great measure direct you; and, though it afford no certain rule, yet you may

frequently guess whether it can be depended upon or not. At the sowing time, when boys are keeping off the birds, you will sometimes be deceived by their halloo; so that it is best, when you are in doubt, to send a whipper-in to know the certainty of the matter. Hounds ought not to be cast as long as they are able to hunt. It is a common idea, that a hunted fox never stops; but Mr. Beckford informs us that he has known them stop even in wheel ruts in the middle of a down, and get up in the middle of the hounds. The greatest danger of losing a fox is at the first finding him, and when he is sinking; at both which times he will frequently run short, and the eagerness of the hounds will frequently carry them beyond the scent. When the fox is first found, every one ought to keep behind the hounds till they are well settled to the scent; and, when the hounds are catching him, they ought to be as silent as possible; and eat him eagerly after he is caught. In some places they have a method of treeing him; that is, throwing him across the branch of a tree, and suffering the hounds to bay at him for some minutes before he is thrown among them: the intention of which is to make them more eager, and to let in the tail-hounds; during this interval also they recover their wind, and are apt to eat him more readily. Our author, however, advises not to keep him too long, as he supposes that the hounds have not any appetite to eat him longer than while they are angry with him.

In case a fox escape so as to earth, countrymen must be got together with shovels, spades, pick-axes, &c., to dig him out, if they think the earth not too great. They make their earths as near as they can in ground that is hard to dig, as in clay, stony ground, or amongst the roots of trees; and their earths have commonly but one hole, and that is straight and a long way in before you come at their couch. Sometimes they take possession of a badger's old burrow, which has a variety of chambers, holes, and angles. To facilitate this way of hunting the fox, the huntsman must be provided with one or two terriers to put into the earth after him, that is, to fix him into an angle; for the earth often consists of many angles: the use of the terrier is to know where he lies; for as soon as he finds him, he continues baying or barking, so that which way the noise is heard that way dig to him. Your terriers must be garnished with bells hung in collars, to make the fox bolt the sooner; besides, the collars will be some small defence to the terriers. The instruments to dig with are, a sharp-pointed spade, which serves to begin the trench where the ground is hardest, and broader tools will not so well enter; the round hollowed spade, which is useful to dig among roots, having very sharp edges; the broad flat spade to dig with, when the trench has been pretty well opened, and the ground softer; mattocks and pickaxes to dig in hard ground, where a spade will do but little service; the coal-rake to cleanse the hole, and to keep it from stopping up; clamps, wherewith you may take either fox or badger out alive to make sport with afterwards.

HUNTING THE HARE. As of all chases the hare makes the greatest pastime, so it gives no little pleasure to see the craft of this small animal for her self-preservation. If it be rainy, the hare usually takes to the highways; and if she come to the side of a young grove, or spring, she seldom enters, but squats down till the hounds have overshot her; and then she will return the way she came, for fear of the wet and dew that hangs on the boughs. In this case the huntsman ought to stay 100 paces before he comes to the wood side, by which means he will perceive whether she return as aforesaid; which if she do, he must halloo in his hounds, and call them back; and that presently, that the hounds may not think it the counter she came first. The next thing to be observed is the place where the hare sits, and upon what wind she makes her form, either upon the north or south wind: she will not willingly run into the wind, but upon, aside, or down the wind; but if she form in the water, it is a sign she is foul and measled; if you hunt such a one, have a special regard all the day to the brook sides; for there and near plashes, she will make all her crossings, doublings, &c. Some hares are so crafty that as soon as they hear the sound of a horn they instantly start out of their form, though it were at the distance of a quarter of a mile, and go and swim in some pool, and rest upon some rush-bed in the midst of it. Such will not stir thence till they hear the sound of the horn, and then they start out again, swim to land, and stand up before the hounds for hours before they can kill them, swimming and using all subtleties and crossings in the water. Nay, such is the subtlety of a hare, that sometimes, after she has been hunted three hours, she will start a fresh hare, and squat in the same form. Others, after being hunted a considerable time, will creep under the door of a sheep-cot, and hide themselves among the sheep; or, when they have been hard hunted, will run in among a flock of sheep, and will by no means be gotten out till the hounds are coupled up, and the sheep driven into their pens. Some of them will take the ground like a coney, which is called going to the vault. Some will go up one side of the hedge and come down the other, the thickness of the hedge being the only distance between the courses. A hare that has been sorely hunted, has got upon a quickset hedge, and ran a good way upon the top thereof, and then leapt off upon the ground; and they frequently betake themselves to furze bushes, and leap from one to the other, whereby the hounds are frequently in default. Having found where a large hare has relieved in some pasture or corn field, you must then consider the season of the year, and the weather: for, if it be in spring or summer, a hare will not then set in bushes, because they are often infested with pismires, snakes, and adders; but will set in corn fields and open places. In winter, they seat near towns and villages, in tufts of thorns and brambles, especially when the wind is northerly or southerly. According to the season and nature of the place where the hare is accustomed to seat, there beat with your hounds, and start her; which is better sport than trailing her from her relief to her form. After the hare has been started, and is on

foot, step in where you saw her pass, and halloo in your hounds, until they have all undertaken it and go on with it in full cry; then recheat to them with your horn, following fair and softly at first, making not too much noise either with horn or voice; for at the first hounds are apt to overshoot the chase through too much heat. But when they have run an hour, and you see the hounds are well in with it, and stick well upon it, then you may come in nearer with them, because their heat will then be cooled, and they will hunt more soberly. But above all things, mark the first doubling, which must be your direction for the whole day; for all the doublings that she will make afterwards will be like the former; and according to the policies that you shall see her use, and the place where you hunt, you must make your compasses great or small, long or short, to help the defaults, always seeking the moistest and most commodious places for the hounds to scent in.

Hunting the Hart or Stag. Gesner, speaking of hart-hunting, observes, that this wild and subtle beast frequently deceives its hunter by windings and turnings. Wherefore the prudent hunter must train his dogs with words of art, that he may be able to set them on and take them off at pleasure. First he should encompass the beast in her own layer, and so unharbour her in the view of the dogs, that so they may never lose her slot or footing. Neither must he set upon every one, either of the herd or those that wander solitarily, or a little one; but partly by sight, and partly by the footing and fumets, make a judgment of the game, and also observe the largeness of his layer. The huntsman, having made these discoveries in order to the chase, takes off the couplings of the dogs; and some on horseback, others on foot, follow the cry with the greatest art, observation, and speed; remembering and intercepting him in his subtle turnings and headings; with all agility leaping hedges, gates, pales, ditches: neither fearing thorns, down-hills, nor woods, but mounting a fresh horse if the first tire. Follow the largest head of the whole herd, which must be singled out of the chase; which the dogs perceiving must follow, not following any other. The dogs are animated to the sport by the winding of horns, and the voices of the huntsmen. But sometimes the crafty beast sends forth his little squire to be sacrificed to the dogs and hunters, instead of himself, lying close the mean time. In this case the huntsman must sound a retreat, break off the dogs and take them in, that is, leam them again, until they be brought to the fairer game; which rises with fear, yet still strives by flight, until he is wearied and breathless. The nobles call the beast a wise hart, who, to avoid all his enemies, runs into the greatest herds, and so brings a cloud of error on the dogs, to obstruct their farther pursuit; sometimes also bearing some of the herd into his footings, that so he may the more easily escape by amusing the dogs. Afterwards he betakes himself to his heels again, still running with the wind, not only for the sake of refreshment, but also because he can thus more easily hear the voice of his pursuers, whether they be far off or near. But being again discovered by the hunters, and the sagacious scent of the dogs, he flies into herds of cattle, as cows, sheep, &c., leaping on a cow or ox, laying the fore-parts of his body thereon, so that touching the earth only with his hinder feet, he may leave very little or no scent behind. But their usual manner is, when they see themselves hard beset, and every way intercepted, to make force with their horns at the enemy who first comes upon them, unless they be prevented by spear or sword. When the beast is slain, the huntsman winds the fall of the beast; and then the whole company come up, blowing their horns in triumph for such a conquest; among whom, the skilfullest opens the beast, and rewards the hounds with what properly belongs to them, for their future encouragement, for which purpose the huntsmen dip bread in the blood of the beast to give to the hounds. It is very dangerous to go in to a hart at bay; of which there are two sorts, one on land and the other in water. If the hart be in deep water, where you can not well come at him, couple up your dogs; for, should they continue long in the water, it would endanger their surbating or foundering. In this case get a boat and swim to him, with drawn dagger, or else with a rope that has a noose, and throw it over his horns: for, if the water be so deep that the hart swims, there is no danger in approaching him; otherwise you must be very cautious. As to the land bay, if a hart be burnished, consider the place; for if it be in a plain and open place, where there is no wood or covert, it is dangerous and difficult to come in to him; but if he be on a hedge-side, or in a thicket, then, while the hart is staring on the hounds, you may come softly and covertly behind him, and cut his throat. If you miss your aim, and the hart turn head upon you, then take refuge at some tree; and, when the hart is at bay, couple up your hounds; and when you see the hart turn head to fly, gallop in roundly to him, and kill him with your sword. The first ceremony, when the huntsman comes in to the death of a deer, is to cry 'ware haunch,' that the hounds may not break in to the deer; which being done, the next is the cutting his throat, and blooding the youngest hounds, that they may the better love a deer, and learn to leap at his throat: then the mort having been blown, and all the company come in, the best person, who hath not taken say before, is to take up the knife that the keeper or huntsman is to lay across the belly of the deer, some holding by the fore legs, and the keeper or huntsman drawing down the pizzle, the person who takes say, is to draw the edge of the knife leisurely along the middle of the belly, beginning near the brisket, and drawing a little upon it, enough in the length and depth to discover how fat the deer is; then he that is to break up the deer, first slits the skin from the cutting of the throat downwards, making the arber, that so the ordure may not break forth, and then he paunches him, rewarding the hounds with it. In the next place, he is to present the same person who took say, with a drawn hanger, to cut off the head of the deer. Which being done, and the hounds rewarded, the concluding ceremony is, if it be a stag, to draw a

triple mort; and if a buck, a double one, and then all who have horns blow a recheat in concert, and immediately a general whoop.

Hunting the Otter is performed with dogs, and also with otter spears; with which, when they find themselves wounded, they make to land, and fight with the dogs most furiously, as if they were sensible that cold water would annoy their green wounds. There is indeed craft to be used in hunting them, but they may be caught in snares under water, and by river sides: but great care must be taken, for they bite sorely; and, if they remain long in the snare, they will get themselves free by their teeth. In hunting them, one man must be on one side of the river, and another on the other, both beating the banks with dogs; and the beast not being able to endure the water long, you will soon discover if there be an otter or not in that quarter. If any of the hounds find out an otter, then view the soft grounds and moist places, to find out which way he bent his head: and then follow the hounds, and lodge him as a hart or deer. But if you do not find him quickly, you may suppose he is gone to couch somewhere farther off from the river; for sometimes they will go to feed a considerable way from the place of their rest, choosing rather to go up the river than down it. Those who hunt otters must carry their spears, to watch his vents, that being the chief advantage; and if they perceive him swimming under water, they must endeavour to strike him with their spears, and, if they miss, must pursue him with their hounds, which, if they be good, will go chanting and trailing along the river side, and will beat every root of a tree, osier-bed, and tuft of bulrushes: nay, they will sometimes take water and bait the beast like a spaniel, by which means he will hardly escape.

We will now give a short definition of the principal terms used in hunting. 1. For beasts as they are in company:—Hunters say, a herd of harts, and all manner of deer; a bevy of roes; a sounder of swine; a rout of wolves; a richess of martens; a brace or leash of bucks, foxes, or hares; a couple of rabbits or coneys. 2. For their lodging:—A hart is said to harbour; a buck lodges; a roe beds; a hare seats or forms; a coney sits; a fox kennels; a marten trees; an otter watches; a badger earths; a boar couches. Hence, to express their dislodging, they say, unharbour the hart; rouse the buck; start the hare; bolt the coney; unkennel the fox; untree the marten; vent the otter; dig the badger; rear the boar. 3. For their noise at rutting time:—A hart belleth; a buck growns or troats; a roe bellows; a hare beats or taps; an otter whines; a boar freams; a fox barks; a badger shrieks; a wolf howls; a goat rattles. 4. For the footing and treading:—Of a hart, they say the slot; of a buck, and all fallow-deer, the view; of all deer, if on the grass, and scarce visible, the foiling; of a fox, the print; and of other vermin, the footing; of an otter, the marks; of a boar, the track; the hare, when in open field, is said to sore; when she winds about to deceive the hounds, she doubles; when she beats on the hard highway, and her footing comes to be perceived, she pricketh; in snow, it is called the trace of the hare. 5. The tail of a hart, buck, or other deer, is called the single; that of a boar, the wreath; of a fox, the brush, or drag; and the tip at the end, the chape; of a wolf, the stern; of a hare and coney, the scut. 6. The ordure of a hart and all deer, is called fewmets or fewmishing; of a hare, crotiles or crotising; of a boar, lesses; of a fox, the billiting; and of other vermin, the fuants; of an otter, the spraints. 7. As the attire or parts of deer, those of a stag, if perfect, are the bur, the pearls, the little knobs on it, the beam, the gutters, the antler, the sur-antler, royal, sur-royal, and all at top the croches; of the buck, the bur, beam, brow-antler, black-antler, advancer, palm, and spellers. If the croches grow in the form of a man's hand, it is called a palmed head. Heads bearing not above three or four, and the croches placed aloft, all of one height, are called crowned heads; heads having double croches, are called forked heads, because the croches are planted on the top of the beams like forks. 8. Of the young, they say, a litter of cubs, a nest of rabbits, a squirrel's dray. 9. The terms used in respect of the dogs, &c., are as follows:—Of greyhounds, two make a brace; of hounds, a couple; of greyhounds, three make a leash; of hounds, a couple and half. They say, let slip a greyhound; and, cast off a hound. The string wherein a greyhound is led, is called a leash; and that of a hound, a lyome. The greyhound has his collar, and the hound his couples. We say a kennel of hounds, and a pack of beagles. 10. The following terms and phrases are more immediately used in the progress of the sport itself:—When the hounds, being cast off, and finding the scent of some game, begin to open and cry, they are said to challenge; when they are too busy ere the scent be good, they are said to babble; when too busy where the scent is good, to bawl; when they run it endwise orderly, holding in together merrily, and making it good, they are said to be in full cry; when they run along without opening at all, it is called running mute; when spaniels open in the string, or a greyhound in the course, they are said to lapse; when beagles bark and cry at their prey, they are said to yearn; when the dogs hit the scent the contrary way, they are said to draw amiss; when they take fresh scent and quit the former chase for a new one, it is called hunting change; when they hunt the game by the heel or track, they are said to hunt counter; when the chase goes off, and returns again traversing the same ground, it is called hunting the foil; when the dogs run at a whole herd of deer, instead of a single one, it is called running riot; dogs set in readiness where the game is expected to come by, and cast off after the other hounds are passed, are called a relay. If they be cast off ere the other dogs come up, it is called vauntlay; when, finding where the chase has been, they make a proffer to enter, but return, it is called a blemish; a lesson on the horn to encourage the hounds, is named a call, or recheat; that blown at the death of a deer, is called the mort; the part belonging to the dogs of any chase they have killed is the reward. They say, take off a deer's skin; strip or ease a hare, fox, and all sorts of vermin:

which is done by beginning at the snout, and turning the skin over the ears down to the tail.

HUNTINGDONSHIRE. Before the Roman invasion, this county, with the adjacent counties of Cambridge, Norfolk, and Suffolk, was inhabited by the Cenamini or Cenemagni. The Romans included it in the province of Flavia Cæsariensis. The Saxons made it part of the kingdom of East Anglia, at which time it was called Huntendunescyre and Hantandunscyre. It was subsequently subjugated by the Mercian kings. Huntendunscyre signifies hunters'-down shire, this district being at the time it was so first named well adapted for the sport of hunting, as it was almost one continued forest.

Huntingdonshire, sometimes called Hunts, is an inland county, bounded by Northamptonshire on the north, north-west, and west; by Bedfordshire on the south and south-west; and by Cambridgeshire on the east, south-east, and north-east. It extends in length about twenty-six miles, in breadth twenty, and in circumference about seventy-six miles, containing about 194,950 acres of land. It lies in the Norfolk circuit, and its ecclesiastical government is in the province of Canterbury, and the diocese of Lincoln. The fenny part of it is in the Bedford Level. It is divided into four hundreds, one borough, six market-towns, and seventy-nine parishes. It is remarkable that this county and Cambridgeshire are joined together under one civil government, there being but one high sheriff for both, who is alternately chosen one year out of Cambridgeshire, the second out of the Isle of Ely in the same county, and the third out of this county.

The climate of Huntingdonshire on the whole is tolerably healthy, considering that all the east or north-east part of the county is skirted by fens, and that but a small part of it is well supplied with spring-water. Mr. Maxwell remarks, that this county possesses several distinct sorts of soil: viz. first, fens or moors; second, skirty land; third, meadow land; fourth, strong deep stapled soil, either consisting of clay or of gravel with a mixture of loam; and, fifth, thin stapled light clay. It appears, from an invaluable list in Mr. Parkinson's View of the Agriculture of this county, that the greater part is watered by ponds. The Ouse and the Nen are the only rivers which communicate with the county, the former falling into it at St. Neots, whence it winds through several parishes into Cambridgeshire, which it enters at or near Erith. The latter divides the northern part from the county of Northampton, in which county it rises, and, flowing through a delightful vale, reaches Huntingdonshire near Elton. It is here that it forms the boundary between the two counties, and, meandering to the north, passes Yarwell and Wansford; soon after, winding to the east, through a more level country, it pursues a devious course to Peterborough, below which it sinks into the Fens, and slowly winds through Wisbech to the sea. Some smaller streams water the north-east side of this county, together with large meres, or pools of water; namely, Whittlesea-mere, Ramsey-mere, Ugg-mere, &c. Most of the meres are visited by abundance of wild fowl. The river Ouse is navigable along its whole line across this county. Inland navigation is neglected in Huntingdonshire: there is, however, a canal, navigable from Ramsay to Lynn in Norfolk; also from Warboys to the same place.

The chief produce of this county is corn and cattle, with fowl and sheep. The cheese of Hunts is deemed of an excellent quality. The sheep are a mixed race, and have been much improved by crosses of the Lincolnshire and Leicestershire breeds. They are without horns, and of imperfect shape, but are found profitable from the quantity of wool they produce; their fleeces weighing from seven to eight pounds each. Those of the native sheep still found, seldom exceed four pounds in weight. The cows are bred with little attention, and are also a mixture of many races. A principal object of pursuit is the suckling of calves to supply veal to London. Many horses are bred in the lower part of the county.

Two medicinal springs are mentioned by Camden, and after him by Fuller, as found at Hailweston, near St. Neots. From one of these issued fresh water, and from the other water somewhat saline. Judging of the productive quality of the ground in this county by the test laid down by Fuller, we may infer that few counties are more fertile and rich. 'The goodness of the ground,' he says, 'may certainly be collected from the plenty of convents erected therein, at St. Neots, Hinchingbrook, Huntingdon, Sautrie, St. Ives, Ramsey, &c.; so that the fourth foot at least in this shire was abbey-land, belonging to monks and friars; and such weeds we know would not grow but in rich ground. If any man say that monks might not choose their own habitations, being confined therein to the pleasure of their founders; know, there were few founders that did not first consult some religious person in the erection of convents; and such would be sure to choose the best for men of their own profession. Sure I am, it would set all England hard to show, in so short a distance, so pleasant a park as Waybridge, so fair a meadow as Portsholme, and so fruitful a tillage as Godmanchester, all three within so many miles in this county.'

The county of Hunts returns four members to parliament; viz. two for the county, and two for the county town, Huntingdon. The family of viscount Hinchingbrook, as well as the ducal branch of Manchester, has always possessed a considerable influence over this county. The Probys and Ludlows have also been frequently returned. Mr. Montague, the husband of the celebrated Mrs. Montague of Portman-square, sat for the county town in 1734, 1741, 1747, 1754, and 1762. The duke of Manchester and the earl of Sandwich are deemed proprietors or patrons of both the shire and the town.

Sawtrey Beaumes, in this county, is thought to have been the birth-place of Beaumais, bishop of London in the time of Henry I., and surnamed Rufus to distinguish him from his nephew, who was afterwards bishop of the same see. He was appointed the first warden of the marshes of Wales, and afterwards governor of the whole of Salop. He died in January 1127-8,

—Richard Broughton, author of the Monasticum Britannicum, was born at Stukely, on the high-road from Huntingdon towards Stilton. —Sir Robert Bruce Cotton, the celebrated antiquary, whose inestimable MSS and library are now in the British Museum, was born at Denton in 1570. Died 1621.—Huntingdon gave birth to Oliver Cromwell.—Richard Cromwell (Oliver's brother) was also a native of this town. Died 1712.—Stephen Marshall, the parliamentary divine, and head of the Smectymnians, and whom Dugdale calls 'the bell-wether of that blessed flock,' 'Presbyterianorum anti-signanus,' was born at Godmanchester. ——Roger, de St. Ives, an Augustine friar, who wrote against the Lollards about 1390, was born at St. Ives, and appears to have been living in 1420.

There is scarcely any manufacture in this county. A little wool-stapling and spinning of yarn are carried on in some places; also a lace manufactory at Kimbolton. Stilton is famous for its cheese: and there is a vinegar manufactory of some extent at the foot of Huntingdon bridge. The remains of antiquity in this county are principally Roman; among them are the vestiges of three roads, which were constructed by that people. The remains of Ramsey Abbey and Castle, the seat of the family of Oliver Cromwell, are of venerable date; and the churches of St. Ives, Bluntisham, and St. Neots, and the castle of Kimbolton are ancient.

HUNTINGDON, the chief town of the above county, is pleasantly situated on the north bank of the Ouse, over which there is here a bridge of six arches. It at present consists of but four parishes, having two churches, and two dissenting chapels; but is said to have been formerly a place of more importance, and to have numbered fifteen churches. Near the church of St. Mary was anciently a priory of black canons, and on an eminence near it stood a castle, erected by Edward the Elder, and enlarged by David I. of Scotland, earl of Huntingdon. Towards the eastern side of the town, where the principal part of it formerly stood, the lanes which divide the enclosures from each other still retain their ancient names; and in a piece of ground, called the Priory-Close, two stone coffins were dug up several years ago. The county assizes, in March and July, contribute greatly to the support of the town. The town-hall is a good modern building, with a piazza and shambles. The lower part contains the civil and criminal courts; and above is a spacious assembly room. The market place is commodious, and the market well supplied. The principal street is very respectable in appearance, and the whole place is well paved and lighted. Here is a free grammar-school, and a charitable green-coat-school. The county gaol is a small structure in the High-street. Huntingdon is famous for being the native place of Oliver Cromwell, whose baptism is entered in the register for 1599. It is a borough by prescription, and sends two members to parliament, chosen by about 200 freemen and inhabitant householders. It is governed by a mayor, twelve aldermen, and a common council of burgesses. The Ouse being navigable from Lynn, through this town up to Bedford, it derives its supply of coals, wood, &c., from Lynn by barges. It has a market on Saturday, noted for corn. Fifteen miles north-west of Cambridge, and fifty-eight and a half north of London.

HUNTINGDON, an extensive mountainous county of Pennsylvania, bounded north and north-west by Lycoming county, east and north-east by Mifflin, south-east by Franklin, south and south-west by Bedford and Somerset, and west by Westmoreland. It is about seventy-five miles long, and thirty-nine broad. Limestone, iron ore, and lead, are found here. It contains eighteen townships. Huntingdon, the chief town, is situated at the north-east side of the Juniatta river, fifty miles from its mouth. It contains a court-house and a jail. Twenty-three miles south-west of Lewistown, and 184 W. N. W. from Philadelphia.

HUNTINGDON (Selina), countess of, was the second daughter of Washington, earl Ferrers, and born in 1707. She married, June 3d 1728, Theophilus, earl of Huntingdon, by whom she had a family of four sons and three daughters; but, becoming a widow, she embraced the principles of the Calvinistic methodists, and patronised the Rev. George Whitefield, whom she afterwards made her chaplain. She was long considered as the head of the sect of Calvinistic methodists, who were designated as the people of lady Huntingdon. She founded schools and colleges for their preachers, supported them with her purse, and expended annually large sums. She died June 17th, 1791, much respected for her virtues.

HUNTINGTON, or HUNT (William), who styled himself S. S., was born near Cranbrook in the weald of Kent, in 1774. He does not spare his mother's reputation in endeavouring to sustain his own; he was 'the offspring,' he tells us, of 'a double adultery.' At first he was a farmer's servant of the lowest description; then, for a while, a gun-maker; then, again, a farmer's servant; then a gardener; then a gunpowder-manufacturer; then a coal-heaver (at which period he first began to preach); then a shoe-maker; and, finally, a dissenting teacher. He added to his original name Hunt, the syllables 'ington' to escape the demand of the parish of Frittenden in Kent upon him for an illegitimate child; and S. S. to proclaim that he was, in his own estimation, a sinner saved.

'You know,' he says, 'we clergy are very fond of titles of honor; some are called lords spiritual, though we have no such lords but in the persons of the ever-blessed Trinity; others are named doctors of divinity, and prebends, though God gives no such titles; therefore I cannot conscientiously add D. D. to my function, though some hundreds have been spiritually healed under my ministry; nor have I £14 to spare to buy the dissenting title of D. D. Being thus circumstanced, I cannot call myself a lord spiritual, because Peter, the pope's enemy, condemns it; nor can I call myself lord high primate, because supremacy, in the Scriptures, is applied only to kings, and never to ministers of the gospel. As I cannot get at D. D. for the want of cash, neither can I get at M. A. for the want of learning; therefore I am compelled to fly for refuge to S. S., by which I mean Sinner Saved.'

His own fanatical story of his conversion, and 'call' to preach, has been adverted to by the Quarterly Review (No. 48.), and other writers, to bring into contempt all modern 'experience' in religion, and conversions as different from this man's as that of St. Paul the apostle. We entirely doubt Hunt's pretensions to having ever been a real lover of good morals, and therefore dismiss his whole profession of Christianity as a mixture of knavery and fanaticism. No man of right feeling would have thought it needful to confess his mother's sins; no man, as we think, that ever hated his own, would have related them in the manner he has done.

It will be sufficient, therefore, to add, that he removed from Thames Ditton, where he commenced preacher, to London about the year 1796; that he first officiated in a chapel of lady Huntingdon's in Margaret-street, but soon obtained one of his own; and finally built the handsome meeting-house in Gray's-Inn Lane, called Providence Chapel; published largely; married the widow of Sir James Saunderson, a late lord mayor; and died rich, in 1813.

HURD (Richard), D. D., bishop of Worcester, a distinguished divine and elegant classical scholar, was born, as he himself informs us, at Congreve, in Staffordshire, in 1720. There being a good grammar school at Brewood, he was educated there under the Rev. Mr. Hillman, and, upon his death, under his successor, the Rev. Mr. Budworth, and continued under his care till he went to the university, when he was admitted to Emanuel College, Cambridge. He took his B. A.'s degree in 1738-39; his M. A.'s degree, and was elected fellow, in 1742. In 1749 he took his degree of B. D. He published the same year Remarks on Mr. Weston's Book on the Rejection of Heathen Miracles, and his Commentary on Horace's Ars Poetica, which last book introduced him to the acquaintance of Dr. Warburton, by whose recommendation to Dr. Sherlock, bishop of London, he was appointed Whitehall preacher in May 1750. He published the Commentary on the Epistle to Augustus in 1751; the new edition of both Comments, with dedication to Mr. Warburton, in 1753; and the Dissertation on the Delicacy of Friendship in 1755. His Remarks on Hume's Natural History of Religion appeared in 1757; and he was instituted this year (February 16th), to the rectory of Thurcaston, in the county of Leicester, on the presentation of Emanuel College. He published Moral and Pol tical Dialogues in 1759. In 1762 he published the Letters on Chivalry and Romance; and Dialogues on Foreign Travel in 1763; and Letter to Dr. Leland of Dublin in 1764. He was made preacher of Lincoln's Inn, on the recommendation of Mr. Charles Yorke, &c., November 6th, 1765; was collated to the archdeaconry of Gloucester, on the death of Dr. Geekie, August 27th, 1767; and was appointed to open the Lecture of bishop Warburton on Prophecy in 1768. He took the degree of D. D. at Cambridge, in the commencement of this year. He published the Sermons on Prophecy in 1772; was consecrated bishop of Litchfield and Coventry, the 12th of February, 1775; and published the first volume of Sermons preached at Lincoln's Inn, 1776; Dr. Hurd was now made preceptor to the prince of Wales and his brother prince Frederick. He lost his old and best friend, bishop Warburton, June 7th, 1779. He was elected member of the Royal Society of Gottingen, January 11th, 1781; and on the death of the bishop of Winchester was translated to the see of Worcester, and made a clerk of the closet. In 1783 archbishop Cornwallis died, and Hurd had it is said the offer of the archbishopric from his majesty; but he begged leave to decline it, as a charge not suited to his temper and talents, and much too heavy for him to sustain, especially in these times. It was also offered to the bishop of London, Dr. Lowth, and refused by him, as was foreseen, on account of his ill health. It was then given to Dr. Moore, bishop of Bangor. Declining all offers of preferment, bishop Hurd continued to fulfil the duties of his station for more than twenty years; during which period he enjoyed the countenance and respect of the royal family, from several members of which he even received repeated visits. The king presented to him two fine full length pictures of his Majesty and the Queen, which the bishop put up in his drawing-room with a suitable inscription. After a few days' confinement to his bed, he expired in his sleep, on Saturday morning, May 28th, 1808; having completed four months beyond his eighty-eighth year. He was buried in Hartlebury church-yard, according to his own directions. He had been bishop of Worcester for almost twenty-seven years; a longer period than any bishop of that see since the Reformation.

HUNYAD, a palatinate of Transylvania on the frontier of Hungary. It has an area of 2250 square miles, and a population of above 100,000, chiefly Walachians, with a few Germans and Hungarians.

HURA, in botany, a genus of the monadelphia order, and monœcia class of plants, natural order fifty-eighth, tricoccæ. The amentum of the male is imbricated, perianth truncated: COR. none, the filaments cylindrical, peltated on top, and surrounded with numerous or double antheræ. Female: CAL. none: COR. none: STYLE is funnel-shaped, the stigma cleft in twelve parts: CAPS. twelve-celled, with a single seed in each cell. There is but one species, viz.

H. crepitans, a native of the West Indies. It rises with a soft ligneous stem to the height of twenty-four feet, dividing into many branches, which abound with a milky juice, and have scars on their bark where the leaves have fallen off. The male flowers come out from between the leaves upon foot-stalks three inches long; and are formed into a close spike or column, lying over each other like the scales of fish. The female flowers are situated at a distance from them; and have a long funnel-shaped tube spreading at the top, where it is cut into twelve reflected parts. After the flower, the germen swells, and becomes a round compressed ligneous capsule, having twelve deep furrows, each being a distinct cell, containing one large round compressed seed. When the pods are ripe, they burst with violence, and throw out their seeds to a considerable distance. It is propagated by

eeds raised on a hot-bed; and the plants must e constantly kept in a stove. The kernels are aid to be purgative, and sometimes emetic.

HUR'DLE, *n. s.* Sax. þyrdel; Goth. *hurd.* texture of sticks woven together; a crate. rate on which criminals are dragged to execuon.

Settle your fine joints 'gainst Thursday next,
Or I will drag thee on a *hurdle* thither.
Shakspeare.

The blacksmith was hanged, drawn, and quartered Tyburn; taking pleasure upon the *hurdle*, to think at he should be famous in after-times. *Bacon.*

The sled, the tumbril, *hurdles* and the flail,
These all must be prepared. *Dryden's Georgicks.*

HURDLES, in fortification, are made of twigs of illows or osiers interwoven close together, sustined by long stakes, in the figure of a long quare, the length being five or six feet, and the readth three and a half. The closer they are attled together, the better. They serve to nder the batteries firm, or to consolidate the assage over muddy ditches; or to cover traerses and lodgments for the defence of the workmen against fireworks or stones. The Romans id a kind of military execution for mutineers, alled putting to death under the hurdle. The riminal was laid at his length in a shallow ater, under an hurdle, upon which was heapd stones, and so pressed down till he was rowned.

HURDLES, in husbandry, certain frames made ther of split timber, or of hazel rods wattled gether, to serve for gates in enclosures, or t ake sheep-folds, &c.

HURDIS (James), D. D., a poet of the last ntury, was the son of a gentleman of small rtune, and born at Bishopstone, in Sussex, in 63. He was educated at Chichester, and in 80 entered a commoner of St. Mary Hall, xford. In 1782 was chosen a demy of St. lary Magdalen. Two years after Mr. Hurdis ecame tutor to the youngest son of lord Chiester, the honorable George Pelham, since ishop of Exeter. In 1788 first appeared his illage Curate, which was followed by Adriano, anthea, Elmer and Ophelia, and the Orphan wins. In 1791 he was presented to the living f Bishopstone; and in 1793 elected profesor of poetry at Oxford, where in 1794 he ook the degree of B. D. and in 1797 that of . D. He died December 23d, 1801. In adition to the above works Dr. Hurdis was uthor of A Disquisition on Genesis 1 and 21; elect Remarks on the First Ten Chapters of enesis; Sir Thomas More, a Tragedy; Curory Remarks on the Arrangement of the Plays f Shakspeare; A Vindication of the University f Oxford from the aspersions of Mr. Gibbon; he Favorite Village, a poem, and Twelve issertations on the Nature and Occasions of rophecy. His poems were published after is death in three volumes by subscription, with life by his sister.

HURDWAR, or HAREDWARA, a town of the rovince of Delhi, Hindostan, on the western ank of the Ganges, near to the issuing of that ver from the mountains. It is one of the ost famous places of Hindoo purification; and pilgrims from every part of India resort hither, in the month of April; on which occasion a number of merchants also attend, and form one of the largest fairs held in Hindostan. Since it came into possession of the British the heavy taxes have been abolished, and every encouragement is held out to the merchants; in consequence of which, at the great fair held every twelfth year, 1,000,000 of persons have attended. A British magistrate, supported by police officers and a corps of native infantry, always attends. Long. 78° 2′ E., lat. 29° 57′ N.

HURE (Charles), a French divine, the son of a laborer at Champigny sur Yonne, born in 1639. He studied theology and the eastern languages with such success that he became principal of the college at Bencourt. He wrote, 1. A Dictionary of the Bible, in 2 vols. folio. 2. A sacred Grammar. 3. A translation of the New Testament into French He was a Jansenist; and died in 1717.

HURL, *v. a.* & *n. s.*
HURL-BAT, *n. s.*
HUR'LER, *n. s.*
HURL'WIND, *n. s.*
HUR'LY,
HUR'LY-BURLY.

From *hurolt*, to throw down, Islandic; or, according to Skinner, from *whirl*. Fr. *harlubrelu*, inconsiderately: hurl, to throw with violence; to utter with vehemence, but this sense is not in use; to play at a kind of game: hurl, tumult; commotion: hurl-wind for whirlwind, a violent gust: hurl-bat for whirl-bat, a weapon whirled rapidly round: hurly-burly, from the French word, as above, tumult or bustle. To hurl 'implies an unusual vehemence on the part of the agent, and an excessive provocation on the part of the sufferer.'

If he thrust him of hatred, or *hurl* at him by laying of wait. *Numbers* xxxv. 20.

They use both the right hand and the left in *hurling* stones. *Chronicles* xii. 2.

Like scattered down by howling Eurus blown,
By rapid *hurlwinds* from his mansion thrown.
Sandys.

The glad merchant that does view
His ship far come from watry wilderness,
He *hurls* out vows. *Spenser.*

All places were filled with tumult and *hurly-burly*, every man measured the danger by his own fear; and such a pitiful cry was in every place, and in cities presently to be besieged. *Knolles.*

He in the same *hurl* murdering such as he thought would withstand his desire, was chosen king. *Id.*

If heav'ns have any grievous plague in store,
O, let them keep it 'till thy sins be ripe,
And then *hurl* down their indignation
On thee! *Shakspeare. Richard III.*

He holds vengeance in his hand,
To *hurl* upon their heads that break his law.
Shakspeare.

I with my nails digged stones out of the ground,
To *hurl* at the beholders of my shame. *Id.*

Winds take the ruffian billows by the top,
That with the *hurly* death itself awake. *Id.*

Poor discontents,
Which gape and rub the elbow at the news
Of *hurly-burly* innovation. *Id.*
Methinks, I see this *hurly* all on foot. *Id.*

Hurl ink and wit,
As madmen stones. *Ben Jonson.*

The *hurlers* must *hurl* man to man, and not two set upon one man at once.

Carew's Survey of Cornwall.

Hurling taketh its denomination from throwing of the ball, and is of two sorts; to goals, and to the country: for *hurling* to goals there are fifteen or thirty players, more or less, chosen out on each side, who strip themselves, and then join hands in ranks, one against another: out of those ranks they match themselves by pairs, one embracing another, and so pass away; every of which couple are to watch one another during this play. *Carew.*

When balls against the stones are hardest throwne,
Then highest up into the aire they fly;
So, when men *hurle* us (with most fury) downe,
Wee hopefull are to be advanced thereby.

G. Withers.

Corrupted light of knowledge *hurled*
Sin, death, and ignorance o'er all the world.

Denham.

His darling sons,
Hurled headlong to partake with us, shall curse
Their frail original and faded bliss. *Milton.*

Highly they rag'd against the Highest,
Hurling defiance towards the vaults of heaven.

Id.

Thus the rash Phaeton with fury *hurled*
And rapid rage, consumes our British world.

Marvell.

She strikes the lute; but if it sound,
Threatens to *hurl* it on the ground. *Waller.*

Young Phaeton,
From East to North irregularly *hurled*,
First set himself on fire, and then the world.

Dryden.

Conjure him far to drive the Grecian train,
And *hurl* them headlong to the fleet and main.

Pope.

To *hurl* the dart, to ride the car,
To stem the deluges of war,
And snatch from fate a sinking land;
Trample the invader's lofty crest
And from his grasp the dagger wrest
And desolating brand. *Beattie.*

The captive usurper,
Hurled down from his throne,
Lay buried in torpor,
Forgotten and lone.
I broke through his slumbers,
I shivered his chain,
I leagued him with numbers,
He's tyrant again. *Byron's Manfred.*

HURON, a large lake of North America, one of the five principal ones which lie partly in the British territories, and partly in those of the United States. Its form is nearly triangular, and its circumference above 1000 miles, being upwards of 240 miles long from east to west, and 180 broad from north to south. It has many bays and islands, and communicates with lake Michigan on the west by the straits of Michillimackinac, with Lake Superior on the north-east by those of St. Mary, and with lake Erie on the south by those of Detroit. It abounds with fish, particularly trout and sturgeons, and its banks with sand cherries. The Chippeway, Ottoway, and Huron Indians reside on its banks. It lies between 80° 10′ and 84° 30′ W. long., and between 43° 30′ and 46° 10′ N. lat.

On the western side of lake Huron an extensive series of islands, called the Manatoulin Islands, stretches in an easterly direction for 160 miles; on some of which the land rises into elevations of great height. On this lake, also, the navigator is often assailed by violent storms, attended with thunder and lightning, more terrific than in any other part of North America. Lake Michigan, at the western angle, although distinguished by a separate name, can only be considered as a part of Lake Huron, deepening into a bay of 262 miles in length, by fifty-five in breadth, and whose entire circumference is 731 miles. Between it and Lake Huron there is a peninsula, that at the widest part is 150 miles; along which, and round the bottom of Michigan, runs part of the chain forming the Land's Height to the southward; whence descend many large and numerous streams that run into it. On the north side of Lake Huron many rivers of considerable size run down from the Land's Height. One of them, called French River, communicates with Lake Nipissing, whence a succession of smaller ones, connected by short portages, opens an intercourse with the Ottawa River, that joins the St. Lawrence near Montreal. On the eastern extremity of the lake is the Matchedash River, which through another succession of lakes, separated only by one short portage, establishes a communication by Lake Simcoe, Holland River, and Yonge Street, with the town of York, the capital of Upper Canada. The land bordering on the western shore of the lake is greatly inferior in quality to that on Lake Erie. It is mixed with sand and small stones, and is principally covered with pines, birch, and some oaks.

HURON, a county of the United States, in Ohio, bounded south by Richland, or the parallel of lat. 41° N. and Indian Lands; east by Medina and Cayahoga counties; north by Lake Erie; and west by Indian Lands. It is watered by Black, Vermillion, and Huron rivers, Pipe and Cold creeks, and Sandusky and Portage rivers. The chief place is Aveny.

HURON, a river of the United States, in the North Western Territory, which rises near the Sciota, and running north-east falls into Lake Erie.

HURONS, a nation of North American Indians, who reside on the banks of the above lake, and whose language is spoken over a great extent of country.

HUR'RICANE, *n. s.* } Fr. *ouragan*; Span.
HURRICA'NO, *n. s.* } *hraacan*. A violent storm, such as is often experienced in the western hemisphere.

Blow winds, and crack your cheeks!
You cataracts, and *hurricanoes*, spout! *Shakspeare.*

A poet who had a great genius for tragedy, made every man and woman too in his plays stark raging mad: all was tempestuous and blustering; heaven and earth were coming together at every word; a mere *hurricane* from the beginning to the end.

Dryden.

The ministers of state, who gave us law,
In corners with selected friends withdraw;
There in deaf murmurs, solemnly are wise,
Whisp'ring like winds, ere *hurricanes* arise. *Id.*

A storm or *hurricano*, though but the force of air, makes a strange havock where it comes. *Burnet.*

So, where our wide Numidian wastes extend,
Sudden th' impetuous *hurricanes* descend,
Wheel through the air, in circling eddies play,
Tear up the sands, and sweep whole plains away.
Addison.

HURRICANES, in the warm climates, greatly exceed the most violent storms known in this country. 'The ruin and desolation accompanying a hurricane,' says Dr. Mosely in his Treatise on Tropical Diseases, 'cannot be described. Like fire, its resistless force consumes every thing in its track, in the most terrible and rapid manner. It is generally preceded by an awful stillness of the elements, and a closeness and mistiness in the atmosphere, which makes the sun appear red, and the stars larger. But a dreadful reverse succeeding—the sky is suddenly overcast and wild—the sea rises at once from a profound calm into mountains—the wind rages and roars like the noise of cannon—the rain descends in deluges—a dismal obscurity envelopes the earth with darkness—the superior regions appear rent with lightning and thunder—the earth often does, and always seems to tremble—terror and consternation distract all nature—birds are carried from the woods into the ocean; and those whose element is the sea seek for refuge on land—the frightened animals in the field assemble together, and are almost suffocated by the impetuosity of the wind in searching for shelter, which, when found, serves only for destruction—the roofs of houses are carried to vast distances from their walls, which are beaten to the ground, burying their inhabitants under them—large trees are torn up by the roots, and huge branches shivered off, and driven through the air in every direction, with immense velocity—every tree and shrub that withstands the shock, is stripped of its boughs and foliage—plants and grass are laid flat on the earth—luxuriant spring is changed in a moment to dreary winter. This dreadful tragedy ended, when it happens in a town, the devastation is surveyed with accumulated horror: the harbour is covered with wrecks of boats and vessels; and the shore has not a vestige of its former state remaining. Mounds of rubbish and rafters in one place, heaps of earth and trunks of trees in another, deep gullies from torrents of water, and the dead and dying bodies of men, women, and children, half buried, and scattered about, where streets but a few hours before were, present the miserable survivors with a shocking conclusion of a spectacle to be followed by famine, and, when accompanied by an earthquake, by moral diseases.' These destructive phenomena are now thought to arise from electricity, though the manner in which it acts in such cases is unknown. See WIND.

HUR'RY, *v.n.* & *n.s.* } Sax. þeꞃȝian, to
HUR'RIER, *n.s.* } plunder: *hurs* was likewise a word used by the old Germans in urging their horses to speed, and seems the imperative of the verb.—Johnson. To hasten; to put into precipitation or confusion; to drive confusedly; to move on with precipitation: hurry, tumult; commotion: hurrier, a disturber.

Your nobles will not hear you; but are gone
To offer service to your enemy;
And wild amazement *hurries* up and down
The little number of your doubtful friends.
Shakspeare.

Among all the horrible *hurries* in England, Ireland was then almost quiet. *Hayward.*

Mars, that horrid *hurrier* of men. *Chapman.*

For whom all this haste
Of midnight march, and *hurry'd* meeting here?
Milton.

That *hurryed* o'er
Such swarms of English to the neighb'ring shore.
Dryden.

Did you but know what joys your way attend,
You would not *hurry* to your journey's end. *Id.*

Impetuous lust *hurries* him on to satisfy it. *South.*

It might have pleased him in the present heat and *hurry* of his rage; but must have displeased him infinitely in the sedate reflection. *Id.*

Stay these sudden gusts of passion,
That *hurry* you away. *Rowe's Royal Convert.*

Ambition raises a tumult in the soul, it inflames the mind, and puts into a violent *hurry* of thought.
Addison.

A long train of coaches and six ran through the heart, one after another in a very great *hurry*. *Id.*

I do not include the life of those who are in a perpetual *hurry* of affairs, but of those who are not always engaged. *Id.*

A man has not time to subdue his passions, establish his soul in virtue, and come up to the perfection of his nature, before he is *hurried* off the stage. *Id.*

After the violence of the *hurry* and commotion was over, the water came to a state somewhat more calm. *Woodward.*

The pavement sounds with trampling feet,
And the mixt *hurry* barricades the street.
Gay's Trivia.

If a council be called, or a battle fought, you are not coldly informed, the reader is *hurried* out of himself by the poet's imagination.
Pope's Preface to the Iliad.

Time *hurries* on
With a resistless unremitting stream,
Yet treads more soft, than e'er did midnight thief,
That slides his hand under the miser's pillow,
And carries off his prize. *Blair.*

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. Childe Harold.

HURST CASTLE, a fortress in Hampshire on a remarkable tongue of the county, projecting two miles into the sea toward the Isle of Wight, though scarcely 200 yards over at high water. The castle was built by Henry VIII., and consists of a round tower, fortified by bastions. Here Charles I. remained for several days previous to his trial. It is two miles west of Yarmouth.

HURT, *v.a.* & *n.s.* }
HURT'ER, *n.s.* }
HURT'FUL, *adj.* }
HURT'FULLY, *adv.* }
HURT'FULNESS, *n.s.* }
HURT'LESS, *adj.* }
HURT'LESSLY, *adv.* }
HURT'LESSNESS, *n.s.* }

Imperf. I hurt; preterper. I have hurt. Sax. þyꞃt; Teut. *hurtew*; Fr. *heurter*, to strike. Hurt implies corporeal injury, as mischief; wound; blow; bruise; mental pain, or wounded feelings; sorrow; displeasure; personal loss by injustice or wrong: hurtful, mischievous;

pernicious: hurtless, innocent; harmless; incapable of doing injury.

I have slain a man to my *hurt*. *Genesis.*

Why should damage grow to the *hurt* of the king? *Ezra.*

See thou *hurt* not the oil and wine. *Revelation.*

For there n'as lady ne creture,
Save on the wals old portraiture
Of horsmen, haukes, and hounds,
And *hurt* dere all full of woundes,
Some like bitten, some *hurt* with shot.
Chaucer's Dreame.

Spiritual theft is sacriledge, that is to say,
Hurting of holy thinges. *Id. The Persones Tale.*

The *hurt* thereby is greater than the good.
Spenser.

She joyed to make proof of her cruelty
On gentle dame, so *hurtless* and so true.
Id. Faerie Queene.

Secret neglect of our duty is but only our own hurt: one man's contempt of the common prayer of the church of God may be most *hurtful* unto many. *Hooker.*

Where is he wounded?
—There will be large cicatrices to shew the people: he received seven *hurts* i' the' body.
Shakspeare. Coriolanus.

My heart is turned to stone: I strike it, and it *hurts* my hand. *Id. Othello.*

Carter adventured bravely, and received two great *hurts* in his body. *Hayward.*

Virtue may be assailed, but never *hurt*;
Surprized by unjust force, but not enthralled.
Milton.

The Adonis of the sea, is so called, because it is a loving and innocent fish, that *hurts* nothing that has life. *Walton.*

Unto her home he oft would go,
Where bold and *hurtless* many a play he tries,
Her parents liking well it should be so;
For simple goodness shined in his eyes. *Sidney.*

Your neighbours have found you so *hurtlessly* strong, that they thought it better to rest in your friendship than make new trial of your enmity. *Id.*

It breeds contempt
For herds to listen, or presume to pry,
When the *hurt* lion groans within his den.
Dryden.

The *hurtful* hazle in the vineyard shun,
Nor plant it to receive the setting sun.
Id. Georgicks.

Shorter every gasp he takes,
And vain efforts and *hurtless* blows he makes.
Id. Æneid.

The pains of sickness and *hurts*, hunger, thirst, and cold, all men feel. *Locke.*

In arms and science tis the same,
Our rivals' *hurts* create our fame. *Prior.*

HURTERS, in fortification, pieces of timber about six inches square, placed at the lower end of the platform, next the parapet, to prevent the wheels of the gun carriage from hurting the parapet, whence the name.

HURTLE, *v. n.* & *v. a.* Prabably from hurt. Fr. *heurter;* Ital. *urtare.* To clash; to skirmish; to run against any thing; to jostle; to meet in shock and encounter; to move with violence or impetuosity, but this meaning is obsolete.

He foineth on his foo with a tronchoun;
An he him *hurtleth* with his hors, adoun.
Chaucer. The Knightes Tale.

And hertily thei *hurtlen* al at ones
And fro the top, doune cometh the grete stones.
Id. Legende of Good Women.

His harmful club he gan to *hurtle* high,
And threaten battle to the fairy knight.
Faerie Queene.

The noise of battle *hurtled* in the air. *Shakspeare.*

Kindness
Made him give battle to the lioness,
Who quickly fell before him; in which *hurtling*,
From miserable slumber I awaked.
Shakspeare. As You Like It.

HUS'BAND, *n. s.* & *v. a.* } Dan. and Swed.
HUS'BANDLESS, *adj.* } *hus bonde*, master,
HUS'BANDLY, *adj.* } from house and
HUS'BANDMAN, *n. s.* } Run. *bonda*; or
HUS'BANDRY, *n. s.* } Dan. and Swed. *bonde*, a conductor, a male guide. A man married to a woman; the male of animals: an economist; a man that knows and practises the methods of frugality and profit: a tiller of the ground, or farmer: the verb signifies to manage with frugality; to till or cultivate: husbandless, without a husband: husbandly, thrifty; frugal: husbandman, an agriculturist: husbandry, tillage of land by manual labor; thrift; frugality; parsimony.

And after dinner, gonnen they to dance
And sing also, sauf Dorigene alone,
Which made alway hire complaint and hire mone,
For she ne saw him on the dance go,
That was hire *husband* and hir love also.
Chaucer. The Frankeleines Tale.

This widewe, which I tell you of my tale,
Sin thilke day that she was last a wif,
In patience led a full simple lif.
For litel was hir catel and hir rente;
By *husbondry* of swiche as God hir sente
She found herself, and eke her doughtien two.
Id. The Nonnes Priestes Tale.

Husbandry supplieth all things necessary for food. *Spenser.*

Husband's work is laborious and hard.
Hubberd's Tale.

Asked if in *husbandry* he ought did know,
To plough, to plant, to reap, to sow. *Id.*

Bare plots full of galls, if ye plow overthwart;
And compass it then, is a *husbandly* part. *Tusser.*

Think you I am no stronger than my sex,
Being so fathered and so *husbanded*? *Shakspeare.*

If you shall prove
This ring was ever her's you shall as easy
Prove that I *husbanded* her bed in Florence,
Where yet she never was. *Id.*

Lorenzo, I commit into your hands
The *husbandry* and manage of my house. *Id.*

It will be pastime passing excellent,
If it be *husbanded* with modesty. *Id.*

A widow *husbandless*, subject to tears;
A woman, naturally born to fears. *Id.*

This Davy serves you for good uses; he is your serving-man, and your *husbandman*. *Id.*

Why, woman, your *husband* is in his old lunes again: he so takes on yonder with my *husband*, and so rails against all married mankind. *Id.*

In my right,
By me invested, he compeers the best.
—That were the most, if he should *husband* you. *Id.*

Peace hath from France too long been chased;
And all her *husbandry* doth lie on heaps,
Corrupting in its own fertility. *Id. Henry V.*

There's *husbandry* in heaven;
The candles are all out. *Id. Macbeth.*

Thy *husband* is thy lord, thy life, thy keeper,
Thy head, thy sovereign. *Id. Taming of the Shrew.*

The seeds of virtue may, by the *husbandry* of Christian counsel, produce better fruit than the strength of self-nature. *Raleigh.*

Husbandry the Spaniards wanting in the valleys of Mexico, could not make our wheat bear seed. *Id.*

I heard a great *husband* say, that it was a common error to think that chalk helpeth arable grounds. *Bacon.*

A farmer cannot *husband* his ground, if he sits at a great rent. *Id.*

The French, wisely *husbanding* the possession of a victory, kept themselves within their trenches. *Id. Henry VII.*

Many men love the sea, others *husbandry*; briefly, they cannot agree in their own trades and professions, much less in their lives and actions. *Burton. Anat. Mel.*

If thou be master-gunner, spend not all
That thou canst speak at once; but *husband* it,
And give men turns of speech. *Herbert.*

In those fields
The painful *husband* ploughing up his ground,
Shall find all fret with rust, both pikes, and shields. *Hakewill.*

He was a father to the fatherless,
To widows he supplyed a *husband's* care. *Fletcher's Purple Island.*

Thus with Sapphira and her *husband's* fate
(A fault which I like them am taught too late),
For all that I gave up I nothing gain,
And perish for the past that I retain. *Cowley.*

Such, as good *husbands* covet or good wives
(The dere companions of most happy-lives)
Wrong courses take to gaine them; yet contemne
Their honest love, who rightly counsel them. *G. Withers.*

He began with a wild method to run over all the art of *husbandry*, especially employing his tongue about well dunging of a field. *Sidney.*

A family governed with order will fall naturally to the several trades of *husbandry*, tillage, and pasturage. *Temple.*

Even though a snowy ram thou shalt behold,
Prefer him not in haste, for *husband* to thy fold. *Dryden.*

This careful *husband* had been long away,
Whom his chaste wife and little children mourn. *Id.*

If continued rain
The lab'ring *husband* in his house restrain,
Let him forecast his work. *Id. Georgicks.*

Let any one consider the difference between an acre of land sown with wheat, and an acre of the same land lying without any *husbandry* upon it, and he will find that the improvement of labour makes the value. *Locke.*

The contract and ceremony of marriage is the occasion of the denomination of relation of *husband.* *Id.*

The greatest schemes which human wit can forge,
Or bold ambition dares to put in practice,
Depend upon our *husbanding* a moment,
And the light lasting of a woman's will. *Rowe's Lady Jane Grey.*

You have already saved several millions to the publick, and that what we ask is too inconsiderable to break into any rules of the strictest good *husbandry.* *Swift.*

The mule being more swift in his labour than the ox, more ground was allowed to the mule by the *husbandman.* *Broome.*

And if in the mean time her *husband* died,
But heaven forbid that such a thought should cross
Her brain though in a dream! (and then she sighed),
Never could she survive that common loss. *Byron. Don Juan.*

HUSH, *interj., adj.,* & *v. n.* } Danish, *hys;*
HUSH-UP, *v. a.* } Goth. *thus.* The
HUSH-MONEY. } interjection is expressive of silence! be still! no noise! the adjective signifies silent; quiet: the verbs, to be still, or cause to be still; to appease: to hush-up, to suppress in silence; to forbid to be mentioned: hush-money, a bribe to secure silence.

'*Husht!* pees,' quod the miller, 'seist thou not the Frere
How he lowreth under his hood with a doggish eye. *Chaucer. The Pardonere and Tapstere.*

When they were set, and *husht* was al the place,
And Theseus abiden hath a space,
Or any word came from his wise brest,
His eyen set he ther, as was his lest. *Id. The Knightes Tale.*

This frowned, that fawned, the third for shame did blush;
Another seemed envious or coy;
Another in her teeth did gnaw a rush;
But at these strangers' presence every one did *hush.* *Spenser.*

Yet can I not of such tame patience boast,
As to be *husht*, and nought at all to say. *Shakspeare.*

It was my breath that blew this tempest up,
Upon your stubborn usage of the pope;
But, since you are a gentle convertite,
My tongue shall *hush* again this storm of war,
And make fair weather in our blust'ring land. *Id.*

Speak softly;
All's *husht* as midnight yet. *Id. Tempest.*

My love would speak; my duty *hushes* me. *Shakspeare.*

As we often see, against some storm,
A silence in the heav'ns, the rack stands still,
The bold winds speechless, and the orb below
As *hush* as death. *Id. Hamlet.*

The king hath done you wrong; but *hush!* 'tis so. *Shakspeare.*

There's something else to do; *hush* and be mute,
Or else our spell is marred. *Id. Tempest.*

When in a bed of straw we shrink together,
And the bleak winds shall whistle round our heads,
Wilt thou then talk thus to me? Wilt thou then
Hush my cares thus, and shelter me with love? *Otway.*

Hushed as midnight silence go;
He will not have your acclamations now. *Dryden.*

Her sire at length is kind,
Calms every storm, and *hushes* ev'ry wind;
Prepares his empire for his daughter's ease,
And for his hatching nephews smooths the seas. *Id.*

The court was *hushed*, and a whisper ran. *Addison.*

This matter is *hushed* up, and the servants are forbid to talk of it. *Pope.*

A dext'rous steward, when his tricks are found,
Hushmoney sends to all the neighbours round;
His master, unsuspicious of his pranks,
Pays all the cost, and gives the villain thanks. *Swift.*

Alas! thou art pale, and on thy brow the drops
Gather like night dew. My beloved, *hush*—
Calm thee. *Byron.*

Speak to me,
For I have called on thee in the still night,
Startled the slumbering birds from the *hushed* boughs,
And woke the mountain wolves, and made the caves
Acquainted with thy vainly echoed name.
Id. Manfred.

HUSK, *n. s.* & *v. a.* } Belg. *hulsck*; Swed.
HUS'KED, *adj.* } *hulsa*. The outmost in-
HUS'KY, *adj.* } tegument of fruits: husk, to strip off the integument: husked, covered with a husk: husky, abounding in husks.

Do but behold yon poor and starved band,
And your fair souls shall suck away their souls,
Leaving them but the shales and *husks* of men.
Shakspeare.

Thy food shall be
The fresh brook muscles, withered roots, and *husks*
Wherein the acorn cradled. *Id. Tempest.*

Most seeds, in their growing, leave their *husks* or rind about the root. *Bacon's Natural History.*

Art thou returned here to repent too late,
And gather *husks* of learning up at last,
Now the rich harvest time of life is past,
And winter marches on so fast. *Cowley.*

Yea, some have lived on *huskes*, whilst others fed
On that which was their labour's due reward,
And, where pursued, (till they almost were dead)
Without the world's compassion or regard.
G. Withers.

Fruits of all kinds, in coat
Rough or smooth rind, or bearded *husks*, or shell
She gathers; tribute large! and on the board
Heaps with unsparing hand. *Milton.*

Some steep their seeds, and some in cauldrons boil
O'er gentle fires; the exuberant juice to drain,
And swell the flatt'ring *husks* with fruitful grain.
Dryden.

Most have found
A *husky* harvest from the grudging ground.
Id. Virgil.

With timely care
Shave the goat's shaggy beard, lest thou too late
In vain should'st seek a strainer, to dispart
The *husky* terrene dregs from purer must.
Phillips.

Some, when the press
Has drained the pulpous mass, regale their swine
With the dry refuse: thou, more wise, shalt steep
The *husks* in water, and again employ
The pond'rous engine. *Id.*

Barley for ptisan was first steeped in water till it swelled; afterwards dried in the sun, then beat till the *husk* was taken off, and ground.
Arbuthnot on Coins.

Do not content yourselves with mere words, lest you feed upon *husks* instead of kernels. *Watts.*

HUSS (John), an eminent reformer and martyr, born at Huss, in Bohemia. He lived at Prague, where he was distinguished by his uncommon erudition and eloquence, and performed the functions of professor of divinity in the university, and pastor in the church of that city. He adopted the sentiments of Wickliffe, and the Waldenses; and in 1407 began openly to oppose and preach against divers errors in doctrine, as well as corruptions in point of discipline, then reigning in the church. He also endeavoured to withdraw the university of Prague from the jurisdiction of Gregory XII. whom the kingdom of Bohemia had hitherto acknowledged as the lawful head of the church. This occasioned a violent altercation between the archbishop of Prague and our reformer, which the latter daily augmented by his exclamations against the court of Rome, and the corruptions that prevailed among the sacerdotal order. Several other circumstances contributed to inflame the resentment of the clergy against him. He adopted the philosophical opinions of the Realists, and strongly opposed, and persecuted, as some say, the Nominalists, whose number and influence were considerable in the university of Prague. He also multiplied the number of his enemies in 1408, by procuring a sentence in favor of the Bohemians, who disputed with the Germans concerning the number of suffrages which their respective nations were entitled to, in all matters decided by election, in this university. In consequence of a decree obtained in favor of the former, which restored them to their constitutional right of three suffrages, usurped by the latter, the Germans withdrew from Prague, and, in 1409, founded a new academy at Leipsic. This event no sooner happened than Huss began to inveigh with greater freedom than he had before done against the vices and corruptions of the clergy, and to recommend, in a public manner, the writings and opinions of Wickliffe, as far as they related to the papal hierarchy, the despotism of the court of Rome, and the corruption of the clergy. Hence an accusation was brought against him, in 1410, before the tribunal of John XXIII., by whom he was solemnly expelled from the communion of the church. Notwithstanding this sentence of excommunication, he proceeded to expose the Romish church with a fortitude and zeal that were almost universally applauded. He was now, therefore, summoned to appear before the council of Constance. Secured, as he apprehended, from the rage of his enemies, by the safe conduct granted him by the emperor Sigismund for his journey to Constance, his residence in that place, and his return to his own country, he obeyed the order of the council, and appeared before it to demonstrate his innocence. But, by the most scandalous breach of public faith, he was cast into prison, declared a heretic, and burnt alive in 1415; a punishment which he endured with unparalleled magnanimity and resolution. The same unhappy fate attended Jerome of Prague, his intimate companion, who attended the council to support his persecuted friend. See JEROME. John Huss's writings, which were numerous and learned, were burnt along with him; but copies of most, if not all of them, were preserved, and published after the invention of printing.

HUSSITES, in ecclesiastical history, a party of reformers, the followers of John Huss. They adhered to their master's doctrine after his death with a zeal which broke out into an open war, that was carried on with the most savage and unparalleled barbarity. John Ziska, a Bohemian knight, in 1420, put himself at the head of the Hussites, who were now become a very considerable party, and threw off the despotic yoke of Sigismund, who had treated their brethren in the most barbarous manner. Ziska was succeeded by Procopius, in the year 1424. The acts of

barbarity that were committed on both sides were horrible beyond expression: for, notwithstanding the irreconcileable opposition between the religious sentiments of the contending parties, they both agreed in this one horrible principle, that it was lawful to persecute and extirpate with fire and sword the enemies of the true religion; and such they reciprocally held each other. These commotions in a great measure subsided, by the interference of the council of Basil, in 1433. The Hussites, who were divided into two parties, the Calixtines and Taborites, spread over all Bohemia and Hungary, and even Silesia and Poland; and there are remains of them still subsisting in all these parts.

HUSTINGS, *n. s.* Sax. þuſtinȝ. A council; a court held; the place where it is held.

Hustings is a court held in Guildhall before the lord-mayor and aldermen of London, and reckoned the supreme court of the city. Here deeds may be enrolled, outlawries sued out, and replevins and writs of error determined. In this court also is the election of the lord-mayor and sheriffs, of the four members of parliament for the city, &c. This court is very ancient, as appears from the laws of Edward the Confessor. Some other cities have likewise had a court bearing the same name, as Winchester, York, &c.

HUSTLE, *v. a.* Perhaps corrupted from hurtle. To shake together in confusion.

HUSTNAPOOR, or Hastinanagara, a once famous and ancient city, founded by Rajah Hasti, fifty miles north-east from the city of Delhi, much celebrated in the Hindoo Mythological Poems. It is about twenty miles south-west from Daranagur, standing on a branch of the Ganges, formerly the bed of that river. There remains only a small place of worship, the extensive site of the ancient city being entirely covered with large ant-hills.

HUSUM, a town of Denmark, in the duchy of Sleswick, and capital of the bailiwic of Husum, with a strong citadel and a very handsome church. It is seated on the river Ow, on the German Ocean, and is subject to the duke of Holstein Gottorp. Long. 9° 8′ E., lat. 54°. 32′ N.

HUS'WIFE, *n. s.* & *v. a.* } From housewife.
Hus'sy, *n. s.* } It is common to
Hus'wifery, *n. s.* } use housewife in a good, and huswife in a bad sense. A bad manager; also a thrifty woman; an economist: huswifery, good or bad management, especially in rural business. Hussy (corrupted from housewife, taken in an ill sense), a sorry or a bad woman; a worthless wench. It is often used ludicrously in slight disapprobation. See Housewife.

Good *huswifery* trieth
To rise with the cock;
Ill *huswifery* lyeth
Till nine of the clock. *Tusser.*

If cheeses in dairie have Argus his eyes,
Tell Cisley the fault in her *huswifery* lies. *Id.*

Why should you want?
The bounteous *huswife*, Nature on each bush
Lays her fulness before you. *Shakspeare.*

Bianca,
A *huswife*, that, by selling her desires,
Buys herself bread and cloth. *Id. Othello.*

But *huswifing* the little Heaven had lent,
She duly paid a goat for quarter-rent;
And pinched her belly, with her daughters' too,
To bring the year about with much ado. *Dryden.*

Get you in, *hussy*, go: now will I personate this hopeful young jade. *Southern's Innocent Adul.*

HUT. *n. s.* Sax. þuttɛ; Fr. *hute*. A poor cottage.

Our wand'ring saints, in woful state,
To a small cottage came at last,
Where dwelt a good old honest yeoman,
Who kindly did these saints invite
In his poor *hut* to pass the night. *Swift.*

Sore pierced by wintry winds
How many shrink into the sordid *hut*
Of cheerless poverty. *Thomson.*

HUTCH, *n. s.* Sax. þpæcca; Fr. *huche*. A corn chest.

The best way to keep them after they are threshed, is to dry them well, and keep them in *hutches*, or close casks. *Mortimer.*

HUTCHESON (Dr. Francis), an elegant writer of the eighteenth century, the son of a dissenting minister in the north of Ireland. He was born in 1694, and, having gone through the usual school education, was removed to the University of Glasgow. He afterwards returned to Ireland, and was about to be settled as minister to a small congregation of dissenters, in the north of that country, when some gentlemen of Dublin invited him to commence a private academy there. He had been fixed but a short time in Dublin, when his merits made him generally known; and his acquaintance was sought by men of all ranks, who had a taste for literature. Lord viscount Molesworth, and Dr. Synge, bishop of Elphin, lived in friendship with him, and assisted him with their observations upon his Enquiry into the Ideas of Beauty and Virtue, before it came abroad. The first edition was published without the author's name; but such was the reputation of the work, that lord Granville, then lord lieutenant of Ireland, enquired out the author, and treated him with distinguished marks of his esteem. From this time his acquaintance began to be still more courted by men of distinction in Ireland. A few years after his Enquiry, his Treatise on the Passions was published. Both these works have been often reprinted, and much admired, even by those who have not assented to his philosophy. After conducting a private academy in Dublin for seven or eight years, with great reputation and success, he was called, in 1729, to Scotland, to be professor of philosophy in the University of Glasgow. Several young gentlemen came with him from the academy, and his high reputation drew many more thither from England and Ireland. He died in 1747, aged fifty-three, leaving behind him one son, Francis Hutcheson, M. D., who published, from his father's original MS., A system of Moral Philosophy, in three books; at Glasgow, 1755, in 2 vols. 4to.

HUTCHINS (John), an English topographer, born at Bradford Peverell, where his father was curate, in 1698. He was educated at Baliol College, Oxford; and, having entered into orders, obtained several benefices, and at last the rectory of Wareham, in 1743, where he died in 1773. He wrote the History and Antiquities of the

county of Dorset, which was published by subscription in 2 vols. folio, with a number of beautiful plates.

HUTCHINSON (John), a well known philosophical writer, born in 1674. He at first served the duke of Somerset as steward, and in the course of his travels employed himself in collecting fossils. The duke afterwards made him his riding surveyor, a sinecure place of £200 a-year, with a good house in the Meuse. In 1724 he published the first part of his Moses's Principia, in which he ridiculed Dr. Woodward's Natural History of the Earth, and attacked the doctrine of gravitation established in Newton's Principia; in 1727 he published the second part of his Moses's Principia, containing the principles of the Scripture philosophy. From this time to his death, he published a volume every year or two; which, with the MSS. he left behind him, were published in 1748, in 12 vols. 8vo. An abstract of the whole has been published in 1 vol. 12mo. However fanciful or extravagant his views of Scripture, his writings are the result of intense study and application. He died August 28th, 1737.

HUTCHINSONIANS, a name given to those who adopt the religious and philosophical opinions of Mr. J. Hutchinson. The reader may find a distinct and comprehensive summary of the Hutchinsonian system in a book, entitled Thoughts concerning Religion, &c., printed in Edinburgh in 1743; and in a letter to a bishop, annexed to it, first printed in 1732, and written by president Forbes. Bishop Horne, the Rev. Julius Bates, and the Rev. W. Jones, as well as the respectable lexicographer Mr. Parkhurst, have been considered as his disciples.

HUTTANY, a large trading town in the Mahratta territories, in the province of Bejapoor, twenty miles east from Mirjee. It has an extensive commerce with Bombay, Surat, Rachore, &c., in its manufactures of silk and cotton sarees, piece goods, &c., but its staple article is grain. The town is enclosed by a wall and ditch, and there is a stone fort of no great strength. But here is an excellent durrumsalla, or place of accommodation for travellers. It is capable of lodging 500 persons, the horses and camels being picketed round the building. Huttany was, in 1679, a considerable place when it was taken from Serajee, who had reduced it, by the confederates from Bejapoor; and the English factory at Carwar, about the middle of the seventeenth century, had considerable traffickings here; but, on account of its frequent revolutions, the intercourse was discontinued.

HUTTEN (Ulric De), one of the early reformers, was born at Seckenburg, the seat of his family, in 1488. He studied at Fulda in 1506, and took the degree of M. A. at Frankfort on the Oder; after which he went into the imperial army, and was at the siege of Padua in 1509. Having published several poetical pieces, which were much admired, the emperor Maximilian I., upon his return to Germany in 1516, bestowed on him the poetical crown. His cousin John de Hutten, court-marshal to Ulric, duke of Wirtemberg, being murdered by the duke, our author gave vent to his vengeance, not only by his pen, in satirising the duke in various poems, letters, orations, and dialogues (collected and printed at Steckleburg in 1519, 4to), but also by his sword; for the duke being impeached before the diet of Augsburgh, for this and other crimes, and a league being formed against him, Hutten engaged in the war. About 1520, having become a convert to the doctrines of Luther, Hutten employed his pen in defence of that great reformer, and published Leo the Xth's bull against him with comments, which so exasperated the Pope that he wrote to Albert elector of Mentz, in whose military service Hutten had engaged, to send him bound hand and foot to Rome. Hutten, however, withdrew to Brabant, and was for some time at the court of the emperor Charles V. He afterwards went to Ebernburg, where he was protected by Francis de Sickengen, a friend of Luther. He died, in August 1523, in an island in the lake of Zurich. His Latin poems were published at Frankfort in 12mo, in 1538.

HUTTON (Charles), LL. D. and F. R. S., a celebrated mathematician, was born at Newcastle-upon-Tyne, August 14th, 1737. At an early age, and during the laborious accumulation of most of his own elementary knowledge, he undertook the profession of a teacher, at a village called Jesmond, from whence he removed to his native place, where he conducted a respectable seminary from 1760 to 1773. At this period he had lord Eldon, the late chancellor, for a pupil. In 1771, the bridge of Newcastle being nearly destroyed by a flood, Mr. Hutton drew up suggestions for the future security of the fabric. In 1773 he offered himself as a candidate for the professorship of the Royal Military Academy at Woolwich, and, after a rigid examination, was elected. Soon after he was chosen a fellow of the Royal Society, whose transactions he enriched with so many valuable papers, that he was fixed upon, in 1775, to conduct the observations on the Mean Density of the Earth. He was also appointed the foreign secretary to the society, which office he held till the accession of Sir Joseph Banks to the presidency, who rather illiberally displaced him, on the plea that the situation ought to be filled by a resident of the metropolis. Upon this the doctor resigned. In 1785 Dr. Hutton published his Mathematical Tables; and, the year following, Tracts on Mathematical and Philosophical Subjects, 3 vols. 8vo. In 1787 appeared the Compendious Measurer, which was followed by his Elements of Conic Sections. In 1795 came out his Mathematical and Philosophical Dictionary, in 2 vols. 4to. In 1803 he undertook, with Drs. Pearson and Shaw, an abridgment of the Philosophical Transactions. While this great undertaking was in progress, he produced a translation of Montucla's Recreations in Mathematics and Natural Philosophy, and a Course of Mathematics, in two octavo volumes. In 1806 he resigned the mastership of the Academy at Woolwich, on a pension of £500 a-year. He died at his house in Bedford-row, January 27th, 1823. Dr. Hutton was twice married, and left one son, a general in the army, and two daughters.

HUTTON (William), an ingenious miscellaneous writer, was born at Derby in 1723. From the age of seven to fourteen he worked at a silk-mill, and was afterwards apprenticed to a stocking-weaver

at which trade he laboured as a journeyman, until he taught himself bookbinding, by which he added to his humble income. In 1750 he opened a book-shop in Birmingham, to which he added a circulating library, and succeeded so well as to be enabled to embark in the paper business, in which, by industry and frugality, he arrived gradually at opulence. In 1791 his house in Birmingham, and villa near that town, were burnt by the rioters, for which he obtained but an inadequate remuneration. He died September 20th, 1815, at the advanced age of ninety-two. The works of this acute and self-taught man are, The History of Birmingham, 8vo; Journey to London; History of the Court of Requests, and of the Hundred Court of Birmingham, a lively and ingenious work; History of Blackport; History of the Battle of Bosworth Field; History of Derby; Description of the Roman Wall; Remarks upon North Wales; Tour to Scarborough; Poems; Trip to Coatham, &c.

Hutton (James), M.D., was born in Edinburgh in 1726. He was sent first to the high school of Edinburgh, and afterwards to the university, where he entered as a student of humanity, in November 1740. His friends wishing him, however, to follow business rather than science, he was placed as an apprentice to a writer to the signet; but he was afterwards allowed to exchange the profession of a writer for that of a physician. After attending the classes in the university of his native town, from 1744 to 1747, he repaired to Paris, where he pursued, with great ardor, the study of anatomy and chemistry. Having resided in that metropolis nearly two years, he returned by the way of the Low Countries, and took the degree of M.D. in September 1749. His thesis is entitled, De Sanguine et Circulatione in Microcosmo. Dr. Hutton did not, however, enter upon the practice of medicine. He cultivated his farm in Berwickshire till it ceased to have any attractions for him; and, in 1768, he took up his abode in Edinburgh, and from that time devoted his undivided attention to scientific pursuits. A good deal of his leisure, says Mr. Playfair, was now employed in the prosecution of chemical experiments. In one of these he first discovered an alkali in zeolite, or in a stony body. About this time he visited the salt-mines in Cheshire, and made those observations on the concentric circles marked on the roof of these mines, to which he has referred in his Theory of the Earth as affording a proof that the salt rock was not formed from mere aqueous deposition. While at Edinburgh he read several papers to the Philosophical Society of that city, but which, from that society being soon after incorporated with the Royal Society, were never published, with the exception of a treatise On certain Natural Appearances of the Ground on the Hill of Arthur's Seat. The institution of the Royal Society of Edinburgh had the good effect of calling forth from Dr. Hutton the first sketch of a theory of the earth, the formation of which had been the great object of his life. Another paper from his pen, a Theory of Rain, appeared also in the first volume of the Edinburgh Transactions. He had long studied meteorology with great attention; and this communication contains one of the few speculations in that branch of knowledge entitled to the name of theory. A more voluminous work from Dr. Hutton's pen made its appearance soon after, viz. An Investigation of the Principles of Knowledge, and of the Progress of Reason, from Sense to Science and Philosophy, in 3 vols. 4to. His activity was now called into exertion by an attack on his Theory of the Earth, made by Mr. Kirwan in the Memoirs of the Irish Academy. Before this period, though Dr. Hutton had been often urged by his friends to publish his entire work on the Theory of the Earth, he had continually put off the publication; but he now began the revisal of his MS., and resolved immediately to send it to the press. The work was accordingly published, in 2 vols. 8vo., in 1795; and contained, besides the treatise formerly given in the Edinburgh Transactions, a more detailed application of his principles to the explanation of appearances. He next began a work on the Elements of Agriculture, in the progress of which, however, he was seized with a violent fever; and, though he recovered from the immediate danger, it left him to emaciated and feeble, that he died about three months after, March, 1797.

HUXING, among fishermen, a particular method of catching pikes. For this purpose they take as large bladders as can be got; blow them up, and tie them close and strong; and at the mouth of each tie a line, longer or shorter according to the depth of the water. At the end of the line is fastened an armed hook, artfully baited; and thus they are put into the water with the advantage of the wind, that they may gently move up and down the pond. When a large pike has struck himself, it affords great entertainment to see him bounce about in the water with a bladder fastened to him; at last, when they perceive him almost spent, they take him up.

HUYGENS (Christian), one of the greatest mathematicians and astronomers of the seventeenth century, was the son of Constantine Huygens, lord of Zuylichem, who had served three successive princes of Orange in the quality of secretary. He was born at the Hague in 1629, and discovered from his infancy an extraordinary partiality for the mathematics; in which he soon made great progress, and perfected himself under the famous professor Schooten, at Leyden. In 1649 he went to Holstein and Denmark, in the retinue of Henry count of Nassau. He travelled into France and England; was, in 1663, chosen F.R.S; and, upon his return to France, M. Colbert settled a considerable pension upon him to engage him to fix at Paris; to which M. Huygens consented, and staid there from 1666 to 1681, where he was admitted a member of the Academy of Sciences; and daily added to the reputation of that society. He was the discoverer of Saturn's ring, and a third satellite belonging to that planet. He discovered the means of rendering clocks exact, by applying the pendulum, and rendering all its vibrations equal by the cycloid. He died at the Hague in 1695. He was the author of several excellent works. The principal of these are contained in

two collections; the first printed at Leyden in 1682; in 4to, entitled Opera Varia; and the second at Amsterdam in 1728, in 2 vols. 4to., entitled Opera Reliqua.

HUYNEN, or HUYNGEN, a town of Germany, in the late archbishopric of Cologne, now annexed to Prussia. It is twenty-five miles south of Cologne, and is included in the grand duchy of the Lower Rhine.

HUYSUM (Justus Van), an eminent painter, born at Amsterdam in 1659. He studied under Nicholas Berchem, and painted flowers, landscapes, and battles.

HUYSUM (John), a celebrated Dutch painter, whose subjects were flowers, fruit, and landscapes. He was born at Amsterdam in 1682, and was a disciple of Justus Van Huysum his father. He began at first to paint, not so much for the acquisition of money as of fame, and therefore did not aim at expedition, but at delicacy. Having first attentively studied the pictures of Mignon and other artists of distinction in his own style, he painted every thing after nature; and, was so exact, as to watch even the hour of the day in which his model appeared in its greatest perfection. His reputation finally rose to such a height, that he fixed immoderate prices on his works; so that none but princes, or those of princely fortunes, could become purchasers. Six of his paintings were sold at a public sale in Holland for prices almost incredible. One of them, a flower-piece, for 1450 guilders, a fruit piece for 1500, and the smaller pictures for 900. The vast sums which he thus received caused him to redouble his endeavours to excel; no person was admitted into his room while he was painting; and his method of mixing the tints, and preserving the lustre of his colors, was an impenetrable secret. From the same principle, he would never take any scholars, except one lady, named Haverman; and he grew envious and jealous even of her merit. It is universally agreed that he has excelled all who ever painted fruit and flowers before him, both in the delicacy of his pencil and his manner of finishing. The greatest truth, united with the greatest brilliancy, and a velvet softness on the surface of his objects, are visible on every part of his compositions; and his touch looks like the pencil of nature. Those pictures which he painted on a clear ground are preferred as having greater lustre; yet there are some on a dark ground, in which appear rather more force and harmony. In grouping his flowers, he generally designed those which were brightest in the centre, and gradually decreased the force of color from the centre to the extremities. He also painted landscapes with great applause. He died in 1749, aged sixty-seven.

HUZZ, *v. n.* } Etymology from
HUZZA', *interj.* & *v. n.* } the sound. To buzz; to murmur: huzza, a cry of acclamation or joy; to utter acclamation; to receive with shouts of pleasure.

The *huzzas* of the rabble are the same to a bear that they are to a prince. *L'Estrange.*

He was *huzzaed* into the court by several thousands of weavers and clothiers. *Addison.*

A caldron of fat beef, and stoop of ale,
On the *huzzaing* mob shall still prevail.
King's Cookery.

You keep a parcel of roaring bullies about me day and night; *huzzas* and hunting-horns never let me cool. *Arbuthnot.*

All fame is foreign, but of true desert;
Plays round the head, but comes not to the heart:
One self-appoving hour whole years outweighs
Of stupid starers and of loud *huzzas*. *Pope.*

Huzza boys!—By the Royal George, I swear,
Tom Coxen and the crew shall straight be there.
Garrick.

HY'ACINTH, *n. s.* } Fr. *hyacinthe*; Lat.
HYACIN'THINE, *adj.* } *hyacinthus*; Gr. υακινθος. A flower; the same with the lapis lyncurius of the ancients: hyacinthine, having the color of the hyacinth.

The Spartan mirtle, whence sweet gumb does flowe,
The purple *hyacinthe*, and fresh costmarie.
Spenser. Faerie Queene.

And *hyacinthin* locks
Round from his parted forelock manly hung
Clustering. *Milton's Paradise Lost.*

Beds of *hyacinth* and roses,
Where young Adonis oft reposes. *Id. Comus.*

Let these *hyacinth* boughs
Be his long, flowing hair,
And wave o'er his brows
As thou wavest in air.
Byron. The Deformed Transformed.

Her hair in *hyacinthine* flow
When left to roll its folds below;
As midst her handmaids in the hall
She stood superior to them all,
Hath swept the marble where her feet
Gleamed whiter than the mountain sleet.
Id. The Giaour.

HYACINTH, in botany. See CRINUM, HYACINTHUS, and SCILLA.

HYACINTHIA, in antiquity, feasts held at Sparta, in honor of Apollo, and in commemoration of his favorite Hyacinthus. They lasted three days; the first and third of which were employed in bewailing the death of Hyacinthus, and the second in feasting and rejoicing.

HYACINTHUS, hyacinth, in botany, a genus of the monogynia order, and hexandria class of plants; natural order tenth, coronariæ: cor. campanulated, and there are three melliferous pores at the top of the germen. There are thirteen species; of which the most remarkable is H. orientalis, the eastern hyacinth. Of this there are a great number of varieties, amounting to some hundreds. It has a large, purplish, bulbous root, sending up several narrow erect leaves, eight or ten inches long; the flower-stalk is upright, robust, and succulent, from ten to fifteen inches in height; adorned upward with many large funnel or bell-shaped flowers, swelling at the base, and cut half way into six parts; collected into a large pyramidal spike of different colors in the varieties; flowering in April or May. They are hardy, and will prosper any where, though the finer kinds require a little shelter during the winter, and may be propagated either by seeds or off-sets from the roots. The properties of a good oriental hyacinth are, a stem, perfectly upright, of moderate length, and so strong and well-proportioned that it will sus-

tain the weight of the florets without bending; the florets should be large, swelling below, expanded above, and numerous, ten or fifteen at least, but are often twenty or thirty in number; and should be placed equally round the stem, the pedicles, on which they grow longer below than above, diminishing gradually in length upward, in such a manner as to represent a pyramid, and each pedicle sufficiently strong to support the florets without drooping. The curious in these plants take care never to plant the fine sorts two years together in the same bed of earth; for, by planting them every year in a fresh bed, the beauty of the flowers is greatly improved.

HYACINTHUS, the son of Amyclas king of Sparta, was beloved both by Apollo and Zephyrus. The youth showing most affection for the former, his rival grew jealous; and, to be revenged, one day, as Apollo was playing at the discus with Hyacinthus, Zephyrus turned the direction of a quoit, which Apollo had pitched, full upon the head of Hyacinthus, who fell down dead. Apollo then transformed him into a flower of the same name; and, as a farther token of respect, instituted the feasts of Hyacinthia.

HY'ADES, *n. s.* } Gr. *ὑάδες*. A watery con-
HY'ADS, *n. s.* } stellation.

Then sailors quartered heaven, and found a name
For every fixed and every wandering star;
The pleiads, *hyads*. *Dryden's Georgicks.*

HYADES, in astronomy, are seven stars in the bull's head, famous among the poets for the bringing of rain. Whence their name *Υαδης*, from the Greek *υειν*, 'to rain.' The principal of them is in the left eye, by the Arabs called Aldebaran.

HYADES, in the mythology, the daughters of Atlas and Pleione. Their brother Hyas being torn to pieces by a lioness, they wept for his death with such vehemence, that the gods, in compassion, translated them into heaven, and placed them in the bull's forehead, where they continue to weep; this constellation being supposed to presage rain. Others represent the Hyades as the nurses of Bacchus; and the same with the Dodonides, who fearing the resentment of Juno, and flying from the cruelty of king Lycurgus, were translated by Jupiter into heaven.

HYÆNA, in natural history, a species of the canis, with the tail straight and annulated; the hairs of the neck long and erect: ears naked: toes, four on each foot. It has six incisores, and two canine teeth in each jaw: and between the tail and the anus a transverse orifice. This quadruped is almost as large as a wolf, excepting that its legs are not so long; the hair of it is rough, and its skin spotted with divers colors. Hyænas were formerly produced at Rome in the public games, and they have been represented on some medals on account of their rarity. It inhabits Asiatic Turkey, Syria, Persia, Barbary, and the Cape of Good Hope. It has no neck, but its head is fastened to the vertebræ of the back, so that it is forced to turn itself quite round, whenever it would look behind. It is very cruel and voracious; it drags dead bodies out of their graves, and carries them to its den. It also preys on herds and flocks, and has been known to run off with live children. It is a solitary unsociable animal, living in caves. Several fossil remains of these animals have been lately found in Kirkdale, Yorkshire. See our article ENGLAND.

HYÆNIUS LAPIS, in natural history, a stone said to be found in the eyes of the hyæna. Pliny informs us, that those creatures were in old times hunted and destroyed for the sake of these stones, and that it was supposed they gave a man the gift of prophecy by being put under his tongue.

HY'ALINE, *adj.* Gr. *ὑάλινος*. Glassy; crystalline; made glass; resembling glass.

From heaven-gate not far, founded in view
On the clear *hyaline*, the glassy sea. *Milton.*

HYBLA, in ancient geography, a town on the east coast of Sicily, called also Hybla Parva, Galeotis, and Megara; which last name it took from the Megareans, who led thither a colony. In Strabo's time Megara was extinct, but the name Hybla remained on account of its excellent honey named from it. It was situated between Syracuse and the Leontines. Galeotæ and Megarenses were the names of the people, who were of a prophetic spirit, being the descendants of Galeus, the son of Apollo.

HYBLA MAJOR, in ancient geography, a town of Italy, in the tract lying between Mount Ætna and the river Simæthus. In Pausanias's time it was desolate.

HYBLA MINOR, or HERÆ, an inland town of Sicily, situated between the rivers Oanus and Herminius; now called Ragusa.

HYBLÆI COLLES, small eminences at the springs of the Albus, near Hybla, famous for their variety of flowers, especially thyme; the honey gathered from which was by the ancients reckoned the best in the world, excepting that of Hymettus in Attica.

HYB'RIDOUS, *adj.* Gr. *ὕβρις*; Lat. *hybrida*. Begotten between animals of different species.

Why such different species should not only mingle together, but also generate an animal, and yet that that *hybridous* production should not again generate, is to me a mystery. *Ray.*

HYBRISTICA, of Gr. *υβρις*, injury, in antiquity, a solemn feast held among the Greeks, with sacrifices and other ceremonies; at which the men attended in the apparel of women, and the women in that of men, to do honor to Venus in quality either of a god or goddess, or both. According to others, the hybristica was a feast celebrated at Argos, wherein the women, being dressed like men, insulted their husbands, and treated them with all marks of superiority, in memory of the Argian dames having anciently defended their country with singular courage against Cleomenes and Demaratus.

HYDARTHRUS, from Gr. *υδωρ*, water, and *αρθρον*, a joint, in medicine, is more usually known by the name of white swelling, and is in this country but too common. Systematic writers have generally distinguished this disease into two kinds, viz. scrofulous and rheumatic. The scrofulous is, however, much more important and dangerous than the other kind, and is perhaps the most serious disorder of the bones to

which man is subject. It commonly commences with a violent pain in one part of the joint, generally the knee, and there appears from the beginning a uniform swelling of the whole surrounding integuments. Great tension generally prevails; but at first there is seldom any external change of color. From the commencement of the disease the motion of the joint is attended with exquisite pain, and the patient keeps it constantly in a relaxed posture, finding that the easiest. Hence, the tendons become extremely stiff and rigid, till at last the joints have the appearance of complete and real anchyloses. The swelling now begins to augment, till the joint has acquired three or four times its natural size; the cuticular veins become turgid and varicose; at the same time that the muscular substance of the limb below decays, though it frequently acquires an equality in size by becoming œdematous; the pain becomes intolerable, especially when the person is warm in bed, or otherwise heated; abscesses form in different parts, which, either breaking of themselves, or, by being laid open, discharge considerable quantities of matter, but without any remarkable effect in reducing the size of the swellings. The bones are found to be carious, and pieces of them are frequently discharged. In the mean time, the health of the patient gradually declines, from the violence of the pain, and the absorption of matter into the system, which takes place in some degree from its first formation in the different abscesses; but which never appears so evidently till the different abscesses have been laid open; after which, a quick pulse, night sweats, and a weakening diarrhœa, are sure to occur, which generally carry off the patient, if the member is not either amputated, or the disease cured some other way. See MEDICINE.

HYDATIDES, *n. s.* From *ὑδωρ*. Little transparent bladders of water in any part; most common in dropsical persons, from a distension or rupture of the lympheducts.

All the water is contained in little bladders, adhering to the liver and peritoneum, known by the name of *hydatides*. *Wiseman.*

HYDE (Edward), earl of Clarendon, and lord high chancellor of England, was descended from an ancient family in Cheshire, and born at Dinton near Hindon, in Wiltshire, in 1608. He was entered of Magdalen Hall, Oxford, where in 1625 he took the degree of A. B., and afterwards studied the law in the Middle Temple. In the parliament which began at Westminster, April 10th, 1640, he served for Wotton Basset in Wiltshire. But, that parliament being soon after dissolved, he was chosen for Saltash in Cornwall, in the long parliament. His abilities were taken notice of, and he was employed in several committees to examine into grievances; but at last, being dissatisfied with the proceedings of the parliament, he retired to the king, and was made chancellor of the exchequer, a privy counsellor, and knight. Upon the decline of the king's cause he went to France, where, after the death of king Charles I., he was sworn of the privy council to Charles II. In 1649 he and lord Cottington were sent ambassadors extraordinary into Spain, and in 1657 he was constituted lord high chancellor of England. In 1659 the duke of York became enamoured of Anne Hyde, the chancellor's eldest daughter, but carefully concealed the amour both from the king and chancellor. After the Restoration, however, he fulfilled his promise of marriage, and her father was chosen chancellor of the university of Oxford; soon after created baron Hindon, viscount Cornbury, and earl of Clarendon; and, on the death of Henry lord Falkland, was made lord lieutenant of Oxfordshire. In these important stations his principal aim was neither to abridge the king's prerogative, nor encroach upon the liberties of the people; he therefore refused to set aside the petition of right, nor would he endeavour again to raise the star-chamber or high-commission courts: and when he might have obtained for the king £2,000,000, for a standing revenue, he asked only £1,200,000, which he thought would still keep the king dependent upon his parliament. In this just conduct he is said to have been influenced by his father's dying advice. In 1662 he opposed a proposal for the king's marriage with the infanta of Portugal, and the sale of Dunkirk; and in the following year articles of impeachment for high treason were exhibited against him by the earl of Bristol; but they were rejected by the house of lords. In 1664 he opposed the war with Holland. In August, 1667, he was removed from his post of lord chancellor, and in November following impeached of high treason, and other crimes and misdemeanors, by the house of commons; upon which he retired into France, when a bill was passed for banishing him from the king's dominions. He now resided at Rouen in Normandy; and dying there, in 1674, his body was brought to England, and interred in Westminster Abbey. He wrote, 1. A History of the Rebellion, 3 vols. folio. 2. A Letter to the Duke of York, and another to the Duchess, upon their embracing the Romish religion. 3. An Answer to Hobbes's Leviathan. 4. A History of the Rebellion and Civil Wars in Ireland, 8vo., and some other works. His character is thus panegyrised by Horace Walpole:—'Sir Edward Hyde, who opposed an arbitrary court and embraced the party of an afflicted one, must be allowed to have acted conscientiously. A better proof was his behaviour on the Restoration, when the torrent of an infatuated nation entreated the king and his minister to be absolute. Had Clarendon sought nothing but power, his power had never ceased. A corrupted court, and a blinded populace, were less the causes of the chancellor's fall, than an ungrateful king, who could not pardon his lordship's having refused to accept for him the slavery of his country. Like justice herself, he held the balance between the necessary power of the supreme magistrate and the interests of the people. This never-dying obligation his contemporaries were taught to overlook and clamor against, till they removed the only man, who, if he could, would have corrected his master's evil government. Almost every virtue of a minister made his character venerable. As an historian, he seems more exceptionable. His majesty and eloquence, his power of painting characters, his knowledge of his subject, rank

him in the first class of writers; yet he has both great and little faults. Of the latter, his stories of ghosts and omens are not to be defended. His capital fault is his whole work being a labored justification of king Charles. If he relates faults, some palliating epithet always slides in; and he has the art of breaking his darkest shades with gleams of light, that take off all impression of horror. One may pronounce on my lord Clarendon, in his double capacity of statesman and historian, that he acted for liberty, but wrote for prerogative.'

Hyde (Thomas), D. D., professor of Arabic at Oxford, and one of the most learned writers of the seventeenth century, was born in 1636, and studied first at Cambridge, and afterwards at Oxford. Before he was eighteen years of age he was sent from Cambridge to London to assist Walton in the great work of the Polyglot Bible; and about that period undertook to transcribe the Persian Pentateuch out of the Hebrew characters, which archbishop Usher, who well knew the difficulty of the undertaking, pronounced to be an impossible task to a native Persian. He, however, succeeded in his task, and was made archdeacon of Gloucester, canon of Christ Church, head keeper of the Bodleian library, and professor of Hebrew and Arabic, in the university of Oxford. He was interpreter and secretary of the Oriental languages, during the reigns of Charles II., James II., and William III. Of all his learned works (the very catalogue of which, as observed by Anthony Wood, is a curiosity), his Religio Veterum Persarum is the most celebrated. Dr. Gregory Sharpe collected several of his pieces formerly printed, and republished them, with some additional dissertations, and his life prefixed, in 2 elegant vols. 4to. He died on the 18th of February, 1702. Among his other works is, A Latin Translation of Ulug Beig's Observations on the Longitude and Latitude of the fixed Stars.

HYDER Aly, or Ali, a celebrated Indian usurper, and for some time a formidable opponent of the British interest in the East Indies. He was the son of a killader, or governor of a fort, to the king of Mysore, and acquired his skill in military tactics in the French army. In 1753 he distinguished himself as their auxiliary at Trichinopoly. In 1763, being commander of the Mysore army, he dethroned his sovereign, and governed the kingdom under the title of regent. In the wars with the British, between 1767 and 1770, he displayed great spirit and abilities; but in 1771 he was totally defeated by the Mahrattas. During the peace that followed he greatly improved his army and revenues. In 1780 he made an irruption into the Carnatic, and cut to pieces a British detachment under colonel Baillie; but his victorious career was soon stopped by Sir Eyre Coote, who, with a force scarcely exceeding 7000 men, gained a complete victory over Hyder Ali at the head of 150,000, and defeated him six times successively afterwards, the last of which victories was obtained on the 7th of June 1782. Hyder died in December 1782.

HYDERABAD, Telingana, or Golconda, an extensive province of Hindostan, situated chiefly between the sixteenth and nineteenth degrees of northern latitude, and between the rivers Godavery and Kistna; but the name is now also applied to all the territories of the Nizam. It may be stated therefore to be bounded on the north-east by the territories of the Berar rajah, and on the north-west by those of the Poonah Mahrattas, on the west by the same power, and on the south and east by the British possessions; being about 350 miles in extreme length, and about 300 in breadth. It thus comprises the ancient provinces of Beder and Nandere, part of Dowlet or Aurungabad, part of Bejapore, and part of Berar; and is principally governed by zemindars, or granted in jagiers (fiefs) to the officers of government. The former are nearly independent. The whole of the land, except some portions set aside for charitable purposes and the estates of the nizam and his family, is thus in the hands of a few individuals; but it is fertile, and, if well managed, it would yield much more abundantly. Its commerce is very confined, the diamond mines hardly paying the expense of working; and the only other article being cotton, which is bartered for salt and European commodities. The chief towns are Hyderabad, Golconda, Warangole, Aurungabad, Beder, and Ellichpore. A considerable portion of the inhabitants are Mahommedans: the majority, however, are Hindoos; but the population is thin.

Hyderabad was once subject to the rajahs of Telingana and Bijanagur, but was conquered by the Mahommedans in the fifteenth century, and in the year 1512 was formed into a separate kingdom under the name of Golconda. Abdoolah Kuttub Shah, of the original dynasty, died in 1674, and was succeeded by his son in law Aboul Hussen, who, in the year 1687, was taken prisoner by Aurungzebe, and Golconda converted into one of the provinces of the Mogul empire, and, with the other five southern provinces, was formed into a viceroyalty, called the Soubadar of the Deccan. In 1719 a Mogul officer, named Cheen Khilij Khan, appointed to this government, had a very large army placed under his command to keep freebooters in awe; and this inspired him with the ambition of founding an independent kingdom. He for several years employed himself in getting possession of the strong holds; and, when summoned to Delhi, proceeded thither with so large a force as to overawe his master.

He is also accused of having encouraged the Persian Nadir Shah to invade Hindostan in 1739; and having, after that event, been appointed vizier or prime minister, he left to Mohammed the emperor nothing but the name. For two years he governed at Delhi with absolute sway, during which period he appointed his son Ghazy ad Deen, his deputy; but, the Mahrattas having invaded the Deccan, he marched in 1741 to meet them with a numerous army. On his arrival at Arcot he found that country in total confusion; and not fewer than twenty petty chiefs assuming the title of rajah: the measures that he pursued, however, tranquillised the country; and he disposed of its different offices to his friends, without consulting the court of Delhi. He now made Aurungabad his capital, but died at Boor

hanpore in the year 1748, aged 104 years. His eldest son, Ghazy ad Deen, was, at this period, one of the ministers at Delhi; and the second son, Nasir Jung, having obtained possession of the treasure and the army, was too powerful to be dispossessed: he was therefore confirmed by the emperor Ahmed as soubadar of the Deccan. Assassinated in 1750, this prince was succeeded by his nephew Muzuffer Jung, who was put to death the following year, and succeeded by his cousin Salabut Jung, who held the government for ten years. He was then confined by his brother Nizam Aly, who for nearly twenty years was engaged in wars with Hyder Aly, the British, and the Mahrattas; and had it not been for his alliance with the British, in 1800, his kingdom would have been annihilated. Nizam Aly transferred the seat of government from Aurungabad to Hyderabad, and died in 1803, being succeeded by his son Mirza Sekunder Jah; and the family is supported in its authority by a British force of 10,000 men, and by treaties of alliance offensive and defensive. There is also a British ambassador constantly residing at this court.

HYDERABAD, the capital of the above kingdom, is situated on the south bank of the Musa, about six miles from the fortress of Golconda. It is said to have been founded about the year 1586, by Mohammed Kootub Shah, who named it Hyderabad, in compliment to the caliph Aly, one of whose titles was Hyder Allah (the Lion of God). It continued to be the residence of the Kootub Shahy dynasty till 1687, when it was taken by Aurungzebe. The late Nizam Aly was the first of the nizams that made it his residence, and expended considerable sums of money in improving Hyderabad. It is now a fine and flourishing city, of about seven miles in circumference, surrounded by a stone wall, with towers at the angles and gates. It contains two palaces and some handsome mosques; and between it and Golconda are various splendid tombs.

HYDERABAD is also the name of a city, the capital of the province of Sinde, Hindostan. A fortress of this name stands on a rock the foot of which is washed by the Fulalee, a branch of the river Indus. Its shape is an irregular pentagon, defended at the angles by round towers. The fortifications are of such a nature as to be very formidable to the native troops. Inside the fort is a good bazaar and several handsome mosques. It is the residence of the princes, who form the aristocracy by which this province is governed, and contains about 15,000 inhabitants. A considerable trade is carried on, by means of the river, with Moultan Tattah, and other towns at the mouths of the Indus.

HYDNUM, in botany, a genus of the natural order of fungi, cryptogamia class of plants. The fungus is echinated or prickly on the under side. One of the species, viz.

H. imbricatum, is a native of Britain, and is found in woods. It has a convex hat, tiled, standing on a smooth pillar, of a pale flesh color, with white prickles. It is eaten in Italy, and is said to be of a very delicate taste.

HY'DRA, *n. s.* Lat. *hydra*. A monster with many heads slain by Hercules: whence any multiplicity of evils is termed a hydra.

Or like the hell-borne *hydra*, which they faine
That great Alcides whilome overthrew,
After that he had laboured long in vaine
To crop his thousand heads, the which still new
Forth budded, and in greater number grew.
Spenser. Faerie Queene.

New rebellions raise
Their *hydra* heads, and the false North displays
Her broken league to imp her serpent wings.
Milton.

More formidable *hydra* stands within,
Whose jaws with iron teeth severely grin. *Dryden.*

Subdue
The *hydra* of the many-headed hissing crew. *Id.*

HYDRA, in fabulous history, was a serpent in the marsh of Lerna, in Peloponnesus, with many heads, one of which being cut off, another, or two others, immediately succeeded in its place, unless the wound was instantly cauterised. Hercules attacked this monster; and, having caused Iolaus to hew down wood for flaming brands, as he cut off the heads he applied the brands to the wounds, by which means he destroyed the hydra. This hydra is supposed to have been a multitude of serpents which infested the marshes of Lerna, near Mycene, and seemed to multiply as they were destroyed. Hercules, with the assistance of his companions, cleared the country of them, by burning the reeds in which they lodged.

HYDRA, in astronomy, a southern constellation, consisting of a number of stars, imagined to represent a water serpent. See ASTRONOMY.

HYDRA, in zoology, a genus of the order of zoophyta, belonging to the class of vermes. There are several species, known by the general name of polypes. See ANIMALCULE, and POLYPUS.

HYDRA, an island between the Archipelago, and the eastern side of the peninsula of the Morea, south of the gulf of Athens and east of that of Napoli, long. 20° 50′ E. lat. 37° 20′ N. It is about twenty-four miles long from north-east to south-west, and ten miles in breadth across the middle, where it is broadest, the extremities tapering almost to a point. If in other parts of Greece, as M. Castellan remarks, we see a people either miserable or diseased, in a rich country and under a balsamic climate, the rocks of Hydra present us with the agreeable spectacle of a vigorous population, which has found the means of creating for itself riches out of a territory naturally confined and barren, and has displayed a spirit of enterprise and speculation almost unique even in Greece. The Schypetars of Albania are found in Hydra as in some other districts of Greece; these colonists, to whom, after the expedition of the Russians into Greece, many refugees from the Peloponnesus united themselves, have improved the ancient race of inhabitants. This appears in the activity which they now discover, and sometimes also by the examples of harshness and cruelty which they afford, and the piracies which they commit.

Happily the greater part of the population of the island prefer enriching themselves by peaceable and honest means, and owe their prosperity solely to their industry. According to M. Pouqueville they have 120 vessels, forty of which are from 400 to 600 tons burden, which used to visit all the ports of the Mediterranean and of the

Atlantic as far as America. The productions and merchandise of France, of Italy, of the Barbary states, and of Egypt, furnish the Hydriots with objects of traffic to the ports of the Levant. The Peloponnesus, especially the canton of Olympia, supplies them with wood for the building of their ships, and many of the continental Greeks afford them funds, which these islanders use to the greatest advantage, though they are destitute of the sciences, and all their knowledge is practical. Even in navigation itself, they are mariners by necessity and by education. From their very childhood they undertake sea voyages, employ themselves in the management of ships, learn to know the latitudes they must constantly travel over, and share in the profits of the expedition. They are hard drinkers, it is true; and it is said, that they sometimes empty in one month the vessels destined for the supply of the whole voyage. Yet mariners, though often intoxicated are full of intelligence, and of wonderful probity: they carry no bills of lading; the money, which they are intrusted to convey, they put into ticketed bags, and forward with the utmost fidelity. Their vessels are well armed, and since the year 1821 they have boldly attacked and put to flight the Turkish squadrons. This island formerly used to furnish an important supply of sailors, and even officers for the Turkish navy.

The island of Hydra owes its embellishments to the people that inhabit it; nature is very sparing: it is from Attica that they fetch even those vegetables with which they used formerly to supply that country; so great is the change that has taken place in this province. The town of Hydra, where the senate is held, contains about 3000 houses, and 16,000 inhabitants, some of whom are rich. They are very fond of dress. The merchants speak three or four different languages. There is a small port for ships, and the quay is lined with houses neatly whitened, the fronts of which are furnished with covered galleries. A great number of warehouses, filled with grain and other provisions, bespeak the trade to which the inhabitants are devoted. The women, who are brown, but well made and of an agreeable figure, appear in the streets, having their veils thrown over only the lower parts of the body, while the children, entirely naked, run about on the shore, or swim near the coast. A female, convicted of an intrigue, would be imprisoned for life, and the seducer punished with the bastinado and banished, if private vengeance did not direct against him the poniards and pistols of the injured relatives.

There is a handsome church in the town, which attracts the attention of foreigners: its front is ornamented with pillars of white marble, and surmounted by a steeple of the same material; it has also a cloister surrounding it, formed with arches. The images painted in water colors, the sculptures in wood, and the gilded adornings of the choir, the pilasters of marble which separate the latter from the nave, every thing announces, that the inhabitants spared nothing to embellish the place of their worship, which they practise with all the fervor common to the Greeks. Their Papas know how to make themselves useful and even necessary to their countrymen; they bless their ships with great pomp. Without this ceremony, they think, the captain and his crew would have no prosperity; and they never fail to burn little wax-lights before the image of the Madonna or Panagia, which is placed at the stern.

This island has not even a single spring. From their commerce, however, they derive good bread, and wine of no inferior quality. On their return from their voyages, the Hydriots love to indulge in good cheer. What Tyre was on a large scale Hydra is in miniature. If the island were larger, this rock would have great influence over the affairs of Greece.

HYDRABAD, the capital of Golconda and of the Deccan, a large city, seated in a plain, on the banks of a river that runs into the Kistna. It is surrounded with walls, and defended with towers; and contains above 100,000 inhabitants. It is 690 miles south of Delhi, and 270 E. N.W. of Madras, according to Mr. Crutwell; but Dr Brookes and J. Walker make it 352 miles north by east of that city. Long. 78° 52′ E., lat. 17° 17′ N.

HYDRABAD, a fort of Hindostan Proper, in the province of Sindy, the residence of a Mahommedan prince, who is tributary to the king of Candahar. It is situate on the Indus, near Nusserpour. Long. 69° 30′ E., lat. 25° 29. N.

HY'DRAGOGUES, *n. s.* Gr. *ὑδωρ* and *ἀγω*; Fr. *hydragogue*. Such medicines as occasion the discharge of watery humors, which is generally the case of the stronger cachartics, because they shake most forcibly the bowels and their appendages.

HYDRAGOGUES, from *υδωρ*, water, and *αγειν*, to draw, are used in dropsies; but the original use of the term proceeded upon a mistaken supposition, that every purgative had some particular humor which it would evacuate, and which could not be evacuated by any other. It is now, however discovered, that all strong purgatives will prove hydragogues, if given in large quantity or in weak constitutions. The principal medicines recommended as hydragogues are—the juice of elder, the roots of iris, soldanella, mechoacan, jalap, &c.

HYDRANGEA, in botany, a genus of the digynia order, and decandria class of plants; natural order thirteenth, succulentæ: CAPS. bilocular, birostrated, and cut round or parting horizontally. There are four species; the chief, H. arborescens, is a native of North America, whence it has been brought to Europe, and is preserved in gardens, more for the sake of variety than beauty. It rises about three feet high; and has many soft pithy stalks, garnished with two oblong heart-shaped leaves, placed opposite. The flowers are produced at the top of the stalks in a corymbus. They are white, composed of five petals with ten stamina surrounding the style. These plants are easily propagated by parting the roots, in the end of October. They thrive best in a moist soil, but must be sheltered from frost.

HYDRARGYRUM, mercury, or quicksilver; so called from *ὑδωρ*, water, and *αργυρος*, silver; q. d. water of silver, on account of its resembling liquid or melted silver. See PHARMACY.

HYDRASTIS, in botany, a genus of the polygamia order, and polyandria class of plants. There is neither calyx nor nectarium; there are three petals; and the berry is composed of a monospermous acini.

HYDRAU'LICS, *n. s.* } Gr. ὕδωρ, water,
HYDRAU'LICAL, *adj.* } αὐλος, a pipe. The
HYDRAU'LIC, *adj.* } science of conveying water through pipes or conduits: hydraulical, hydraulic, from the substantive, relating to the conveyance of water through pipes.

Among the engines in which the air is useful, pumps may be accounted, and other *hydraulical* engines. *Derham.*

We have employed a virtuoso to make an *hydraulick* engine, in which a chymical liquor, resembling blood, is driven through elastick channels. *Arbuthnot and Pope.*

HYDRAULICS comprehend the science of the motion of fluids and the construction of all kinds of instruments and machines relating thereto. See HYDROSTATICS.

HYDRIODIC ACID, in chemistry, is, like the muriatic acid, a gaseous substance when in an insulated state. If four parts of iodine be mixed with one of phosphorus, in a small glass retort, applying a gentle heat, and adding a few drops of water from time to time, a gas comes over, which must be received in the mercurial bath. Its specific gravity is 4·4. It is elastic and invisible, but has a smell somewhat similar to that of muriatic acid. Mercury after some time decomposes it, seizing its iodine, and leaving its hydrogen, equal to one-half the original bulk, at liberty. Chlorine, on the other hand, unites to its hydrogen, and precipitates the iodine. From these experiments, it evidently consists of vapor of iodine and hydrogen, which combine in equal volumes, without change of their primitive bulk. Hydriodic acid is partly decomposed at a red heat, and the decomposition is complete if it be mixed with oxygen. Water is then formed and iodine separated.

We can easily obtain an aqueous hydriodic acid very economically, by passing sulphureted hydrogen gas through a mixture of water and iodine in a Woolfe's bottle. On heating the liquid obtained, the excess of sulphur flies off, and leaves watery hydriodic acid. When exposed to the air, it is speedily decomposed, and iodine is evolved. Concentrated sulphuric and nitric acids also decompose it. When poured into a saline solution of lead, it throws down a fine orange precipitate. With solution of peroxide of mercury, it gives a red precipitate; and, with that of silver, a white precipitate insoluble in ammonia.

The compounds of hydriodic acid with the salifiable bases may be easily formed, either by direct combination, or by acting on the basis in water with iodine. Upon a determinate quantity of iodine, pour solution of potassa or soda, till the liquid ceases to be colored. Evaporate to dryness, and digest the dry salt in alcohol, which will retain the hydriodate. Then distil off the alcohol, and complete the neutralisation of the potassa, by means of a little hydriodic acid separately obtained. Sulphurous and muriatic acids, as well as sulphureted hydrogen, produce no change on the hydriodates, at the usual temperature of the air. Chlorine, nitric acid, and concentrated sulphuric, instantly decompose them, and separate the iodine. With solution of silver, they give a white precipitate insoluble in ammonia; with the pernitrate of mercury, a greenish-yellow precipitate; with corrosive sublimate, a precipitate of a fine orange-red, very soluble in an excess of hydriodate; and, with nitrate of lead, a precipitate of an orange-yellow color. They dissolve iodine, and acquire a deep reddish-brown color.

Hydriodate of ammonia results from the combination of equal volumes of ammoniacal and hydriodic gases; though it is usually prepared by saturating the liquid acid with ammonia. It is nearly as volatile as sal ammoniac; but it is more soluble and more deliquescent. It crystallises in cubes.

Hydriodate of zinc is easily obtained, by putting iodine into water with an excess of zinc, and favoring their action by heat. When dried it becomes an iodide.

HYDROCELE, in medicine, from ὑδωρ, water, and κηλη, a tumor, would literally signify any swelling or tumor produced by water; but it is confined by surgeons of the present time to those which possess either the membranes of the scrotum, or the coats of the testicle and its vessels. Of this disease there are only three different kinds, one the anasarcous hydrocele, in which the fluid is lodged in the cellular texture of the scrotum; a second in which it is contained in the tunica vaginalis; and a third in which it it is collected in the spermatic cord.

The *anasarcous hydrocele* is generally a symptom of dropsy throughout the whole body; but some instances have occurred of a local cause producing a mere local dropsy of the scrotum. Thus, it has been known to happen from swellings in the groin and in the abdomen obstructing the passage of the lymphatics. When this is the case, if tumors producing such obstructions can be extirpated, no other means will afford such effectual relief: but, when they are so deeply seated as to render any attempt for removing them improper, the practice of making punctures in the most depending part of the tumor to drain off the fluid must be employed, with a view to palliate such symptoms as occur.

The *hydrocele of the tunica vaginalis*, is a preternatural collection of the aqueous fluid, employed by nature for lubricating the surface of the testicle. The symptoms are, a fulness at first observed about the inferior parts of the testicle, and most remarkable when the patient is erect, becoming gradually more tense as the disease advances; the tumor by degrees changing from the globular to the pyramidical form; no degree of pressure making the swelling disappear at any period of the disease. In the early part of the disease, therefore, if it be not combined with hernia, or with a hydrocele of the cord, the spermatic process may be distinctly felt, because the swelling does not extend beyond the scrotum. In its more advanced state, it cannot be distinguished; the weight of the tumor now drags the skin of the neighbouring parts so much as to cause the penis almost to disappear;

and in this state of the disease the testicle cannot be felt without much difficulty. On a minute examination, a hardness is always to be felt along that part of the scrotum where the testicle is situated; and at this point pressure excites some uneasiness. Fluctuation of fluid may in general be distinguished through the whole course of the disease. In late stages, however, the appearance of a fluid is not very evident.

The transparency of the tumor has been generally supposed to be the principal criterion of this species of the disorder: but this must depend upon the nature of the contents, or thickness of the sac; so that, though the transparency of the tumor is a certain sign of the existence of water, its opacity cannot upon any account be considered as an indication of its absence. Through the whole course of the disease, the tumor is not attended with pain, but some uneasiness is commonly felt in the back by the weight of the swelling of the spermatic cord. This is more particularly the case when a suspensory bandage is not used. In the radical cure of hydrocele, in whatever way it is attempted, some degree of inflammation will take place.

The cure of the hydrocele of the tunica was formerly effected by one of three methods; either by caustic, by the seton, or by incision. Although in most cases any one of these methods will induce a cure, yet that of simple incision is less liable to produce violent inflammation, the danger of which from the proximity of the intestines is too evident to require discussion.

But the surgeons of the present day do not generally make use of any of these systems. The cure is now generally attempted by the injection of some irritating fluid which will cause inflammation throughout the whole extent of the tunica. The preference is usually given to wine, and commonly that is somewhat diluted; but, where no pain is excited by the injection, the liquor should be discharged, and a stronger one used. For where no pain takes place a cure is not to be expected.

The *hydrocele of the spermatic cord* is either anasarcous or encysted. The anasarcous kind is attended with a colorless tumor in the course of the spermatic cord, soft and inelastic to the touch, and unaccompanied with fluctuation. In an erect position of the body it is of an oblong figure; but, when the body is recumbent, it is flatter. Generally it is no longer than that part of the cord which lies in the groin, though it sometimes extends as far as the testicle, and even stretches the scrotum to an uncommon size; an instance of which is related by Mr. Pott, who from a swelling of this kind discharged eleven pints at once. By pressure a great part of the swelling can always be made to recede into the abdomen; but it instantly returns to its former situation on the pressure being withdrawn.

When the tumor is connected with general anasarca of the system, it can only be cured with the rest of the disease; but, when the swelling is local, the remedy is also to be locally applied. An incision is to be made of such a size as may be sufficient for discharging the whole of the water; in the performance of which, attention is necessary to guard against hurting the spermatic vessels. The contents of the tumor being discharged, the sore is to be treated like any other simple wound.

Encysted hydrocele of the spermatic cord sometimes begins in the upper, but generally in the lower part of the spermatic cord. On its first appearance it is so small as to give little or no trouble; hence it is seldom particularly attended to till it has acquired a considerable size. By degrees it extends as far as the abdominal muscles, and sometimes reaches to the bottom of the scrotum; and, to a person unacquainted with the appearance of the disorder, may be mistaken for a hydrocele of the tunica vaginalis. But here the tumor is always above the testicle, which is distinctly felt below; whereas, in the advanced stages of hydrocele in the vaginal coat the testicle cannot be distinctly felt. In the encysted hydrocele of the cord, the figure and size of the penis is little altered; whereas, in cases of common hydrocele, the penis frequently disappears almost entirely. In adults, the cyst, in every variety of incysted hydrocele, becomes so firm as not to be affected by external applications; so that, when the tumor becomes large, it is necessary to use means for producing either a palliative or radical cnre, in the same manner as is done for a hydrocele in the tunica vaginalis. See SURGERY and MEDICINE.

HYDROCEPHALUS, in medicine, (from υδωρ water, and κεφαλη the head), is as the name imports a dropsy of the head, and is commonly called water on the brain. It is a disease almost peculiar to children, being seldom observed in persons above the age of twelve or fourteen, and it seems to be most prevalent in scrofulous families. With respect to the proximate cause of hydrocephalus very opposite opinions are entertained by different medical writers. It appears generally to begin with slight inflammation, but whether as a cause or only as a symptom is a matter of dispute. The disease appears to be constitutional. Patients usually complain first of a pain in some part below the head, commonly about the nape of the neck and shoulders; often in the legs; and sometimes, but rarely, in the arms. The pain is not uniformly acute, nor always fixed to one place; and sometimes does not affect the limbs. Some have violent sickness and head-aches alternately. From being perfectly well and sportive, some are in a few hours seized with those pains in the limbs, or with sickness, or head-ach, in a slight degree; whilst others are observed to droop a few days before they complain of any local indisposition. In this manner they continue three, four, or five days. They then complain of an acute deep-seated pain in the head, extending across the forehead from temple to temple; of which, and a sickness, they alternately complain in short and affecting exclamations; dosing a little in the intervals, breathing irregularly, and sighing much while awake. Sometimes their sighs, for a few minutes, are incessant. As the disease advances, the pulse becomes slower and irregular, till within a day or two of the fatal termination, when it becomes exceedingly quick; the breathing being deep, irregular, and laborious. After the first access, which is often attended with

feverish heats, the heat of the body is for the most part temperate, till at last it keeps pace with the increasing quickness of the pulse. The head and præcordia are always hot from the first attack. The sleeps are short and disturbed, sometimes interrupted by watchfulness and startings. In the first stage there is a peculiar sensibility of the eyes, and intolerance of light. But in the progress of the disease a very opposite state occurs. The pupil is remarkably dilated, and cannot be made to contract by the action even of strong light. Various methods of cure have been attempted, but the disease almost always terminates fatally. See MEDICINE.

HYDROCYANIC ACID. See PRUSSIC ACID.

HYDROCHARIS, the little water lily, a genus of the enneandria order, and dicœcia class of plants; natural order first, palmæ. Male spatha diphyllous: CAL. trifid: COR. tripetalous; the three inferior filaments styliferous. Female CAL. trifid: COR. tripetalous; the styles six: CAPS. six celled and polyspermous inferior. There is only one species, a native of Britain, growing in slow streams and wet ditches. It has kidney-shaped leaves, thick, smooth, and of a brownish-green color, with white blossoms. There is a variety with double flowers of a very sweet smell.

HYDROCOTYLE, water navelwort, a genus of the digynia order, and pentandria class of plants; natural order forty-fifth, umbellatæ. The umbel is simple; the involucrum tetraphyllous; the petals entire; the seeds are half round and compressed. There are several species, none of which are ever cultivated in gardens. One of them, a native of Britain, growing in marshy grounds, is supposed by some farmers to occasion the rot in sheep. The leaves have central leaf-stalks, with about five flowers in a rundle; the petals are of a reddish white.

HYDROGEN GAS, in chemistry (from *υδωρ*, water and *γενναω* to produce), is the lightest species of ponderable matter hitherto discovered. The following is the best method of obtaining it:—Into a phial furnished with a bent tube fitted to its cork, or into a retort, put some pieces of pure redistilled zinc, or harpsichord iron wire, and pour on them sulphuric acid diluted with five times its bulk of water. An effervescence will ensue, occasioned by the decomposition of the water, and disengagement of hydrogen, which may be collected in the pneumatic apparatus. For very accurate researches, it must be received in jars over mercury, and exposed to the joint action of dry muriate of lime, and a low temperature. It derived its name from the property it possseses of forming water when mixed with oxygen, and exposed to the electric shock. If a bottle, containing the effervescing mixture of iron and dilute sulphuric acid, be shut with a cork, having a straight tube of narrow bore fixed upright in it, then the hydrogen will issue in a jet, which, being kindled, forms the philosophical candle of Dr. Priestley. If a long glass tube be held over the flame, moisture will speedily bedew its sides, and harmonic tones will soon begin to sound. Mr. Faraday, in an ingenious paper inserted in the tenth number of the Journal of Science, states, that carbonic oxide produces, by the action of its flame, similar sounds, and that therefore the effect is not due to the affections of aqueous vapor, as had formerly been supposed. He shows, that the sound is nothing more than the report of a continued explosion, agreeably to Sir H. Davy's theory of the constitution of flame. Vapor of ether, made to burn from a small aperture, produces the same sonorous effect as the jet of hydrogen, of coal gas, or olefiant gas, on glass and other tubes. Globes from seven to two inches in diameter, with short necks, give very low tones; bottles, Florence flasks, and phials, always succeeded; air jars, from four inches diameter to a very small size, may be used. Some angular tubes were constructed of long narrow slips of glass and wood, placing three or four together, so as to form a triangular or square tube, tying them round with pack-thread. These, held over the hydrogen jet, gave distinct tones.

Professor Dobereiner has discovered that, by throwing a jet of hydrogen gas on a small pellet of spongy platinum, the platinum instantly becomes red hot and the jet of hydrogen inflamed. Mr. Gordon of Oxford Street has formed a lamp on this principle, which is actually a new apparatus for procuring instantaneous fire. See our articles CHEMISTRY in which the nature properties and combination of hydrogen are fully treated of, and GAS in which its application to lighting of roads, shops, &c., is detailed. One of the principal objections to its use as a light is the strong disagreeable smell. But if hydrogen gas, obtained by the solution of iron in sulphuric acid, be made to pass into pure alcohol, it almost entirely loses its smell. Water added to the alcohol renders it milky; and, on resting some hours, a volatile oil separates, which is the cause of the well-known smell of hydrogen gas. This gas is obtained perfectly free of smell, by putting into pure water an amalgam of potassium; but, if there be added to the water an acid or sal-ammoniac to accelerate the development of the gas, the latter will have the smell, which is observed during the solution of zinc in weak sulphuric acid. Ann. de Chim. et de Phys., October 1824.

HYDROG'RAPHER, *n. s.* } Fr. *hydro-*
HYDROGRAPHY, *n. s.* } *graphe*; Greek, *υδωρ* and *γραφω*. One who draws maps of the sea. Description of the watery parts of the globe.

> It may be drawn from the writings of our *hydrographers*. *Boyle.*

HYDROGRAPHY is the art of measuring and describing the sea, rivers, canals, lakes, &c. With regard to the sea, it gives an account of its tides, counter-tides, soundings, bays, gulfs, creeks, &c.; also the rocks, shelves, sands, shallows, promontories, harbours; the distance and bearing of one port from another; with every thing that is remarkable, whether out at sea or on the coast.

HYDROLEA, in botany, a genus of the digynia order, pentandria class of plants: CAL. pentaphyllous: COR. rotaceous; the filaments at the base cordate: CAPS. bilocular and bivalved.

There are four species, two of which are natives of South America, two of the East Indies.

HY'DROMANCY, *n. s.* Fr. *hydromantie;* Gr. ὕδωρ and μαντία. Prediction by water.

Divination was invented by the Persians: there are four kinds of divination; *hydromancy*, pyromancy, aeromancy, and geomancy. *Ayliffe.*

HY'DROMEL, *n. s.* Fr. *hydromel;* Gr. ὕδωρ and μέλι. Honey and water.

Hydromel is a drink prepared of honey, being one of the most pleasant and universal drinks the northern part of Europe affords, as well as one of the most ancient. *Mortimer.*

In fevers the aliments prescribed by Hippocrates were ptisans and cream of barley: *hydromel*, that is, honey and water, when there was no tendency to a delirium. *Arbuthnot.*

HYDROM'ETER, *n. s.* } Greek, ὕδωρ and
HYDROM'ETRY, *n. s.* } μετρον. An instrument to measure the extent or depth of water: the act of measuring it.

HYDROPHO'BIA, *n. s.* Fr. *hydrophobie;* Gr. ὑδροφοβία. Dread of water.

Hydrophobia is a kind of madness, well known in every village, which comes by the biting of a mad dog; or scratching [saith Aurelianus), touching, or smelling alone, sometimes (as Sckenkius proves), and is incident to many other creatures as well as man; so called because the parties so affected cannot endure the sight of water, or any liquor, supposing still they see a mad dog in it. *Burton. Anat. Mel.*

HYDROPHOBIA in medicine, is a disease generally communicated to man by the bite of a rabid dog, and is so called because one of its principal symptoms is the inability of the patient to swallow water or any other liquid. It is called by some writers canine madness, and seldom makes its appearance till a considerable time after the bite of the rabid animal. In some few instances it has commenced in seven or eight days from the accident; but generally the patient continues in health for twenty, thirty, or forty days, or even much longer. The bite will in general be healed long before that time, frequently with the greatest ease; though sometimes it resists all kinds of healing applications, and forms a running ulcer, which discharges a quantity of matter for many days. The approach of the disease is known by the cicatrix of the wound becoming high, hard, and elevated, and by a peculiar sense of prickling at the part; pains shoot from it towards the throat; sometimes it is surrounded with livid or red streaks, and seems to be in a state of inflammation; though often there is nothing remarkable to be observed. The patient becomes melancholy, loves solitude, and feels sickness at the stomach. Sometimes the peculiar symptom, the dread of water, comes on all at once. Sometimes the disease begins like a common sore throat; and, the soreness daily increasing, the hydrophobic symptoms appear like a convulsive spasm of the muscles of the fauces. In others, the mind is first affected, and a real dread of water arises before the patient tries whether he can swallow it. But, in whatever manner this symptom comes on, the most painful sensations accompany every attempt to swallow liquids. Nay, the bare sight of water, or any thing clear, will give the utmost uneasiness, or even throw the patient into convulsions. The patient, however, is not as yet deprived of reason. Some have, merely by the dint of resolution, conquered the dread of water, though they never could overcome the convulsive motions which the contact of liquids occasioned, and yet this has been of no avail; for the convulsions and other symptoms increasing, have always overpowered the individual at last; and a great flow of viscid saliva into the mouth now takes place; as it has the same effect upon their fauces that other liquids have. This therefore is blown off with violence, which in a patient of Dr. Fothergill's occasioned a noise like the barking of a dog. Patients then have an insatiable thirst, but are unable to get down any drink without the utmost difficulty; though sometimes they can swallow bread soaked in liquids, slices of oranges, or other fruits. There is a pain under the scrobiculus cordis, as in the tetanus. But the symptoms are so various, that they cannot be enumerated; for we seldom read two cases of hydrophobia which do not differ very remarkably. Sometimes every member is convulsed by fits, but most violently from the navel up to the breast and œsophagus. The fit comes on perhaps every quarter of an hour, the fauces are not red, nor the tongue dry. The pulse is not at all feverish; and, when the fit is over, nearly like a sound pulse. The face grows pale, then brown, and during the fit almost black, the lips livid, the head is drowsy, and the ears tingling; the urine limpid. At last the patient is weary, the fits are less violent, the pulse becomes weak, intermittent, and not very quick; and at last the whole body becomes cold. If the patient can get sleep, so he will expire. The blood drawn a few hours before death appears good in every respect. The hydrophobia seems to be a symptom peculiar to the human race; for the mad animals which communicate the infection do not seem to have any dread of water.

With regard to the symptoms of madness in dogs, they are very equivocal; and those particularly enumerated by some authors are only such as might be expected in dogs much heated or agitated by being violently pursued and struck. The most certain symptom, indeed, is that all other dogs avoid and run away from one that is mad; and even large dogs will not attack one of the smallest size who is infected with this disease. You may discover whether a dog who has been killed was really mad or not, by rubbing a piece of meat along the inside of his mouth, and then offering it to a sound dog. If the latter eats it, it is a sign the dog was not mad; but, if the other rejects it with a kind of a howling noise, it is certain that he was. Dr. James tells us, that among dogs the disease is infectious by staying in the same place; and, that after a kennel has been once infected, the dogs put into it will be for a considerable time afterwards in danger of going mad. He rejects as false the opinion, that dogs, when going mad, will not bark: though he owns that there is a very considerable change in their bark which becomes hoarse and hollow.

It is said, that the causes commonly assigned for this disease among animals viz. heat, feeding

upon putrid flesh, want of water, &c., are not sufficient to produce the distemper. It does not appear that madness is more frequent among dogs in the warm than in the cold climates; nay, in the island of Antigua, where the climate is very hot, and the water very scarce, this distemper has never, it is said, been observed. As to putrid aliment, it seems natural for dogs to prefer this to any other, and they have been known to subsist upon it for a long time without detriment. With regard to the immediate cause among mankind, there is not the least doubt that the hydrophobia is occasioned by the saliva of the mad animal being mixed with the blood. It does not appear that this can operate through the cuticula; but, when that is rubbed off, the smallest quantity is sufficient to communicate the disease, and a slight scratch with the teeth of a mad animal has been found as pernicious as a large wound. It is certain, also, that the infection has been communicated by the bites of dogs, cats, wolves, foxes, weasels, swine, and even cocks and hens, when in a state of madness.

If the disease once exhibits its symptoms in a human patient the chances for recovery are small indeed: there having never been one well authenticated case of the recovery of a really hydrophobous person.—Prevention is the only chance, and removal of the contagious matter the only fair hope, of preserving life. Of all the means of removal, the cutting out the part to which the tooth has been applied, is unquestionably the most effectual. This therefore should not be delayed; one-quarter of an hour's hesitation will sometimes prove fatal. But, besides cutting away the part, careful washing may be used. Cold water should be poured upon the wound from a considerable height, that the matter may be washed away with some force. Even after removal by the knife careful washing is still proper. And after both these, to prevent, as far as can be, the possibility of any contagious matter lurking about the wounded part, it should not be allowed to heal, but a discharge of matter should be supported for several weeks, by ointment with cantharides, or similar applications. By these means there is the best chance of removing the matter at a sufficiently early period. Prevention may also be obtained by the destruction of the contagious matter at the part; and, where there is the least reason to think that a complete removal has not been obtained, these should always be had recourse to. With this intention the actual cautery, and burning with gun-powder, have been employed. And fire is, doubtless, one of the most powerful agents that can be used for this purpose. Recourse has also been had to washing, both with acids and alkalies. Of the former, vinegar has been chiefly used; but more may be expected from the latter, particularly from the caustic alkali, so far diluted that it can be applied with safety; for, from its influence as a solvent of animal mucus, it gives a better chance of a complete removal of the poison. See MEDICINE, Index.

HYDROPHYLUM, water leaf: a genus of the monogynia order, and pentandria class of plants: COR. campanulated, with five melliferous longitudinal stria on the inside; the stigma is bifid: CAPS. globose and bivalved. There are three species, the chief is—H. Virginianum, the water leaf of Morinus. It grows naturally in Canada and many other parts of America on moist spongy ground. The root is composed of many strong fleshy fibres, from which arise many leaves with foot-stalks five or six inches long, jagged into three, five, or seven lobes, almost to the mid-rib, indented on their edges. The flowers are produced in loose clusters hanging downwards, are bell-shaped, and of a dirty white color. It may be propagated by parting the roots; which ought to be done in autumn, that the plants may be well rooted before spring, otherwise they will require a great deal of water.

HYDROPICAL, *adj.* } Fr. *hydropique*,
HYDROPICK, *adj.* } from Lat. *hydrops*; Gr. ὑδροπικός. Dropsical; diseased with extravasated water: resembling dropsy.

Cantharides heat the watery parts of the body; as urine, and *hydropical* water.
Bacon's Natural History.

The world's whole sap is sunk:
The general balm the *hydropick* earth hath drunk.
Donne.

Every lust is a kind of *hydropick* distemper, and the more we drink the more we shall thirst. *Tillotson.*

Hydropick wretches by degrees decay,
Growing the more, the more they waste away;
By their own ruins they augmented lye,
With thirst and heat amidst a deluge fry.
Blackmore.

Hydropical swellings, if they be pure, are pellucid.
Wiseman.

One sort of remedy he uses in dropsies, the water of the *hydropicks*. *Arbuthnot.*

HYDROSELENIC ACID. The best process which we can employ for procuring this acid, according to M. Berzelius, consists in treating the seleniuret of iron with the liquid muriatic acid. The acid gas evolved must be collected over mercury. As in this case a little of another gas, condensable neither by water nor alkaline solutions, appears, the best substance for obtaining absolutely pure hydroselenic acid would be seleniuret of potassium.

Seleniureted hydrogen gas is colorless. It reddens litmus. Its density has not been determined by experiment. Its smell resembles, at first, that of sulphureted hydrogen gas; but the sensation soon changes, and another succeeds, which is at once pungent, astringent, and painful. The eyes become almost instantly red and inflamed, and the sense of smelling entirely disappears. A bubble of the size of a little pea is sufficient to produce these effects. Of all the bodies derived from the inorganic kingdom, seleniureted hydrogen is that which exercises the strongest action on the animal economy. Water dissolves this gas; but in what proportions is not known. This solution disturbs almost all the metallic solutions, producing black or brown precipitates, which assume, on rubbing with polished hæmatites, a metallic lustre. Zinc, manganese, and cerium, form exceptions. They yield flesh-colored precipitates, which appear to be hydro-seleniurets of the oxides, whilst the others, for the most part, are merely metallic seleniurets.

HYDROSTATICS AND HYDRAULICS.

HYDROSTAT'ICAL, *adj.* } Gr. *υδωρ* and
HYDROSTAT'ICALLY, *adv.* } *στατικη*. The
HYDROSTAT'ICS, *n. s.* } science of weighing fluids, and bodies in fluids.

A human body forming in such a fluid, will never be reconciled to this *hydrostatical* law; there will be always something lighter beneath, and something heavier above; because bone, the heaviest in specie, will be ever in the midst. *Bentley.*

The weight of all bodies around the earth is ever proportional to the quantity of their matter: for instance, a pound weight, examined *hydrostatically*, doth always contain an equal quantity of solid mass. *Id.*

HYDROSTATICS and HYDRAULICS; from *ὑδωρ*, water, and *στατικη*, the art of weighing: and *ὑδωρ* and *αυλος*, a pipe or flute, (the doctrine of machines worked by water, because organs when first invented were thus first sounded, or filled with wind). In the arrangement of our more important treatises we endeavour to unite the consideration of scientific propriety with the convenience of alphabetical order. Looking only to the latter of these, in regard to the above sciences, HYDRAULICS would claim a prior place, but as this arrangement would, of necessity, tend to render the subject obscure and unconnected, it will be advisable to connect these important subjects and to treat of them in their natural order; beginning with the weight and pressure of water, and then showing the application of hydrostatic equilibrium in the construction of hydraulic machines.

We had better in the first instance explain the nature of fluidity. A perfect freedom of motion is essential to this state, and fluid bodies are usually divided into elastic, and non-elastic. Air is an example of the first, as its bulk may be lessened by augmenting the pressure, and enlarged by diminishing the compressive force. Water, on the contrary, is said to be non-elastic, or incompressible, not because it is absolutely so, but because its compressibility is so very small, as to make no sensible difference in our calculations, relative to its weight or motion.

The compressibility of water was a subject which engaged the attention of philosophers at a very early period. The Florentine academicians, from the following experiment, inferred that it could not be diminished in bulk: they took a globe of gold, which was the least porous of any body at that time known; and, having filled it with water, they closed it up. They then subjected the globe to a great compressive force, which squeezed the water through its pores, before any indentation could be made in it. As a hollow sphere has a greater capacity than any other form, under the same surface, the academicians supposed that the compressive power, which was applied to the globe, must either force the particles of the fluid closer together, or drive them through the metal, before the globe yielded in the slightest degree to compression. With respect to its precise object, therefore, this celebrated experiment is not entirely conclusive, because they had no means of determining whether the diminution of the internal capacity of the globe by pressure, was exactly equal to the quantity of water forced through its pores; but they certainly proved the extreme minuteness of the particles that could be forced through so dense a metal as gold. The inference, drawn by the Florentines, remained uncontradicted till about 1762, when Canton published some experiments on the subject. With the barometer at 29¼°, and the thermometer at 50°, he states the following to be the results obtained:—

Compression of spirits of wine . .	66 parts in	1,000,000
Oil of olives . .	48 Ditto	
Rain-water . .	46 Ditto	
Sea-water . .	40 Ditto	
Mercury . .	3 Ditto	

These results he obtained in the following manner: he took a glass tube, about two feet long, with a ball at one end, of an inch and a quarter in diameter; he filled the ball end part of the tube with water, which had previously been deprived of air as much as possible; he then placed it under the receiver of an air-pump, and removed the pressure of the atmosphere: under this treatment, he observed that the water rose a little in the tube. On the contrary, when he placed the apparatus upon a condensing engine, and by condensing the air in the receiver, increased the pressure upon the water, he observed that the water descended in the tube. In this manner he proved that water expanded one part in 21,740, when the pressure of the atmosphere was removed; and submitted to a compression of one part in 10,870, under the weight of a double atmosphere. He also observed, that water possessed the remarkable property of being more compressible in winter than in summer; contrary to the effect on spirit of wine and oil of olives. Lest it might be supposed the compressibility, thus discovered, might be owing to air lodged within the fluids employed, a quantity of water was caused to imbibe more air than it contained in a preceding trial, but its incompressibility was not increased. These experiments, although, upon the whole, so apparently decisive of the questions they were instituted to determine, are not yet to be received without some caution; and, in particular, the remark that the addition of a portion of so compressible a fluid as air did not render water more compressible than before, is rather staggering; and is calculated to throw a veil of doubt over all the rest. It remained, therefore, for future investigators to determine the data for this branch of the science; but, even granting all the compressibility that has been contended for, the quantity of it is too small to be noticed in practice.

The piezometer employed by Mr. Perkins, in his experiments on the compressibility of water,

is represented in plate I. fig. 1. HYDROSTATICS and HYDRAULICS. The end I, of a cylinder S, three inches wide and eighteen long, being made water-tight by a plate firmly soldered to it: a cap, also water-tight, was screwed on the extremity. The rod *a*, $\frac{9}{10}$ths of an inch in diameter, and carrying a flexible ring C, was made to pass through a tight stuffing-box F. The compression was effected in a cannon, the top of which was capable of containing the piezometer. It was fixed vertically in the earth, the touch-hole being plugged tight, and the muzzle about eighteen inches above ground. A strong cap was firmly screwed on at the mouth, and in the centre of it a small forcing pump, with a piston $\frac{1}{8}$ths of an inch in diameter, was tightly screwed, and a valve introduced to ascertain the degree of pressure, one pound of pressure on that valve indicating an atmosphere. In performing experiments with this apparatus, the piezometer was introduced into the cannon, the water being forced in till the cap showed signs of leakage: the valve at the same time indicating a pressure of 100 atmospheres; when the piezometer was taken out of the cannon, the flexible ring, C, was eight inches upon the rod *a*, which proved that the rod had been forced that length into the cylinder, and that the compression was about one per cent.; in order to produce this compression, three per cent. must be pumped into the gun; an effect arising from the expansion of the gun, or the entrance of the water into the pores of the cast iron.

On his voyage to England, Mr. Perkins repeated this experiment frequently, and with the same result; by sinking the piezometer with fifty-four pounds of lead, to the depth of 500 fathoms, which gives nearly a pressure of 100 atmospheres. Being satisfied that the above piezometer would not show all the compression, he made another, consisting of a small tube, closed at the lower end, and water-tight; at the upper end, the water entered through a small aperture, closed by a delicate valve opening inwards; it was then perfectly filled with water (the weight of which was accurately known), and subjected in a common hydraulic press to a pressure of about 326 atmospheres. When taken out, and weighed, there was found an increase of water, amounting to about 3½ per cent. This water had been previously boiled and cooled down to 48°, and kept at that temperature during the experiment.

Fluids have weight, and gravitate towards the earth according to their density in the same way that solids do; but from the want of cohesion among their particles they are, however, incapable of assuming and retaining any particular form or figure without support and assistance, and consequently they always take the form of the vessel which contains them, and they also exert a certain force against the sides of that vessel from their tendency to fall, which constitutes their lateral pressure; for fluids not only press downwards with their whole weight, in obedience to gravitation, but they press sideways or laterally in all directions at the same time and from the same cause, and consequently no fluid can remain in a state of quiet equilibrium, unless every part of its surface is equidistant from the centre of the earth, or in what is generally called a level plane, although that apparent plane is, in fact, not a plane, but partakes of the convexity of the earth. And it is for the purpose of establishing such an equilibrium that fluids always run from a higher to a lower situation.

For the purpose of explaining the manner in which the surfaces of fluids become level, it may be very fairly supposed that the particles of which they are composed are placed one upon another so as to form what may be termed pillars or columns of particles as represented in plate I. fig. 2, and supposing all the particles to be of the same size and weight, then the six which are on one side will be an exact balance to the six which are on the other (both columns being supported by the bottom of the vessel which contains them), and their two tops will be level; but, if the two upper particles *t* and *v* are supposed to be taken away, a balance can no longer exist, for now there will be six particles in one column, while there are but four in the opposite one to press against and resist them, the consequence of which will be that the tallest column will descend, and the particle *u* will fall into the situation of *w*, while that marked *x* will, with its column, ascend into the situation *v*, and thus *x* and *u* will come to the same level, and a balance or equilibrium will be again restored. Every vessel is supposed to be filled by an infinite number of such columns, although two only are represented in the figure to prevent confusion. The cause of bodies floating upon fluids, or sinking in them, may be explained by the same reasoning, for whenever a solid is immersed in a fluid, it displaces a quantity of water, and consequently renders the columns of particles underneath it shorter, and therefore lighter, than those which surround it. It will only then be to conceive that the two particles *t* and *v*, in the last figure represent a body which is partly immersed in the water, and is floating near its surface; the columns under that body will be shorter than those which surround it, but the weight of the body becomes a counterpoise to the greater length of the surrounding columns, and must in every case be precisely equal to the quantity of water which it displaces, otherwise it cannot float, for all bodies which are incapable of so becoming this counterpoise, or, in other words, are so heavy that their small bulk will not permit them to displace as much water as is equal to their own weight, must inevitably sink; consequently all things which are lighter than their bulks of water will swim, and all that are heavier must sink, unless when they are placed in a boat or hollow vessel, which by its bulk enables them to displace more water than is equal to their weight, and then they will float. A ship therefore of 500 tons burthen must displace 500 tons of water from the bed or hollow which it makes itself up to its water-line, and in this way the tonnage of vessels is estimated.

The truth of this position is very satisfactorily proved by putting the model of a ship or any other body capable of floating into a scale, and exactly balancing it with water in the other scale. The floating body is then to be removed and

placed in a small cistern, previously filled quite full of water, when a quantity of it will flow over, and on again removing the floating body a vacuity of water will be found, which will be exactly reinstated by the quantity in the scale, being the weight of the floating body.

The balance which has been stated to take place among the columns of water may be pleasingly illustrated by the simple expedient of tying a bladder in a flaccid way over the end of a large patent lamp glass, or other cylinder which is open at both ends; when, upon filling the same to a little above the bladder, it will be borne down by the weight of the water, and will continue in the same situation even when the apparatus is immersed in water, until such immersion causes the water, both within and without the glass, to stand at the same level; and, whenever this is the case, a balance occurs between the pressures of the internal and external water, and the bladder will become quite flaccid, thus indicating that it is under no pressure either from above or below; on pressing the glass a little deeper into the water the external columns will become the longest, and consequently the most powerful, and the bladder will therefore in this case be as forcibly protruded upwards into the glass as it was at first pressed downwards.

The ancient method of supplying towns with water was by means of aqueducts, or bridges built over the valleys, and supporting either pipes or an open conduit or channel. These stupendous and costly erections, the remains of which still adorn the ruins of some ancient cities, and which exist in a more perfect state in the neighbourhoods of Paris and Lisbon, could not have been constructed for want of a knowledge of fluids rising to their common level, but probably from the practical difficulty of uniting a long range of pipes, in such a manner as to remain perfectly water-tight against the pressure of a heavy column of water, a circumstance which is by no means easy, even in our present state of improvement, and with all the advantage of cast iron and the most durable materials, instead of stone or earthenware, which appears to have been chiefly resorted to for pipes in the formation of the older water-works.

The New River water-works, which are of such vast importance to the comfort and health of the great metropolis of England, are in themselves a species of aqueduct, and unite all the varieties in the construction of water-works. The spring that supplies them rises at Ware, in Hertfordshire, and its waters are conducted in an artificial channel or cut, formed for their conveyance alone, which is sometimes raised by arches and embankments very considerably above the natural surface of the ground, and at others sinks deeply into it, for upwards of thirty-eight miles. At length it ends in the open basin or reservoir, called the New River Head, at Islington, which is sufficiently high to supply the lower parts of the town by its natural descent into the pipes. To accomplish the rest, a powerful steam-engine is placed near this reservoir, for the purpose of working pumps which force a part of the water into still more elevated reservoirs on Pentonville Hill, and in the Hampstead road, and what these cannot command is effected by an air vessel attached to the pumps of the steam engine, so that the greater part of London is supplied, without the expense of any other power than the water's natural gravitation, and the remainder by the well appropriated power of a steam engine.

There is a very singular paradoxical experiment illustrative of this part of our subject. It is this, that any quantity of water, or any other fluid, however small, may be made to balance and support any quantity, or any weight, how great soever. Thus, the water in a pipe, or canal, open at both ends, always rises to the same height at both ends, whether those ends be wide or narrow, equal or unequal. And since the pressure of fluids is directly as their perpendicular heights, without any regard to their quantities, it follows, that whatever the figure or size of the vessels may be, provided their heights be equal, and the areas of their bottoms equal, the pressures of equal heights of water are equal upon the bottoms of those vessels, even though the one should contain 1000, or 10,000 times as much as the other. Mr. Ferguson has illustrated this matter by the following apparatus:—Let two vessels, plate 1, figs. 3 and 4, such as C and O, be of equal heights, but very unequal capacity; let each vessel be open at both ends, and their bottoms E and F of equal widths; let the brass bottoms be exactly fitted to each vessel, not so as to go into them, but for each vessel to rest upon respectively; and let a piece of wet leather be put between each vessel and its brass bottom, for the sake of keeping them close. Join each bottom to its vessel by a hinge, A F, so that it may open like the lid of a box; and let each bottom be kept up to its vessel by equal weights, B I, hung to lines which pass over the pulley as at I, the blocks being fixed to the sides of the vessel, and the lines tied to hooks at D B, fixed in the brass bottoms opposite to the hinges. Things being thus prepared, hold one vessel upright in the hand over a basin on a table, and cause water to be poured slowly into it, till the pressure of the water bears down its bottom at the side, and raises the weight, and then part of the water will run out beneath. Mark the height at which the surface of the water stood in the vessel when the bottom began to give way; and then, holding up the other vessel in the same manner, cause water to be poured into it, and it will be seen that, when the water rises in this vessel just as high as it did in the former, its bottom will also give way at the same height, and it will lose part of the water.

The cause of this apparently surprising phenomenon is, that, since all the parts of a fluid at equal depths below the surface are equally pressed in all directions, the water immediately below the fixed part will be pressed as much upward, against its lower surface within the vessel, by the action of the column in the centre, as it would be by a column of the same height, and of any diameter whatever; and therefore, since action and re-action are equal, and contrary to each other, the water immediately below the surface, B, will be pressed as much downwards by it as if it were immediately touched,

and pressed by a column of the whole height, and of the diameter A B; and therefore the water in the cavity beneath will be pressed as much downwards upon its bottom, F, as the bottom of the other vessel is pressed by all the water above it.

When a machine is constructed expressly for the purpose of showing, in the most striking manner, that the pressure of fluids is as their perpendicular heights, and that a quantity, however small, may be made to support a weight, or another quantity, however large, it may be most advantageously made in the form of what is called the hydrostatical bellows. This apparatus may now be examined. It consists of two circular boards I, plate I. fig. 5, about sixteen inches in diameter; these boards are connected by means of a strong leather, which entirely surrounds them, and permits them to open and close like a pair of common bellows, with this difference, that they open equally all round, and therefore the boards always remain parallel to one another. The leather, at its junctures, is well secured, and the whole machine is water-tight. In the upper board is fixed a pipe, A C, communicating with the interior, and reaching above to a considerable height, suppose five feet. Through this pipe let some water be poured into the bellows, and the upper board will be observed to rise a little; place a weight, B, upon it, pour in more water, and it will rise, though we increase the weight very considerably. Indeed, we may add water till the leathers are at their utmost extension; the water will then fill in the tube, and the upper board cannot be depressed, nor the water forced out of the small tube, until the pressure upon it is more than that of a column of water whose diameter is equal to that of the interior of the bellows, and its height equal to that in the tube; by increasing, therefore, the length of the tube, a most enormous weight might be raised by the pressure of a few ounces of water.

To illustrate this singular experiment, we may suppose a hole to be made in any part of the upper board, and another tube to be inserted there; the water would certainly rise to the same level in them both; and, supposing the board to be filled with tubes, the water would obtain the same level in them all, because a series of pipes would, in fact, form a solid cylinder of water. If we suppose the hole to be of the same diameter as the interior of the tube, and fitted with a piston, then, if the tube contained two ounces of water, the piston would sustain a weight of two ounces without being depressed. If the area of the whole were twice that of the bore of the tube, two ounces in the tube would sustain four ounces on the piston. In this manner, every part equal to the bore of the tube is pressed upwards with a force equal to the weight of fluid in the tube. Hence, if the proportion subsisting between the area of the tube and that of the bellows be multiplied by the weight of water in the tube, the product will express the force with which the boards are separated.

In lieu of the bellows part of the apparatus, the leather of which would be incapable of resisting any very considerable pressure, Mr. Bramah suggested the use of a very strong metal cylinder, in which a piston was so packed as to move water-tight; and, as a substitute for the high column of water, he employed a small forcing pump, to which any power can be applied; and thus the pressing column becomes indefinitely long, although the whole apparatus is of itself comparatively small.

In plate I., fig. 6, we have a section of one of these presses, in which *b* is the piston of the large cylinder, formed of a solid piece of metal turned truly cylindrical, and carrying the lower board *v* of the press upon it: *r* is the piston of the small forcing pump, being also a cylinder of solid metal, moved up and down by a handle or lever. The whole lower part of the press is sometimes made to stand in a case, S *a*, containing more than a sufficient quantity of water, as at C, to fill both the cylinders; and the suction pipe of the forcing-pump dipping into this water will be constantly supplied. Whenever, therefore, the handle is moved upwards, the water will rise through the conical metal valve, opening upwards into the bottom of the pump *t*; and, when the handle is depressed, that water will be forced through another similar valve *g*, opening in an opposite direction in the pipe of a communication between the pump and the great cylinder *d*, which will now receive the water by which the piston rod *b* will be elevated at each stroke of the pump *t*. Another small conical valve, *f*, is applied by means of a screw to an orifice in the lower part of the large cylinder, the use of which is to release the pressure whenever it may be necessary; for, on opening this valve, any water which was previously contained in the large cylinder *d* will run off into the reservoir by the passage *c*, and the piston *b* will descend; so that the same water may be used over and over again. The power of such a machine is enormously great; for supposing the hand to be applied at the end of the handle with a force of only ten pounds, and that this handle, or lever, be so constructed as to multiply that force but five times, then the force with which the piston *r* descends will be equal to fifty pounds: let us next suppose that the magnitude of the piston *b* is such, that the area of its horizontal section shall contain a similar area of the smaller piston *r* fifty times; then fifty times multiplied by fifty gives 2500 pounds, for the force with which the piston *b* and the presser *v* will rise. A man can, however, exert ten times this force for a short time, and could therefore raise 25,000 pounds; and would do more if a greater disproportion existed between the two pistons *b* and *r*, and the lever or handle of the pump were made more favorable to the exertion of his strength.

Mr. Hawkins has contrived an hydrostatic weighing machine, which may be easily understood by reference to plate I. fig. 7: *a* is a cylinder made of tin, and japanned, which is partly filled with water; *b* is another cylinder, rather less in diameter, resting upon and floating in the water contained in the external vessel. A graduated scale and glass tube, *c*, are seen to run parallel to the vessel *a*, with which they are con-

nected at bottom; so that the water always stands at the same height in both. The central cylinder is furnished with a dish or scale for holding the goods to be weighed, the pressure of which causes it to sink. The water being thus displaced in the larger vessel is raised in the small tube in an equal proportion, and the exact weight of the goods will be indicated by the scale attached to the tube. This ingenious contrivance is well adapted for small weights; and, if mercury be substituted for the water recommended by Mr. Hawkins, the range of the instrument may be extended, without its accuracy being affected by its evaporation.

If a hole be made in the side of a vessel, the water will spout forth in a curvilinear path because fluids press equally in all directions.

The velocity with which water spouts out, at a hole in the side or bottom of a vessel, is as the square root of the depth or distance of the hole below the surface of the water: for, in order to make double the quantity of a fluid run through one hole as through another of the same size, it will require four times the pressure of the other, and therefore the aperture must be four times the depth of the other below the surface of the water; and, for the same reason, three times the quantity, running in an equal time through the same sort of hole, must run with three times the velocity, which will require nine times the pressure, and consequently the hole must be nine times as deep below the surface of the fluid, and so on.

To prove this by experiment, let two pipes of equal sized bores be fixed into the side of a vessel, one pipe being four times as deep below the surface of the water in the vessel as the other is: and, whilst the pipes run, let water be poured constantly into the vessel, so as to keep it always full. Then if a cup that holds a pint be so placed as to receive the water that spouts from the upper pipe, and at the same moment a cup that holds a quart be placed to receive the water from the lower pipe, both cups will be filled at the same time by their respective pipes.

The horizontal distance to which a fluid will spout from a horizontal pipe in any part of the side of an upright vessel, below the surface of the fluid, is equal to twice the length of a perpendicular to the side of the vessel, drawn from the mouth of the pipe to a semicircle described upon the altitude of the fluid: and therefore the spout will be to the greatest distance possible from a pipe whose mouth is at the centre of the semicircle; because a perpendicular to its diameter (supposed parallel to the side of the vessel), drawn from that point, is the longest that can possibly be drawn from any part of the diameter to the circumference of the semicircle.

Thus if the vessel A B, plate I. fig. 8, be full of water, the horizontal pipe D be in the middle of its side, and the semi-circle N E C be described upon D, as a centre, with the radius, or semi-diameter D C, or D N, the perpendicular D E to the diameter C D N is the longest that can be drawn from any part of the diameter to the circumference: and, if the vessel be kept full, the jet will spout from the pipe D to the horizontal distance M M, which is double the length of the perpendicular D E. If two other pipes, as F and G, be fixed into the side of the vessel, at equal distances above and below the pipe D, the perpendiculars F H and G I, from these pipes to the semi-circle, will be equal; and the jets spouting from them will each go to the horizontal distance N K, which is double the length of either of the perpendiculars F H or G I.

The reader will easily perceive that the curve described by the spouting fluid, in all the different situations, will be that of a parabola; being acted upon by the combined forces of the lateral pressure of the fluid in the vessel, and the force of gravity.

When a solid body is plunged in any liquid, it must displace a quantity of that liquid exactly equal to its own bulk. Hence, by measuring the bulk of the liquid so displaced, we can ascertain precisely the bulk of the body; for the liquid can be put into any shape, as that of cubical feet or inches, by being poured into a vessel of that shape, divided into equal parts, or the vessel in which the body is plunged may be of that shape, and so divided. If the width of the vessel is four inches by three, or twelve square inches, and divided on the upright side into twelfths of an inch, when a body of any irregular shape, as a bit of rough gold or silver, is plunged in it, every division that the water rises will show that one-twelfth of twelve cubic inches, or one cubic inch of water, has been displaced; so that, if it rises two divisions, the body contains exactly two solid inches of metal. And this is by far the easiest way of measuring the solid contents of irregular bodies.

When a body is so plunged it will remain in whatever part of the fluid it is put in, if it be of the same weight with the fluid; that is, if the bulk of the body weighs as much as the same bulk of the fluid; for in this case it will be the same thing as if the fluid were not displaced, and as an equal quantity of the fluid would have remained at rest there, being equally pressed on all sides, so will the solid body: it will be pressed from below with the same weight of fluid as from above. But if the body be heavier than the fluid, bulk for bulk, this balance will be destroyed, and the weight of the fluid pressing from above will be greater than that pressing from below, by the weight of the solid body, which will therefore sink to the bottom. So, if it be lighter than an equal bulk of the fluid, it will rise through the fluid to the surface. But if a solid heavier than the fluid be plunged to a depth as many times greater than its thickness, as the solid is heavier than the fluid, and there protected by any means from the pressure of the fluid above, it will float notwithstanding its weight, because the pressure from below, being in proportion to the depth, will counter-balance the weight of the body, and there will be no pressure from above, except the weight of the body. Thus, lead is somewhat above eleven times heavier than water. If a cube of lead be placed so as to press closely against the bottom of a wooden pipe one foot square, closed at the top, and plunged twelve feet deep, and held upright, it will there swim; the water pressing it upwards with a force greater than its weight, and there being no pres-

sure from the water downwards. So if a body lighter than water, as cork, be placed at the bottom of a vessel, and so smoothly cut that no water gets between its lower surface and the surface of the bottom, it will not rise but remain fixed there, because it is pressed downwards by the water from above, and there is no pressure from below to counter-balance that from above.

It follows from these principles, that if any body be weighed in the air, and then weighed in any liquid, it will seem to lose as much as an equal bulk of the liquid weighs. Not that the body really loses its weight, but that it is pressed upwards by a force equal to the weight of the liquid, the place of which it fills. Thus, if a piece of lead weigh an ounce before being plunged in water, that is, require an ounce weight on the opposite scale to balance it; if you hang it by a thread from its own scale, and let it be plunged so that the water in a full jar covers it, a quantity of water equal to the bulk of the lead will run over the sides of the jar, and a number of grains equal to the weight of this quantity of water must be taken out of the opposite scale to restore the balance: for the lead is now pressed downwards in the water with a force not equal to its own weight, but to the difference between its own weight and that of an equal bulk of the water. And in this manner we can determine the relative weights of all bodies, or the proportion which they bear to each other in weight; which is called their *specific gravity;* that is, their weight in kind, and sometimes their *relative gravity*, that is, their weight compared with the weight of other bodies. By weighing a known bulk, as a cubic foot or a cubic inch of any two substances, we can find their specific gravity; or their gravity as compared with each other: if, for instance, we found a cubic inch of iron weighed 1948 grains, and a cubic inch of lead 2858, we should say, that the specific gravities of the two substances were in the proportion of 3 to 4⅓ nearly; and so we might find the specific gravity of a solid substance, as compared with that of a liquid, by weighing an equal bulk of each. But this operation is extremely difficult, because it requires the substances compared to be formed accurately into the same shape and size; and, when we are not allowed to change their figure, the comparison cannot be made at all. Thus we could not ascertain the specific gravity of precious stones, crystals, metallic ores, or animal and vegetable substances, without in effect destroying them. But the *hydrostatic balance*, upon the principles now explained, affords a perfectly easy and most accurate method of comparing all substances solid and fluid. We have only to weigh any substance first in air, and then in water; the difference of the weights is the weight of a bulk of water equal to the bulk of the substance; and by comparing any other substance with water, in like manner, we ascertain its specific gravity, as compared with that of the first substance.

Let us now take an example of the use of the hydrostatic balance. If a guinea suspended in air be counterbalanced by 129 grains in the opposite scale, and upon being immersed in water requires 7¼ grains to be put in the scale over it, in order to restore the equilibrium; we thus find that a quantity of water, of equal bulk with the guinea weighs 7¼ grains, or 7·25; by which divide 129, the weight of the guinea in air, and the quotient, or 17·793, shows that the guinea is so many times heavier than its bulk of water. Whence if any piece of gold be tried, by weighing it first in air, then in water, and if upon dividing the weight in air by the loss in water, the quotient is 17·793, the gold is good; if the quotient is 18, or between 18 and 19, the gold is very fine; but, if it be less than 17¼, the gold is too much alloyed with other metal. If silver be tried in this manner, and found to be eleven times heavier than water, it is very fine: if it be 10½ times heavier, it is standard: but, if it be any less weight compared with water, it is mixed with some lighter metal, such as tin.

When substances are lighter than water, a different mode of treatment to that which has been described must be adopted for obtaining their specific gravities; for now some force is necessary for producing their submersion:—To effect this a small pulley moving with little friction may be attached to the bottom of the water jar, or to a weight sufficiently heavy to cause it to remain steadily there; and the hair attached to the substance, must in this case pass downwards under the pulley, and rise again so that its opposite end may fix to the hook of one of the scale pans. The substance is first to be weighed in the scale in the ordinary manner, and afterwards placed in the jar; water must then be added, until the substance, by floating, draws the scale beam into an horizontal position; after which weights must be placed in the opposite scale until the substance is drawn under the water.

Mr. Ritchie's hydrostatic balance is cheap and delicate; it is constructed as follows:—Let a slender beam of wood be procured, about eighteen or twenty-four inches long, and tapering a little from the middle to each end. Let a fulcrum of tempered steel, resembling the blade of a pen-knife, be made to pass through the middle of the beam, a little above the centre of gravity. Similar steel blades are also made to pass through the ends of the beam for suspending the scales. The fulcrum rests on two small portions of thermometer tubes, fixed horizontally on the upright support E F, fig. 9, plate I. The support has a slit passing along the middle, to allow the needle at E F to play between the sides. A small scale made of card, and divided into any number of equal parts, is placed at F, for the purpose of ascertaining the point at which the needle remains stationary. This balance possesses extreme delicacy. It may even be made more sensible than that belonging to the Royal Society of London.

To ascertain the weight of any body, place it in one of the scales, and bring the needle to any point by means of small shot placed in the other scale; observe the point opposite to which the needle rests, or the middle between its extreme point of oscillation; remove the body, and put into the scale as many known weights as will bring the needle to the same division as

before. These weights will evidently be equal to the weight of the body, whether the arms of the balance be equal or not. This method of weighing is due to Borda.

In the use of the hydrostatical balance generally, it will be proper to observe the following general precautions. The water in which the solid is to be weighed, besides its being either distilled or rain water, must be quite clean. Its temperature, as well as that of the solid, must be as near as possible to 62° of Fahrenheit's thermometer; for which purpose the ball of the thermometer must be placed in the water, and the temperature is adjusted by the addition of hot or cold water. If the solid body be soluble in water, or if it be porous enough to absorb any water, then it must be varnished, or coated with some oily or greasy substance; but in that case some allowance is to be made on account of the varnish, &c. When the solid is weighed in water, its upper part ought to be a little way below the surface of the water; for instance, about an inch; and it must by no means be suffered to touch the sides or bottom of the jar. Care must be taken that no bubbles of air adhere to the solid under water; for they would partly buoy it up. These may be easily removed by means of a feather. The solid must be of a compact form, and free from accidental or artificial vacuities, so as not to harbour any air; for otherwise its specific gravity cannot be ascertained by weighing in water, &c. Thus a piece of silver, which is much heavier than water, may be formed into a hollow sphere, which will appear to be much lighter than water; for, if this sphere were immersed in water, it would displace a quantity of water which is equal not only to the silver, but also to the space which is contained in the sphere. It is for this reason that a ship might be made of iron, or of copper, or, in short, of any substance whose specific gravity far exceeds that of water, and yet it would float as well as a ship which is made of wood in the usual way.

In order to determine the specific gravity of living men, Mr. Robertson prepared a cistern seventy-eight inches long, thirty inches wide, and thirty inches deep; and, having procured ten men for his purpose, the height of each was taken, and his weight, and afterwards they plunged successively into the cistern. A ruler, graduated to inches and decimal parts of an inch, was fixed to one end of the cistern, and the height of the water noted before each man went in, and to what height it rose when he immersed himself under its surface.

The following Table contains the several results of his experiments:—

No. of Men.	Height.		Weight.	Height of water before immersed.	Height of water when immersed.	Water raised.	Solidity.	Weight of water.
	Ft.	*In.*	*lbs.*	*In.*	*In.*	*In.*		*lbs.*
1	6	2	161	19·30	21·20	1·90	2·573	160·8
2	5	10⅜	147	19·25	21·16	1·91	2·586	161·6
3	5	0½	156	19·21	21·06	1·85	2·505	156·6
4	5	6¾	140	19·17	21·21	2·04	2·763	172·6
5	5	5⅞	158	19·13	21·21	2·08	2·817	176·0
6	5	5½	158	19·09	21·26	2·17	2·939	183·7
7	5	4⅜	140	19·05	21·06	2·01	2·722	170·1
8	5	3⅛	132	19·01	20·86	1.85	2·505	156·6
9	5	4⅛	121	18·97	20·76	1·79	2·424	151·5
10	5	3¼	148	18·93	20·66	1·73	2·343	146·4

One of the reasons, Mr. Robertson says, that duced him to make these experiments, was a sire to know what quantity of fir or oak timber would be sufficient to keep a man afloat in er or sea water, thinking that most men were ecifically heavier than river or common fresh ter; but the contrary appears from the trials fore recited; for, except the first and last, ery man was lighter than his equal bulk of sh water, and much more so than his equal lk of sea water: consequently, if persons who l into the water could preserve their presence mind, many might be preserved from drown-g, and a piece of wood, not larger than an oar, uld buoy a man partly above water as long he could adhere to it.

It is evident also that a reference to the same neral principle will enable us to ascertain the ecific gravities of different fluids. For, if the me substance be weighed in two fluids, the ight which it loses in each is as the specific avity of that fluid. Thus a cubic inch of lead loses 253 grains when weighed in water, and only 209 grains when weighed in rectified spirits; therefore a cubic inch of rectified spirit weighs 209 grains, an equal bulk of water weighing 253; and so the specific gravity of the water is about a fourth greater than that of the spirit.

Upon this principle the *hydrometer* is constructed. There are various kinds of hydrometers. One is a glass or copper ball with a stem, on which is marked a scale of equal parts or degrees. The point to which the stem sinks in any liquid being ascertained, and marked on this scale, we can tell how many degrees any other liquid is heavier or lighter, by observing the point to which the stem sinks in it. Another and a very simple hydrometer is formed by preparing a number of hollow glass beads of different weights, but the proportions of which are known, and the beads marked accordingly; they are then successively dropped in the fluid to be examined, until one is found which neither sinks nor comes up to the surface, but remains at rest,

wherever it is placed in the liquid. You thus ascertain that the liquid is of the same specific gravity with this bead. If the same bead be dropped into another liquid, and sink, that liquid must be lighter than the first; if the bead come to the top, the second liquid is heavier than the first; and by trying the liquid with the other beads, until one is found which neither sinks nor floats, you ascertain the relative weight of the liquid by the number of the bead.

A hydrometer of great delicacy and peculiarly useful for measuring the specific gravity of different waters, and thereby ascertaining their degrees of purity, consists of a ball of glass three inches diameter, with another joining it, and opening into it, of one inch diameter, B and C, plate I. fig. 10, and a brass neck *d*, into which is screwed a wire *a o*, about ten inches long, and one-fortieth of an inch diameter, divided into inches, and tenths of an inch. The whole weight of this instrument is 4000 grs. when loaded with shot in the lower ball. It is found that, when plunged into water in the jar, a grain laid upon the top *a* makes it sink one inch; therefore a tenth of a grain sinks it a tenth of an inch. Now it will stand in one kind of water a tenth of an inch lower than in another, which shows that a bulk of one kind of water equal to the bulk of the instrument weighs one-tenth of a grain less than an equal bulk of the other kind of water; so that a difference in specific gravity of one part in 40,000 is thus detected. This weight of 4000 grs. is convenient for comparing water; but the quantity of shot in the lower ball may be varied, so as to make it lighter or heavier, and so adapt it to measure the specific gravities of lighter or heavier liquids. It will always be an accurate and very delicate measure for liquids of nearly the same weight. Indeed its delicacy is so great, that an impurity too slight to be detected by the taste, will be discovered by this instrument.

The *areometer* invented by M. De Parcieux, of Paris, is more simple, and affords a very accurate comparison of different liquids. It is only a different form of the instrument just described. A glass phial, about two inches or two inches and a half in diameter, and seven or eight long, with a plane or round bottom, is corked tight, and into the cork is fixed a perfectly straight wire of about one-twelfth of an inch diameter, and thirty inches long. The phial is loaded with shot, so as to make it sink in the heaviest liquid to be examined, leaving the wire just below the surface. There is a cylinder of glass, about three or three and a half inches diameter, and three or four feet long, with a scale of equal parts on the side. The liquor to be tried is put into this; and the scale marks the point to which the top of the wire sinks. This instrument is so sensible, that if it stands at any point in water of the common temperature, and the sun's rays fall upon the water, the wire will sink several inches, from the slight increase of heat causing an increase of bulk, and consequently a diminution of relative weight in the water; and it will rise again when carried into the shade. A pinch of salt or sugar thrown in makes it rise some inches, and a little spirits poured in make it sink. With one of these instruments, weighing somewhat less than twenty-four ounces, and plunged in water, there is a fall or rise of above half an inch for every $\frac{1}{1000}$th part of the water displaced; so that the difference of $\frac{1}{10000}$th part is easily perceived.

Fahrenheit's hydrometer, like the common one, consists of a hollow ball, with a counterpoise *c*, fig. 11, but the stem B is very slender, and terminates in a small dish A. Round the middle of the stem is drawn a fine line; and there are no divisions on the stem, which is always immersed in the fluid to be tried, up to the mark, by placing as much weight as may be required in the small dish A. Hence, as the part immersed is constantly of the same magnitude, and the whole weight of the hydrometer is known, this last weight, added to the weight in the dish, will be equal to the weight of fluid displaced by the instrument.

Mr. Clarke's hydrometer is made of copper, because ivory imbibes spirituous liquors, and glass is apt to break. It consists of a brass wire about one-fourth of an inch thick, passing through and soldered into the copper ball B*b*, fig 12, plate 1. The upper part of the wire is filed flat on one side of the stem of the hydrometer, and marked at *m*, to which division it exactly sinks in proof spirits. There are two other marks, A and B; the one showing that the liquor is one-tenth above proof, when this instrument sinks to A, and the other indicating one-tenth under proof when it emerges to B; a brass weight, as C, having been previously screwed on to the bottom at *c*. There is a great variety of weights of different sizes, as K, &c., adapted to liquors that differ more than one-tenth from proof, and for determining the specific gravities of all such liquors as occur in trade, as well as for showing the specific gravities of all fluids down to common water. The round part of the wire above the ball may be marked across, so that with the weight C, which fits the instrument for the trial of river water, in which it sinks to R W, it may serve for wines or other waters: thus in spring water it will sink to S P; in mineral water to M I; in sea-water to S E; and in the water of salt springs to S A: and the marks *br*, *ra*, *po*, *me*, denote the divisions to which the instrument descends in Bristol water, rain water, port wine, and mountain wine, respectively.

This hydrometer is inferior to Fahrenheit's in two respects. In the first place, either a bubble of air, or a portion of the fluid, will be hid in that part of the cavity of the ballast weight which is not filled by the screw; and it is of very different consequence which of the two is there. And secondly, the weights acting on the instrument, by their residual gravity, will not be constant; or, in other words, an additional weight will be accompanied by an addition to the bulk of the immersed part of the instrument; and in the case where the specific gravity of the liquid is not given, but required, it will not be easy to determine how much the operation of the one is counteracted by the other. However, though this last consideration evinces that the instrument is not fit for general use, yet it is accurate for the trial of ardent spirits, or any other particular liquid, when the weights are adjusted by experiment to the intended use.

Sikes's hydrometer is now generally employed, especially since its adoption by the commissioners of his majesty's customs. This instrument has but nine shifting weights, applicable upon the upper part of the stem, and is used with a set of tables, or a sliding rule sold with it, for computing compensation for different temperatures. The scale is divided into ten principal divisions, each of which is subdivided into five parts, and by the separate application of the weights in succession completes the range of strength from pure alcohol to water, each weight being equivalent to ten principal divisions. This hydrometer, with the weight marked 60, screwed on to the lower stem, is so adjusted as to sink to the line mark P on the scale of the instrument when placed in proof spirit, of the temperature of 51° Fahrenheit, and, by the addition of the square weight on the top of the stem, it sinks to the same point in distilled water of the same temperature. This weight being just one-twelfth part of the entire weight of the whole hydrometer, together with its bottom weight No. 60, causes the scale to show the difference between water and proof spirit, which, the act states, shall weigh exactly twelve-thirteenth parts of an equal bulk of distilled water.

Mr. Meikle's hydrometer consists of a glass tube, open at both ends, and bent into a kind of double syphon, having four parallel legs; so that the open ends are pointed in the same direction or upwards, as shown in fig. 13, plate I. The manner of using it is very simple. Let one of the ends be stopped with a finger or cork, and water be poured into the other. This fluid will only rise a small way into the second leg, because of the included air. Next stop the other orifice, and open the one first closed; and, having poured into the latter the liquid whose specific gravity is to be tried, open the top of the water tube; then, the instrument being held upright, the two liquids will arrange themselves so as to press equally on the included air. This pressure will be measured by the difference in the heights of the two columns of either liquid, multiplied by its specific gravity, so that, by dividing the difference of the two columns of water by the difference of those of the other liquid, we obtain the specific gravity of the latter; that of water being unity. The difference between the columns may be measured by applying any scale of small equal parts, or the glass may be attached to a graduated plate furnished with verniers, &c. The longer the columns of liquids employed, the more accurate the process. The expansion of the glass, or its capillary action, cannot affect the result, nor is it influenced by the expansion of the scale; the only correction required will be to reduce the observations to one temperature.

There are other methods of judging of the strength of spirituous liquors, which though useful are not accurate, such as the taste, the size and appearance of the bubbles when shaken, the sinking or floating of olive oil in it, and the appearances that it exhibits when burned; if it burns away perfectly to dryness, and inflames gunpowder, or a piece of cotton immersed in it, it is considered as alcohol; the different spirituous liquors leave variable proportions of water, when thus burned in a graduated vessel.

There is the greatest difficulty in ascertaining what is meant by the terms proof spirit. Dr. Thomson, quoting the act of parliament of 1762, states, that at the temperature of 60°, the specific gravity of proof spirit should be 0·916; and he also observes, that proof spirit usually means a mixture of equal bulks of alcohol and water; but the specific gravity of such a mixture will, of course, depend upon that of the standard alcohol, which is not specified. It appears from Gilpin's Tables that spirit of the specific gravity ·916, at 60°, consists, by weight, of 100 parts of alcohol, specific gravity ·825, at 60°, and 75 of water; and, by measure, of 100 parts of the same alcohol, and 61·87 of water.

One of the most accurate and convenient methods of obtaining the specific gravity of fluids is by what is called a thousand grain bottle. This is sold by most of the philosophical instrument makers, together with a weight, which is an exact counterpoise for the bottle when filled with distilled water; its magnitude being adjusted by grinding down the length of its neck, until it holds exactly 1000 grains of water at 60° of Fahrenheit. This instrument consequently requires no computation, but is simply to be filled with fluid, and placed in one scale of a balance, while its counterpoise is placed in the other. If the fluid put into it is lighter than water, it will appear deficient in weight, and as many grains must be added to the scale that contains it as will restore the balance. This at once shows that the specific gravity of the fluid under examination is negative, or less than the standard, and consequently must be a fractional number; but, should the fluid be heavier than water, the bottle will preponderate, and weights must be put into the opposite scale, when their amount will be positive, and must be added to the amount of the standard. For example: if the bottle were filled with sulphuric ether, it would require 739 grains to be placed in the same scale to restore the balance, consequently its specific gravity would be thus expressed 0·739. Had it been filled with sea-water, which is rather denser than that which is distilled, twenty-six-hundredths, or rather better than one-fourth of a grain must have been added in the opposite scale, and these, as already explained, must be added to the standard 1·000 to express the specific gravity of such water, which would be thus written 1·026. Sulphuric acid again, being still heavier, would, in like manner require 875 grains, and would accordingly be expressed 1·875.

A bottle, however, holding 1000 grains is often inconveniently large, and a small and thin globular phial, with a piece of thermometer tube ground into it by way of stopper, will be found more useful: such a phial should not weigh more than from fifty to sixty grains, and may contain between 400 and 500 grains of water. To use it it should be accurately counterbalanced in a delicate pair of scales, and then filled with distilled water, and the stopper thrust in, the capillary opening in which allows a little to ooze out, and prevents the likelihood of bursting the

phial; it is then to be wiped clean and dry, and again carefully weighed, by which the quantity of water it contains is ascertained; the water being poured out it is next filled with the liquid whose specific gravity is required, taking care that it is of the same temperature as the water; we then weigh as before, and divide the weight by the former weight of water, the product gives the specific gravity required. Thus, suppose the phial to contain 425 grains of water at the temperature of 45°, it will be found to hold 5737·5 grains of pure mercury of the same temperature; and 5737·5 ÷ 425 = 13·5 the specific gravity of mercury. Or, supposing the liquid lighter than water, such as alcohol, of which we may assume the pnial to contain 350·5; then 350·5 ÷ 425 = 0·824, the specific gravity of the alcohol under trial.

The following table is given by Mr. Gilpin, in the eighty-fourth volume of the Philosophical Transactions, and is of essential use for taking the specific gravities both of solids and fluids, by enabling the operator to reduce the weight or bulk of the distilled water, employed in any case, to that which it would have at any other common temperature, and particularly to 60°, which is the usual standard.

Thus, for example, since the specific gravity of water at 47° is 1·0008 grains, and at 60° is 1·00000, (and consequently 1·0008 grains, at 47°, are equal in bulk to 1·00000 grains at 60°), it follows that it would require 252·708 grains at 47°, to equal the space of a cubic inch; for 1·00000 : 1·0008 :: 252·506 (the weight of a cubic inch at 60°), : 252·708.

TABLE of the SPECIFIC GRAVITY of WATER, at every Degree of Temperature, from 30° to 80° Fahrenheit.

Fahr.	Specific Gravity.	Fahr.	Specific Gravity.
30°	1·00074	56°	1·00031
31	1·00078	57	1·00024
32	1·00082	58	1·00016
33	1·00085	59	1·00008
34	1·00088	60	1·00000
35	1·00090	61	0·99991
36	1·00092	62	0·99981
37	1·00093	63	0·99971
38	1·00094	64	0·99961
39	1·00094	65	0·99950
40	1·00094	66	0·99939
41	1·00093	67	0·99928
42	1·00092	68	0·99917
43	1·00090	69	0·99906
44	1·00088	70	0·99894
45	1·00086	71	0·99882
46	1·00083	72	0·99869
47	1·00080	73	0·99856
48	1·00076	74	0·99843
49	1·00072	75	0·99830
50	1·00068	76	0·99816
51	1·00063	77	0·99802
52	1·00057	78	0·99788
53	1·00051	79	0 99774
54	1·00045	80	0·99759
55	1·00038		

The above particulars are essential to a right understanding of our subject, as far as water, which is the standard of comparison, is concerned; but we must not close this view of hydrostatic equilibrium without furnishing a more general table.

TABLE OF SPECIFIC GRAVITIES.

Acid, Acetic	1·062	Do. solid	2·800	Barytes, sulphate of, from	4·000 to 4·865
Arsenic	3·391	Sulphuric	1·850	Do. carbonate of, from	4·100 to 4·600
Arsenious	3·728	Agate	2·590	Basaltes . from	2·421 to 3·000
Benzoic	0·667	Alcohol, absolute	0·797	Beryl, oriental	3·549
Boracic, crystallised	1·479	Do. highly rectified	0.809	Do. occidental	2·723
Do. fused	1·803	Do. of commerce	0·835	Blood, human	1·053
Citric	1·034	Alum	1·714	Do. crassamentum of	1·245
Formic	1·116	Amber . from	1·065 to 1·100	Do. serum of	1·030
Fluoric	1·060	Ambergris from	0·780 to 0·926	Borax	1·714
Molybdic	3·460	Amethyst, common	2·750	Butter	0·942
Muriatic	1·200	oriental	3·391	Camphor	0·988
Nitric	1·271	Amianthus from	1·000 to 2·313	Caoutchouc, or Indian	
Do. highly concentrated	1·583	Ammonia, aqueous	0·875	rubber	0·933
Phosphoric, liquid	1·558	Arragonite	2·900		
		Azure-stone	2·850		

TABLE OF SPECIFIC GRAVITIES.—*Continued.*

Cornelian, speckled	2·613
Chalcedony, common, from	2·600 to 2·65
Chalk . from	2·252 to 2·657
Chrysolite	3·400
Chrystalline lens of the eye	1·100
Cinnabar, from Almaden	6·902
Coals . from	1·020 to 1·300
Copal	1·045
Coral, red, from	2·630 to 2·857
white, from	2·540 to 2·570
Corundum	3·710
Cyder	1·018
Diamond, oriental, colorless	3·521
Do. colored varieties, from	3·523 to 3·550
Do. Brasilian	3·444
Do. colored varieties, from	3·518 to 3·550
Dolomite, from	2·540 to 2·830
Dragon's blood (a resin)	1·204
Ether, Acetic	0·866
Muriatic	0·729
Nitric	0·908
Sulphuric . from	0 632 to 0·775
Emerald from	2·600 to 2·770
Emerald from	2·900 to 3·300
Fat of Beef	0·923
Hogs	0·936
Mutton	0·923
Veal	0·934
Feldspar from	2·438 to 2·700
Flint, black	2·582
Gamboge	1·222
Garnet, precious, from	4·000 to 4·230
Do. common, from	3·576 to 3·700
Gases,—Atmospheric air	1·000
Ammoniacal	0·590
Carbonic acid	1·527
Carbonic oxide	0·972
Carbureted hydrogen	0·972
Chlorine	2.500
Chlorocarbonous acid	3·472
Chloroprussic acid	2·152
Cyanogen	1·805
Euchlorine	2·440
Fluoboric acid	2·371
Fluosilicic acid	3·632
Hydriodic acid	4·340
Hydrogen	0·069
Muriatic acid	1·284
Nitric oxide	1·041
Nitrogen	0·972
Nitrous acid	2·638
Nitrous oxide	1·527
Oxygen	1·111
Phosphureted hydrogen	0·902
Prussic acid	0·937
Sub-carbureted hydrogen	0·555
Sub-phosphureted ditto	0·972
Sulphureted do.	1·180
Sulphurous acid	2·222
Glass, crown	2·520
green	2·642
flint from	2·760 to 3·000
plate	2·942
Granite . from	2·613 to 2·956
Gum arabic	1·452
cherry-tree	1·481
Gunpowder, loose	0·836
shaken	0·932
solid	1·745
Gypsum, compact, from	1·872 to 2·288
crystallised, from	2·311 to 3·000
Heliotrope, or bloodstone from	2·629 to 2·700
Honey	1·450
Honeystone, or mellite, from	1·560 to 1·666
Hornblende, common, from	3·250 to 3·830
basaltic, from	3·160 to 3·333
Hornstone from	2·533 to 2·810
Hyacinth from	4·000 to 4·780
Jasper . from	2·358 to 2·816
Jet	1·300
Indigo	1·009
Ironstone from Carron	3·281
Do. Lancashire	3·573
Isinglass	1·111
Ivory	1·825
Lapis Nephriticus	2·894
Lard	0·947
Lead, glance or galena from Derbyshire, from	6·565 to 7·786
Limestone, compact, from	2·386 to 3·000
Magnesia, native, hydrate of	2·330
Do. carbonate of, from	2·220 to 2·612
Malachite, compact, from	3·572 to 3·994
Marble, Carrara	2·716
white, Italian	2·707
black veined	2·704
Parian	2·560
Mastick (a resin)	1·074
Melanite, or black garnet, from	3·691 to 3·800
Metals, Antimony	6·702
Arsenic	5·763
Bismuth	9·880
Brass, from	7·824 to 8·396
Cadmium	8·600
Chromium	5·900
Cobalt	8·600
Columbium	5·600
Copper	8·900
Gold, cast	19·25
Do. hammered	19·35
Iridium, hammered	23·00
Iron, cast at Carron	7·248
Do. bar-hardened, or not	7·788
Lead	11·38
Manganese	8·000
Mercury, solid, 3° below 0 of Fahr.	15·61
Do. at 32° of Fahr.	13·61
Do. at 60° of Fahr.	13·58
Do. at 212° of Fahr.	13·37
Molybdenum	8·600
Nickel, cast	8·279
forged	3·666
Osmium and Rhodium, alloy of	19·50
Palladium	11·80
Platinum	21·47
Potassium at 59° Fahr.	0·865
Rhodium	10·65
Selenium	4·300
Silver	10·47
hammered	10·51
Sodium at 59° Fahr.	0·972
Steel, soft	7·833
tempered	7·816
Steel, hardened	7·840
tempered and hardened	7·818
Tellurium, from	5·700 to 6·115
Tin, Cornish	7·291
Do. hardened	7·299
Tungsten	17·40
Uranium	9·000
Zinc from	6·900 to 7·191
Mica from	2·650 to 2·934
Milk	1·032
Mineral pitch, or asphaltum, from	0·905 to 1·650
Mineral tallow	0·770
Myrrh (a resin)	1·360
Naphtha from	0·700 to 0·847
Nitre	1·900
Obsidianum from	2·348 to 2·370
Oils, Essential—Amber	0·868
Anise-seed	0·986
Carraway-seed	0·904
Cinnamon	1·043
Cloves	1·036
Fennel	0·929
Lavender	0·894
Mint, common	0·898
Turpentine	0·870
Wormwood	0·907
Expressed—Sweet almonds	0·932
Codfish	0·923
Filberts	0·916
Hempseed	0·926
Linseed	0·940
Olives	0·915
Poppyseed	0·939
Rapeseed	0·913
Walnuts from	0·923 to 0·947
Whale	0·923
Opal, precious	2·114
Do. common, from	1·958 to 2·114
Opium	1·336

TABLE OF SPECIFIC GRAVITIES.—*Continued.*

Orpiment	from 3·048 to 3·500	Do. carbonate of,	from 3·658 to 3·675	Cedar, Indian	1·315
Oyster-shell	. . 2·092	Stone, Bristol, from	2·510 to 2·640	American	0·561
Pearl, oriental, from	2·510 to 2·750	cutlers'	. . 2·111	Cherry-tree	. 0·715
Pearlstone	. . 2·340	grinding	. . 2·142	Citron	. . 0·726
Peat	from 0·600 to 1·329	hard	. . 2·460	Cocoa-wood	. 1·040
Peruvian bark	. . 0·784	paving, from	2·415 to 2·708	Crab-tree	. 0·765
Phosphorus	. . 1·770	Portland	. . 2·496	Cork	. . 0·240
Pitchstone	from 1·970 to 2·720	Rotten	. . 1·981	Cypress, Spanish	0·644
Plumbago, or graphite,	from 1·987 to 2·400	Sugar	. . . 1·606	Ebony, American	1·331
Porcelain from China	2·384	Sulphur, native	. . 2·033	Do. Indian	1·209
Sèvres	2·145	fused	. . 1·990	Elder-tree	. 0·695
Porphyry	from 2·452 to 2·972	Talo	. from 2·080 to 3·000	Elm-tree	. . 0·671
Porphyry, Seltzer	. 1·003	Tallow	. . . 0·941	Filbert-tree	. 0·600
Proof-spirit	. . 0·923	Topaz	from 4·010 to 4·061	Fir, male	. 0·550
Pumice-stone from	0·752 to 0·914	Tourmaline	from 3·086 to 3·362	Do. female	. 0·498
Quartz	from 2·624 to 3·750	Turquoise,	from 2·500 to 3·000	Hazel	. . 0·600
Realgar	from 3·225 to 3·338	Ultramarine	. . 2·360	Jasmin, Spanish	0·770
Rock-crystal from	2·581 to 2·888	Uranite	. . . 2·190	Juniper-tree	. 0·556
Ruby, oriental	. . 4·283	Vesuvian	from 3·300 to 3·575	Lemon-tree	. 0·703
Sal gem	. . . 2·143	Vinegar	from 1·013 to 1·080	Lignum vitæ	1·333
Sapphire, oriental, from	4·000 to 4·200	Water, distilled	. 1·000	Linden-tree	. 0·604
Sardonyx	from 2·602 to 2·628	sea	. . 1·028	Mastick-tree	. 0·849
Scammony of Smyrna	1·274	Water, of Dead Sea	1·240	Mahogany	. 1·063
Aleppo	1·235	Wax, bees'	. . 0·964	Maple-tree	. 0·750
Schorl	from 2·922 to 3·452	white	. . 0·968	Medlar	. 0·944
Serpentine	from 2·264 to 2·999	shoemakers'	. 0·897	Mulberry, Spanish	0·897
Shale	. . . . 2·600	Whey, cows'	. . 1·019	Oak-heart, 60 yrs.	
Silver glance, from	5·300 to 7·208	Wine, Bourdeaux	. 0·993	old	. . 1·170
Slate (drawing)	. . 2·110	Burgundy	. 0·991	Olive-tree	. 0·927
Smalt	. . . 2·440	Constance	. 1·081	Orange-tree	. 0·705
Spar, fluor, from	3·094 to 3·791	Malaga	. . 1·022	Pear-tree	. 0·166
Do. calcareous, from	2·620 to 2·837	Port	. . . 0·997	Plum-tree	. 0·785
Do. double refrg. from	Castleton . 2·724	White Champagne	0·997	Pomegranate-tree	1·351
Spermaceti	. . 0·943	Wood, Alder	. . 0·800	Poplar-tree	. 0·383
Spodumene or triphane,	from 3·000 to 3·218	Apple-tree	. 0·793	Do. White Spanish	0·529
Stalactite	from 2·323 to 2·546	Ash	. . 0·845	Quince-tree	. 0·705
Steam of water	. . 0·481	Bay-tree	. 0·822	Sassafras	. . 0·482
Steatite	from 2·400 to 2·665	Beech	. . 0·852	Vine	. . 1·327
Stilbite	from 2·140 to 2·500	Box, French	. 0·912	Walnut	. . 0·681
Strontian, sulphate of, from	3·583 to 3·958	Dutch	. 1·328	Willow	. 0·585
		Brasilian, Red	1·031	Yew, Dutch	. 0·788
		Campeachy	. 0·913	Spanish	. 0·807
		Cedar, wild	. 0·596	Knot of 16 yrs. old	1·760
		Palest	0·613	Woodstone from	2·045 to 2·675
				Zeolite	from 2·073 to 2·718
				Zircon	from 4·385 to 4·700*

* It may be proper to add, that Mr. S. L. Kent, to whom we are indebted for much valuable information on this subject, has nearly completed the most extensive and accurate series of observations on the specific gravity of mineral bodies that has ever been attempted.

Having in the preceding portion of our article examined the nature of hydrostatic pressure, we may now proceed to treat of fluids in motion, and the structure of hydraulic machines.

One of the most simple instruments for raising water is the syphon; a bent tube which owes its operation to the pressure of the atmosphere. The ordinary syphon is represented at fig. 1, plate II., HYDROSTATICS and HYDRAULICS; and consists of a crooked tube A B C, of such a length, and with such an angle, or so bent at the vertex, as that, when the orifice A is placed on a horizontal plane, the height of A B may not exceed thirty-two or thirty-three feet. For common uses a foot or half a foot high suffices. If now the less arm A B be immersed in water, or any other liquid, and the air be sucked out of it by the aperture C till the liquor follow, it will continue to flow out of the vessel, through the tube B C, as long as the aperture A is under the surface of the liquor. Or if the syphon be at first filled with the fluid, and the aperture C stopped with the finger until the aperture A is immersed, the event will be precisely the same. During the process of sucking, the air in the tube is rarefied, and the equilibrium destroyed; consequently the water must be raised into the less leg A B, by the preponderating pressure of the atmosphere. The syphon being thus filled, the atmosphere presses equally on each extremity, so as to sustain any equal quantity of water in each leg; but the air not being able to sustain all the water in the longer leg, and being more than able to sustain that in the shorter leg, with the excess of force, therefore, it will raise new water into the shorter leg; and this new water cannot make its way

but by protruding the first before it: by this means the water is continually driven out at the longer leg, as fast as it is raised by the shorter.

The syphon will raise a stream of water to a considerable altitude in every situation where a little descent can be procured, but, while the operation continues, no water can directly be taken out of the stream above the lowest part of the tube. When, however, the two open ends of a syphon are closed, a quantity of water may be let out of the highest part, and its place supplied by introducing a like quantity of no use: all the avenues for the purpose being then closed, and the stream suffered to flow through the tube, the useless water will be displaced, and a fresh quantity may be soon after drawn off. This mode of exchanging fluids may be useful in furnishing a supply for domestic purposes; but there are some cases in which the water drawn off by this arrangement would not be thought sufficiently pure. To effect the same end the following apparatus has been suggested. In the upper part of the syphon E E, fig. 2, plate II., are inserted two small pipes, and their apertures in the inside of the tube should be divided by a projecting piece a quarter of an inch thick; wherever the pipes are inserted, the piece must be placed in such a position that the current will strike against one of its flat sides. The pipe which opens on that side of the obstacle, or dam, struck by the stream, may be called the water-pipe, and that on the other side the air-pipe. Insert their other ends into a circular vessel, the air-pipe opposite to *c* must rise to near the top of this vessel, but the water-pipe *o* need not rise above the place of its insertion; a cock perfectly air-tight must be fixed in each pipe between the vessel and syphon; the vessel must also have a tube in its lower part for letting out water. This tube must have a cock fixed in it, or a valve, covered with leather, to close its lower end. To hasten the delivery of the water in this vessel, the external air may be admitted in such a manner as is most convenient.

The communication between the vessel and syphon being intercepted by turning the cocks in the pipes *c o*, and the branches closed at their lower ends, the tube may be filled with water through an aperture in the top. After this aperture is closed, and a stream of water let into the cistern *o* for supplying the syphon, the ends of the branches may be opened, and a continued stream will flow through the tube.

When it is required to fill the vessel *c o* with water, exclude the external air, and open the pipes between it and the syphon. The vessel will soon be filled, and the water may be let out by opening the tube for that purpose; after which the small pipes are again closed by turning the cocks.

In estimating the discharge by a syphon, the head of water must be reckoned equal to the difference between the levels of the surface of the water, and of the lower orifice. The reason of this will be obvious, when it is recollected that the length of the shorter leg is only measured to the surface of the water, however far it may reach below; and that, as the action of the instrument is dependent on the discharging leg being the longer of two, the greater the difference in favor of this leg, the greater will be the force employed in promoting the discharge.

The improved syphon of M. Buten is shown at fig. 3, where A B is the long branch, with a bulb at A, and D C the short branch. This syphon requires neither to be blown into, nor any suction. It is sufficient to fill the long branch A B, and the ball A with the liquid, and to plunge the short branch C D into the liquid to be decanted. The bulb A, in emptying itself, draws off the liquid in contact with the short branch, and, though the bulb itself is partly empty, the flow is unremitting.

Another improved syphon by M. Hempel, is shown at fig. 4. It has the same advantages as that of M. Buten, and is more easily constructed on a large scale. A part of the liquid to be decanted is poured into the funnel A, at the top of the tube A B, which is fitted into the short branch of the syphon. As soon as the flow commences, through the long branch D C, the tube A B is withdrawn, and the flow of water continues.

The syphon is also occasionally disguised to form a philosophical toy, called Tantalus's cup, from the well known fable. This cup has a hollow stem, as at *y*, fig. 5, into which a small glass syphon *z* is cemented in such a manner that the upper bend of the syphon may be a little below the top of the cup, and the shortest leg *a* may very nearly touch it. On pouring water into the cup it will rise to its proper level in the tube *a*, but still the cup will hold water, but, on attempting to fill it, the water will still rise up the tube *a* until it reaches the bend, which it will flow over and thus fill the whole of the longer leg *z b*, and the instant this is effected the water will flow continuously from *b* until the cup is quite emptied. The upper part of the syphon *z a* may be concealed by placing a hollow image of a man over it, with the chin on a level with the bend of the syphon, when the cup will hold water until filled to the chin of the figure, but the water will begin to flow away as soon as it reaches that point.

The strange appearance of intermitting springs, or springs which run for a time and then stop altogether, and after a time run again, and then stop, is entirely occasioned by the channels in which the water flows being formed like syphons. Thus if A B C fig. 6, plate II., represents a hill or mountain, in which there is a hollow E F G, and a channel bent like a syphon F H B leading out of it. The water collected from the rills *d* will fill the hollow, and, as soon as it rises to the line O P, of the same height with H, it will rise to H in the channel, and then flow out through B, till the whole runs off to the level of F. It will then cease to flow until the hollow is again filled to the level O P, when it will flow again, and so on. Some springs called variable or reciprocating, do not cease to flow, but only discharge a much smaller quantity of water for a certain time, and then give out a greater quantity. This is owing to the hollow being supplied from another hollow, which is situated higher up, and has a common runner going to join the stream below the bend H; for this

runner keeps the stream always supplied to a certain degree, and when the lower hollow, which feeds the syphon runner F H, is filled up to O H, both the common runner and the syphon runner feed the stream together, until the lower hollow is drained.

In some places the most absurd tales are told and believed by ignorant people respecting such springs; their flowing and ceasing are ascribed to witchcraft; and designing men have sometimes taken advantage of the credulity of others, and gained credit for themselves, by fortelling the return of the spring after it had ceased, or pretending to stop it when it was running. Some notions connected with superstitions of this kind are adverted to in the account given of an intermitting, or rather a variable spring, at Laywell, near Torbay, in Devonshire, by Dr. Atwell, the first person who distinctly explained these appearances by a reference to the nature of the syphon. 'It is a long mile,' says he, 'distant from the sea, upon the north side of a ridge of hills lying between it and the sea, and making a turn or angle near this spring. It is situated in the side of those hills, near the bottom, and seems to have its course from the south-west towards the north-east. There is a constantly running stream which discharges itself near one corner into a basin, about eight feet in length, and four feet and a half in breadth, the outlet of which is at the farthest end from the entrance of the stream, about three feet wide and of a sufficient height. This I mention that a better judgment may be made of the perpendicular rise of the water in the basin at the time of the flux or increase of the stream. Upon the outside of the basin are three other springs which always run, but with streams subject to a like regular increase and decrease with the former: they seem indeed only branches of the former, or rather channels discharging some parts of the constantly running water, which could not empty itself all into the basin; and, therefore, when by means of the season or weather the springs are large and high, upon the flux or increase of this fountain, several other little springs are said to break forth, both at the bottom of the basin and without it, which disappear again upon the ebb or decrease of the fountain. All the constant running streams put together at the time I saw them, were, I believe, more than sufficient to drive an overshot mill, and the stream running into the basin might be one-half of the whole. I had made a journey, purposely to see it, in company with a friend; when we came to the fountain we were informed by a man working just by the basin, that the spring had flowed and ebbed about twenty times that morning, but had ceased doing so about half an hour before we came. I observed the stream running into the basin for more than an hour by my watch, without perceiving the least variation in it, or the least alteration in the height of the surface of the water in the basin; which we could observe with great nicety by means of a broad stone laid in a shelving position in the water. Thus disappointed, we were obliged to go and take some little refreshment at our inn; after which, we intended to come back and spend the rest of our time by the fountain, before we returned home. They told us in the house that many had been disappointed in this manner, and the common people superstitiously imputed it to I know not what influence which the presence of some people had over the fountain; for which reason they advised, that, in case it did not flow and ebb when we were both present, one of us should absent himself, to try whether it would do so in the presence of the other. Upon our return to it, the man, who was still at work, told us that it had begun to flow and ebb about half an hour after we went away, and had done so ten or twelve times in less than a minute. We saw the stream coming into the basin, and likewise the others on the outside of the basin began to increase, and to flow with great violence, upon which the surface of the water in the basin rose an inch and a quarter perpendicularly, in nearly the space of two minutes; immediately after which the stream began to abate again to its ordinary course, and in nearly two minutes time the surface was sunk down to its usual height, where it remained two minutes more; then it began to flow again as before, and, in the space of twenty-six minutes, flowed and ebbed five times; so that an increase, decrease, and pause, taken together, were made in about five minutes, or a little more. I could observe by the mark upon the stones, that the surface of the water in the basin had risen, before we came, at least three quarters of an inch perpendicularly higher than we saw it; and I thought that I could perceive some very little abatement each turn, both in the height, and in the time of its sinking; but the time of the pause, or standing on the surface at its usual height, or equable running of the stream, was lengthened, yet so as to leave some abatement in the time of the rising, sinking, and pause all together.'

It should seem, that, in the hill from which this stream comes, there are three hollows, or reservoirs, of different sizes, and connected by syphons of different widths. The times of the increase and decrease lengthening, arises from the water sinking in one of the reservoirs, which makes it flow more slowly than when it is full.

Having already briefly adverted to the principle upon which the syphon acts, it will now be necessary for us to show in what manner this instrument may be employed as a prime mover. The apparatus to which we allude was contrived by Mr. C. A. Busby, the son of Dr. Busby, and termed the hydraulic orrery. The original apparatus, as described by Mr. Busby, in the fortieth volume of the Transactions of the Society of Arts, is exceedingly complicated; but the following arrangement, as constructed by Mr. Partington, and employed by him in his public lectures, will be found to possess much greater simplicity, and its construction will be easily understood. A, fig. 7, plate II., represents a tin water-tight vessel, placed in a circular trough C. The upper vessel of water is furnished with an upright stem of wire, supporting a ball S, which is intended to represent the sun. The smaller balls, E and *m*, revolve round the larger sphere in the same time that the earth and moon revolve round the sun, and as such, serve to convey a

olerably accurate idea of the movements of hose bodies. The syphon B may be considered is the prime mover; as the lateral apertures at), by allowing the escape of a small portion of vater from the lower extremity of the instrument, lestroy the equilibrium within the tube, and ive a preponderance of power to the side which s opposed to the jet, and by this simple process n equable rotatory motion is produced: the hole apparatus floating round the central wire iat supports the sun.

The mode of constructing pumps must next e examined. The common sucking-pump consists of a pipe, open at both ends, in which is a ioveable piston, bucket, or sucker, in which is tuated the valve. The piston is leathered ound, so as to move freely, but not to admit any ir between it and the pump-barrel. When the ump is worked, the piston is raised, and causes vacuum between itself and the valve below; ie external pressure of the air upon the surface f the water in the well then forces it up through ie lower valve to supply the vacuum, when the hole space between the valves is filled with ater. At the next stroke of the pump, the iston is forced down, and the water rises rough the upper valve; when the piston, on ing again raised, in addition to its former peration, lifts up the water which had before ssed through the upper valve, and discharges from the spout of the pump; and this it conues to do as long as the pump is worked. hus, every time the piston is raised, the lower lve rises, and the upper one falls; and every ne it is depressed the upper valve opens, hile the lower one shuts.

As it is the pressure of the atmosphere which uses the water to rise and follow the piston or cket as it is drawn up; and since a column water, about thirty-two feet high, is of the me weight as a column of air of equal area, om the earth to the utmost height of the atmohere, therefore, the perpendicular height of the ston or bucket, from the surface of the water the well, must always be less than thirty-two et. For, independently of the inconvenience most cases of having so long a stroke, if it ere ever so much increased, the water would ver rise higher than thirty-two feet (nor indeed high, as it would have the weight of the valve lift), and there would be an empty space tween the surface of the water in the pumprrel and the sucker, and consequently a consirable loss of time and labor. But, when the ter has once passed through the upper valve, may be lifted by it to any height, if the pistond be made long enough, and a sufficient degree strength employed, without ever lengthening e stroke.

The construction of pumps is usually exained to the student by glass models, in which e action both of the pistons and valves may be en. In order to understand the arrangement of e common pump, we may refer to fig. 8, plate II. is a vessel intended to contain water, which must deep enough to rise at least as high as from B to

The valve *a* on the moveable bucket D, and e valve *b* on the fixed box E (which box quite ls the bore of the pipe or barrel at E), will each lie close, by its own weight, upon the hole in the bucket and box, until the engine begins to work. The valves are made of brass, and covered underneath with leather for closing the holes more exactly; and the bucket D is raised and depressed alternately by the handle F and rod G *c*, the bucket being supposed at H before the working begins.

Take hold of the handle F, and thereby draw up the bucket from H to I, which will make room for the air in the pump to dilate itself, by which its spring is weakened, and then its force is not equivalent to the weight or pressure of the outward air upon the water A: and, therefore, at the first stroke, the outward air will press up the water through the notched foot B, into the lower pipe, about as far as *d*: this will condense the rarefied air in the pipe between *d* and I to the same state it was in before; and then, as its spring within the pipe is equal to the force or pressure of the outward air, the water will rise no higher by the first stroke; and the valve *b*, which was raised a little by the dilatation of the air in the pipe, will fall, and stop the hole in the box E; and the surface of the water will stand at *d*. Then depress the piston or bucket from I to H, and, as the air in the part H cannot get back again through the valve *b*, it will (as the bucket descends), raise the valve *a*, and so make its way through the upper part of the barrel *c*, into the open air. But, upon raising the bucket D a second time, the air between it and the water in the lower pipe at *d*, will be again left at liberty to fill a larger space; and so, its spring being again weakened, the pressure of the outward air on the water A, will force more water up into the lower pipe from *d* to *e*; and when the bucket is at its greatest height I, the lower valve *b*, will fall, and stop the hole in the box E, as before. At the next stroke of the bucket or piston, the water will rise through the box E towards H, and then the valve *b*, which was raised by it, will fall when the bucket D is at its greatest height. Upon depressing the bucket again, the water cannot be pushed back through the valve *b*, which keeps close upon the hole whilst the piston descends. And, upon raising the piston again, the outward pressure of the air will force the water up through E, where it will raise the valve, and follow the bucket to I. Upon the next depression of the bucket D it will go down into the water in the barrel H; and, as the water cannot be driven back through the now close valve *b*, it will raise the valve *a* as the bucket descends, and will be lifted up by the bucket when it is next raised. And now, the whole space below the bucket being full, the water above it cannot sink when it is next depressed; but, upon its depression, the valve *a* will rise to let the bucket go down; and when it is quite down the valve *a* will fall by its weight, and stop the hole in the bucket. When the bucket is next raised, all the water above it will be lifted up and begin to run off by the pipe K. And thus, by raising and depressing the bucket alternately, there is still more water raised by it; which, getting above the pipe K, into the wide top L, will supply the pipe, and make it run with a continued stream.

The common sucking-pump may, by a small addition, be converted into a lifting-pump, fitted for propelling the water to any distance, and with any velocity. Fig. 9 is a sucking-pump whose working-barrel A B has a lateral pipe, C, connected with it close to the top. This terminates in a main, or rising-pipe, furnished, or not, with a valve. The top of the working-barrel A B is shut by a strong plate, having a hollow neck terminating in a small flanch. The piston-rod passes through this neck, and is accurately turned and polished. A number of rings of leather are put over the rod, and strongly compressed round it by another flanch and several screwed bolts. By this contrivance, the rod is closely grasped by the leathers, but may be easily drawn up and down, while all passage of air and water is effectually prevented. The piston is perforated, and furnished with a valve opening upwards. There is also a valve T on the top of the suction-pipe; and it will be of advantage, though not absolutely necessary, to put a valve L at the bottom of the rising-pipe. Now, suppose the piston at the bottom of the working-barrel; when it is drawn up, it tends to compress the air above it, because the valve in the piston remains shut by its own weight. The air, therefore, is drawn through the valve L into the rising-pipe, and escapes. In the mean time, the air, which occupied the small space between the piston and the valve T, expands into the upper part of the working-barrel; and its elasticity is so much diminished thereby, that the atmosphere presses the water of the cistern into the suction-pipe, where it rises until an equilibrium is again produced. The next stroke of the piston, downwards, allows the air which had come from the suction-pipe into the barrel during the ascent of the piston, to get through its valve. Upon drawing up the piston, the air is also drawn off through the rising pipe. Repeating this process brings the water at last into the working-barrel, and it is then driven along the rising-pipe by the piston.

This is one of the best forms of a pump. The rarefaction may be very perfect, because the piston can be brought so near to the bottom of the working barrel; and, for forcing water in opposition to great pressures, it appears preferable to the common forcing-pump; because in that, the piston-rod is compressed and exposed to bending, which greatly hurts the pump, by wearing the piston and barrel on one side. This soon renders it less tight; and much water squirts out by the sides of the piston. But in this pump the piston-rod is always drawn, or pulled, which keeps it straight, and rods exert a much greater force in opposition to a pull than to compression. The collar of leather round the piston-rod is found by experience to be very impervious to water; and, though it needs but little repair, yet the whole is very accessible; and, in this respect much preferable to the common pump in deep mines, where every fault of the piston obliges us to draw up some hundred feet of piston-rods. By this addition, too, any common pump, for the service of a house, may be converted into an engine for extinguishing fire; or may be made to convey the water to every part of the house; and this without hurting or obstructing its common uses. All that is necessary is, to have a large cock on the upper part of the working-barrel, opposite to the lateral pipe in this figure. This cock serves for a spout, when the pump is used for common purposes; and the merely shutting this cock converts the whole into an engine for extinguishing fire, or for supplying distant places with water. It is scarcely necessary to add, that, for these services, it will be requisite to connect an air-vessel with some convenient part of the rising-pipe, in order that the current of water may be continual.

It is of considerable importance that as equable motion as possible be produced in the main pipe, which diminishes those strains to which it is otherwise liable. The application of an air vessel, at the beginning of the pipe, answers this purpose. In great works it is usual to effect this by the alternate action of two pumps. It will be rendered still more uniform if four pumps be employed, succeeding each other at the interval of one quarter of the time of a complete stroke.

But ingenious men have attempted the same thing with a single pump; and many different constructions for this purpose have been proposed and executed. Fig. 10 represents one of the best. It consists of a working-barrel *a b*, closed at both ends; the piston *c* is solid, and the piston-rod passes through a collar of leathers at the top of the barrel. This barrel communicates laterally with two pipes *n* and *k*, the communications being as near to the top and bottom of the barrel as possible. At each of the communications are two valves, opening upwards. The two pipes unite in a larger rising-pipe at *b*, which bends a little back, to give room for the piston-rod. Suppose the piston down close to the entry of the lateral pipe *h*; when it is drawn up, it compresses the air above it, and drives it through the valve in the pipe *k*, whence it escapes through the rising-pipe; at the same time it rarefies the air below it. Therefore the weight of the atmosphere shuts the valve *m*, and causes the water in the cistern to rise through the valve *n*, and fill the lower part of the pump. When the piston is pushed down again this water is fresh driven through the valve *m*, because *n* immediately shuts; and then most of the air which was in this part of the pump at the beginning goes up through it, some of the water coming back in its stead. In the mean time the air which remained in the upper part of the pump after the ascent of the piston, is rarefied by its descent; because the valve *o* shuts as soon as the piston begins to descend, the valve *p* opens, the air in the suction-pipe *h*, expands into the barrel, and the water rises into the pipes by the pressure of the atmosphere. The next rise of the piston must bring more water into the lower part of the barrel, and must drive a little more air through the valve *o*, namely, part of that which had come out of the suction-pipe *h*; and the next descent of the piston must drive more water into the rising-pipe *k*, and along with it most, if not all, of the air which remained below the piston, and must rarefy still more the air remaining above the piston; and more water

will come in through the pipe *h*, and get into the barrel. It is evident, that a few repetitions will at last fill the barrel on both sides of the piston with water. When this is accomplished, there is no difficulty in perceiving how, at every rise of the piston, the water of the cistern will come in by the valve *n*, and the water in the upper part of the barrel will be driven through the valve *o*; and, in every descent of the piston, the water of the cistern will come into the barrel by the valve *p*, and the water below the piston will be driven through the valve *m*; and thus there will be a continual influx into the barrel through the valves *n* and *p*, and a continual discharge along the rising-pipe *l*, through the valves *m* and *o*.

This machine is certainly equivalent to two forcing-pnmps, although it has but one barrel and one piston; but it has no sort of superiority. It is not even more economical, in most cases; because, probably, the expense of the additional workmanship will equal that of the barrel and piston, which is saved. There is, indeed, a saving in the rest of the machinery, because one lever produces both motions. It therefore cannot be called inferior to two pumps; and there is undoubtedly some ingenuity in the contrivance.

The forcing-pump represented at fig. 1, plate III., consists of a barrel A B, and a piston or forcer C. It is also provided with an air-vessel *v*.

When the forcer is first moved upwards in the barrel, the air between that and the water below, having room to dilate, by its natural spring, will of course be rarefied; the pressure of the atmosphere being intercepted by the force of the barrel A B on one hand, and by the upper valve at S in the branching-pipe, on the other, the water will rise from the spring into A B, for the reason already given; and repeated strokes of the piston will fetch up the fluid to the forcer, and fill the cavity of the pipes between the fixed valves D and S. The water in this manner raised, being hindered from going down again by the lower valve, will be pressed by the forcer every time it descends, and be thereby obliged to make its way where there is least resistance, viz. through the upper valve at S. And whenever, on the rising of the forcer, this pressure intermits, the valve at S will immediately close under the weight of the upper water, and prevent its return that way, while the piston is rising with a fresh supply; and this is repeated at every stroke of the forcer.

It is evident that the operation of a pump is by starts, and that the water in the main remains at rest, pressing on the valve during the time that the piston is withdrawn from the bottom of the working-barrel. It is in most cases desirable to have this motion equable, and in some cases it is absolutely necessary. Thus, in the engine for extinguishing fires, the spout of water, going by jerks, could never be directed with a certain aim, and half of the water would be lost by the way; because a body at rest cannot in an instant be put in rapid motion; and the first portion of every jerk of water would have out a small velocity. A very ingenious contrivance has been fallen upon for obviating this inconvenience, and procuring a stream nearly equable. At any convenient part of the rising pipe, beyond the valve S, there is annexed a strong and capacious vessel V, closed at top by a small pipe T fixed into it, which reaches nearly to the bottom of the vessel. When the water is forced along the rising-pipe, S, it gets into this vessel, and rises above the lower part of the pipe T. The air, which is above the water in the vessel, being now confined, and being condensed into a smaller space by the admission of more water at each action of the piston, presses by its elasticity upon the surface of the water, which cannot return by the valve S, and forces it up the pipe T in a continued stream. This air-vessel must be so large, that the change of bulk of the compressed air, during the inaction of the piston, may be inconsiderable, otherwise the stream will not continue until the next stroke. We must not imagine, that because the stream produced by the assistance of an air-vessel is almost perfectly equable, and because as much water runs out during the returning of the piston as during its active stroke, that it therefore doubles the quantity of water. No more water can run out than what is sent forward by the piston during its effective stroke. The continued stream is produced only by preventing the whole of this water from being discharged during this time, and by providing a propelling force to act during the piston's return. It is, however, a matter of fact, that a pump, furnished with an air-vessel, delivers a little more water than it would do without it.

In forcing-pumps it is of the utmost consequence to avoid all contractions in the pipes. The main, which leads from the forcing-pumps, should be equal to the working barrel. If it be only half the diameter, it has but one-fourth of the area; the velocity in the main is four times greater than that of the piston; and the force necessary for discharging the same quantity of water is sixteen times greater. It is not, however, possible to avoid these contractions altogether, without making the main wider than the barrel; for if only so wide, with an entry of the same size, the valve makes a considerable obstruction. Unskilful engineers endeavour to obviate this, by making an enlargement in that part of the main which contains the valve. If this be not done with great judgment, it will increase the obstruction; for, if this enlargement be full of water, the water must move in the direction of its axis with a diminished velocity; and, when it comes to the main, it must again be accelerated. In short, any abrupt enlargement, which is to be afterwards contracted, does as much harm as a contraction, unless it be so short that the water in the axis keeps its velocity until it reach the contraction. All angular enlargements, all boxes into which the pipes, from different working-barrels, unite their water before it goes into a main, must therefore be avoided by an artist who would execute a good machine; and the different contractions, which are unavoidable at the seats of valves, and the perforations of pistons, &c., should be diminished, by giving the parts a trumpet shape. In the air-vessel, for producing a constant stream, this is of

very great consequence. The throat, or the end of the tube through which the water is forced by the expansion of the confined air, should be always formed in this manner. A neglect of this seemingly trifling circumstance will diminish the performance at least one-fifth.

The requisites of a valve are, that it be tight, and of sufficient strength to resist the pressure to which it is exposed; that it afford a free passage to the water; and that it do not allow much to go back whilst it is shutting. The clack-valve is of all others the most obvious and common. It consists merely of a leather flap, covering the aperture, and having a piece of metal on the upper side, both to strengthen and to make it heavier, that it may shut of itself. Sometimes the hinge is of metal. The hinge being liable to be worn by such incessant motion, and as it is troublesome, especially in deep mines and under water, to undo the joint of the pump, in order to put in a new valve, it is frequently annexed to a box like a piston, made a little conical on the outside, and dropt into a conical seat made for it in the pipe, where it sticks fast; and, to draw it up again, there is a handle, like that of a basket, fixed to it, which can be laid hold of by a long grappling-iron. The only defect of this valve is, that, by opening very wide, when pushed up by the stream of water, it allows a good deal to go back during its shutting again.

The butterfly-valve is free from most of these inconveniences, and seems to be the most perfect of the clack-valves. It consists of two semicircular flaps revolving round their diameters, which are fixed to a bar placed across the opening through the cistern. Some engineers make their great valves of a pyramidal form, consisting of four clacks, whose hinges are in the circumference of the water-way, and which meet with their points in the middle, and are supported by four ribs, which rise up from the sides, and unite in the middle. This is a most excellent form, affording a more spacious water-way, and shutting very readily.

There is another form of a valve, called the button, or tail-valve. It consists of a plate of metal turned conical on the edge, so as exactly to fit the conical cavity of its box. A tail projects from the under side, which passes through a cross bar in the bottom of the box, and has a little knob at the end, to hinder the valve from rising too high. This valve, when nicely made, is unexceptionable. It has great strength, and is therefore proper for all severe strains; and it may be made perfectly tight by grinding. Accordingly, it is used in all cases where tightness is of indispensable consequence. It is most durable, and the only kind that will do for passages where steam or hot water is to pass through.

Mr. Perkins has contrived an ingenious and valuable ship's pump, which may be constructed by sea-faring people while at sea, from materials that are always found on board; viz. deal boards or planks, leather, nails, canvas, and tar.

This pump is constructed as follows: take four strips of deal boards, of suitable width and length, nail them firmly together, so as to form a square trunk: this trunk is next covered entirely with tarpawling; then another layer of boards is laid over the trunk, observing to break the joints. A third layer of boards, nailed firmly to the first and second layer, will complete the body of the pump, if of a common size (say five inches); but, if the pump is larger, it may be strengthened by adding more layers of boards. The substitute for the upper box of the common pump consists of two isosceles triangular valves, the sides of which are double the length of the base, jointed with leather to two square pieces of wood (hard wood, if convenient). These two pieces of board, to which the valves are jointed, play diagonally in the pump. Between these two pieces of board is fastened, with nails, the pump rod, which is also made of deal board: the leather which forms the joint should be extended over the sides of the valves, so as to form the stuffing, as the valves lie obliquely in the angles of the pump. The inside of the valves may be loaded with sheet lead, if convenient; at any rate, they should be filled with as many nails as the valves will hold without weakening them. The upper valves are furnished with a check string, to prevent the friction of the valves on the sides of the pump; this check, which may be made of small line, is very important to the ease of working the pump. It should be so adjusted as to prevent the valves from resting on the sides of the pump; the leather only should touch the pump. The lower valves, which are fixed to the bottom of the pump, are made similar to the upper valves, with the exception of the rod and check. Between the lower valves a piece of hard wood, for hooking up the valves, if no sheet iron or copper is at hand, should be fastened.

This pump works very easily, owing to the water-way by the valves being much greater than the water-way through common boxes. It is not liable to choke, in consequence of the water not being wire-drawn below the boxes or valves; for the water-way below the valves may be so contracted as to draw up even iron; but, by enlarging the bottom of the pump, this will be remedied.

Plate III., Hydrostatics and Hydraulics, fig. 2, is a side section of the pump; and fig. 4 the upper end of the trunk. A A, body of the pump: C C, pump rods: D D, upper valves: E E, lower valves.

We may now notice the ingenious pump contrived by Mr. Aust, for which he was rewarded by the Society of Arts. The advantages which it possesses over pumps of the ordinary construction depend on the curvilinear form of the barrel, which allows, and indeed obliges, the rod, the handle, and the lever, on which it works, to be all in one piece. Hence results, not only a much greater simplicity in the workmanship, and consequent cheapness, but a greater steadiness and precision of action, whereby more water is discharged, and the leathering of the valve will last a much longer time without wanting repair.

Plate III., fig. 3, is a view of the pump, *a a*, the barrel, forming a curve of a quarter of a circle, fixed at the upper end to the head *f*, and at its lower to the pipe *b*: *b b*, the pipe that conducts the water into the barrel; it is made curvilinear, in order that as little ob-

stacle as possible may be opposed to the ascending water: *c*, *c*, *c*, the piston, the handle, and the lever, on which it works, all in one piece; the piston part is curved, to correspond with the curvature of the barrel: *d*, the pivot on which the lever of the handle works: *e*, a flat plate to which the whole apparatus is fastened, and which may itself be screwed to a block of wood fixed against the wall.

Mr. Eve's patent pump is probably one of the most ingenious and valuable inventions of its kind that has appeared of late years; there are no valves to open and close, the moving parts being rotatory; their speed may therefore be increased at pleasure, and to an almost unlimited degree. The water pumped up is in proportion to the speed of the revolving parts, and to the force applied. Figs. 5, 6, will, however, best illustrate its construction. A shows a front view; and B an interior view; after the end of the case with the cog-wheels is removed.

The principle is this: two cylinders of equal diameter (three inches and a half) and equal length (six inches), move in close contact on axes or pivots, and revolve in opposite directions, in an outer case or box. These cylinders have each two wings, of three-fourths of an inch area, and two grooves; and, as they revolve, the wing of one cylinder falls regularly into the groove of the other, alternately, and so in rotation; and in order that the groove may present itself regularly to the wings of the opposite cylinder, and let them pass, cog-wheels, placed outside the case, are fixed to the axes or pivots, which project: these cog-wheels insure not only an even revolution of the two moving parts, but they communicate the power, which is applied by means of a handle, to the axis of a large toothed wheel gearing into one of the two cog-wheels.

The pump-case is placed upon a common pipe, descending down to the well twenty-one feet below. Two men, turning the handle, raise half a ton of water in three minutes with this small pump; which is allowed to be a most satisfactory result, considering that, as the first pump constructed on this principle, it has of course many imperfections.

By substituting an air-vessel, with a hose and pipe, the machine becomes the most simple, strong, and effectual fire-engine. It may be converted into a water-wheel, where a small stream with a high fall of water exists, or be acted upon by steam as a rotatory steam-engine.

The advantages which it possesses over common pumps are manifold and self-evident. The most conspicuous are, a saving of power, on account of the friction being much less than in ordinary pumps. It requires no leathering, being made entirely of metal; it does not wear, as no parts touch or rub, except the axes or pivots on their bearings. Its simplicity, strength, and elegance, and the ease with which it is turned into a fire-engine, the saving of room, and weight in pump work, if applied to deep wells or shafts in mines, the advantages as a ship's pump, are peculiar, and too numerous here to enumerate.

Mr. William Brunton, of Butterly iron works in Derbyshire, has presented to the Society of Arts an improved pump for mining, which obviates many difficulties connected with the ordinary arrangements. To prevent the pump drawing air, he has introduced a side pipe, connecting the parts of the working barrel which are above and below the bucket, which pipe has a stop valve, that the miners can regulate with the greatest ease, so as to keep the engine to its full stroke, without drawing air, by letting down the water from the upper part of the barrel into the lower, so that it is working again in its own water. Instead of having the whole weight of the lower lift of pumps standing on the bottom, it is fixed in the pit by cross beams, and the miner has only to fit and move an additional pipe or wind-bore, which slides upon the lower length of the pump like a telescope, to lengthen down, and this additional wind-bore is besides crooked, and turned aside like a short crank, which, by the facility with which it turns round in the leathered collar above the nose of it, can easily be removed into every fresh hole which is made in the bottom by the miners. The pumps are supported in the pit by beams placed across at proper distances, so as to suit the lengths of the pipes, or lengths of the pump, which are nine feet. Short pieces are laid across these, with half circular holes in them: which being put round the pump, first beneath the flanches, firmly sustain its weight, but may quickly be removed when it is required to lower the pumps in the pit; and, as they are not fastened by any bolt, they do not prevent the pumps being drawn upwards, if it becomes necessary to take out the pumps when the pit is full of water. The pumps by these means remain stationary, and the suction-pipe lengthens as the pit is sunk, until it is drawn out to its full extent; the whole column is then lowered to the next flanches, and another pipe is added to the top. The pumps being thus kept stationary till nine feet are sunk, the pipe at the top will of course deliver the water at the same level at all times, and, instead of being obliged to lengthen the column every yard sunk, it will only be necessary every nine feet. Plate III., fig. 7, explains the construction of Mr. Brunton's pump, being a section through the centre of the working barrel and suction-piece. A is the door which unscrews to get at the clack of the pump; B is the working barrel, with the bucket D working in it; E is the clack, also shown enlarged in figs. 8 and 9; F is the suction-pipe, and G G a moveable lengthening piece: this slides over, and includes the other when the pump is first fixed; but, as the pit is sunk, it slides down over the pipe F, to reach the bottom. The outside of the inner pipe F is turned truly cylindrical and smooth, and the inside of the outer pipe G, at the upper end, for about six inches down, is made to fit it. The junction is made perfect, by leathers being placed in the bottom of the cup *a a*, which holds water and wet clay over them, to keep them wet and pliable, and consequently air-tight. The lower extremity of the suction-pipe G, terminates in a nose R, pierced with a number of small holes, that it may not take up dirt. This nose is not placed in a line with the pipe, but curved to one side of it, like a crank, so as to describe a circle when turned round. By this means the miners, by turning it round upon the

pipe F, can always place the nose R in the deepest part of the pit; and, when they dig or blast a deeper part, they turn the nose about into it, the sliding tube lengthening down to reach the bottom of the hole, as shown in the figure. By this means there is never a necessity to set a shot for blasting so near the pump-foot as to put it in any danger of being injured by the explosion, as is the case in the common pump, in which this danger can only be avoided by moving the pump-foot to one side of the pit, which necessarily throws the whole column of pumps out of the perpendicular.

The construction of the clack is explained by the preceding figs., the former being a section, and the latter a plan. L L is a cast-iron ring, fitting into a conical seat in the bottom of the chamber of the pump, as shown in fig. 10; it has two stems *l*, *l*, rising from it, to support a second iron ring M M; just beneath this, a bar *m* extends across from one stem to another, and has two screws tapped through it; these press down a second cross-bar *n*, which holds the leather of the valves down upon the cross-bar of the ring L, and this makes it fast, forming the hinge on which the double valves open, without the necessity of making any holes through the leather, as is common; but the chief advantage is, that by this means the clack can be repaired, and a new leather put in, with far less loss of time than at present, an object of the greatest importance; for in many situations the water gathers so fast in the pit, that if the clack fails, and cannot be quickly repaired, the water rises above the clack door, so as to prevent any access to it, and there is no remedy in the common pump but drawing up the whole pile of pumps, which is a most tedious and expensive operation. In Mr. Brunton's pump, the clack can at any time be drawn out of it, by first drawing out the bucket, and letting down an iron prong Z, which has hooks on the outside of its two points: this, when dropped down, will fall into the ring M, and its prongs springing out will catch the under side, and hold it fast enough to draw it up. Another part of Mr. Brunton's improvement consists in the addition of a pipe H, which is cast at the same time with the barrel, and communicates with it at the top and bottom, just above the clack: at the upper end the pipe is covered by a flat sliding plate, which can be moved by a small rod *b*, passing through a collar of leather; the rod has a communication by a lever, so that the valve can be opened or shut by the men in the bottom of the pit. The object of this side pipe is to let down such a proportion of the water which the pump draws, as will prevent its drawing air; though, of course, the motion of the engine will be so adapted as not to require a great proportion of the water to be thus returned through the side pipe, yet it will not be possible to work the engine so correctly as not to draw some without this contrivance, and, if it does, it draws up much dirt and pieces of stone into the pump, besides causing the engine to work very irregularly, in consequence of partially losing its load every time the air enters the pump. Another use of the side pipe is to let down water into the chamber of the clack to fill it, when the engine is first set to work, after the pumps have been standing still, and the lower part of the barrel and chamber empty.

When a spiral pipe, consisting of many convolutions, arranged either in a single plane, or in a cylindrical or conical surface, and revolving round a horizontal axis, is connected at one end by a water-tight joint with an ascending pipe, while the other end receives, during each revolution, nearly equal quantities of air and water, the machine is called a *spiral pump*. It was invented about 1746, by Andrew Wirtz, a pewterer at Zurich. The end of this pipe is furnished with a spoon, containing as much water as will fill half a coil, which enters the pipe a little before the spoon has arrived at its highest situation; the other half remaining full of air, which communicates the pressure of the column of water to the preceding portion, and in this manner the effect of nearly all the water in the wheel is united, and becomes equivalent to that of the column of water, or of water mixed with air, in the ascending pipe. The air nearest the joint is compressed into a space much smaller than that which it occupied at its entrance; so that, where the height is considerable, it becomes advisable to admit a larger portion of air than would naturally fill half the coil, and this lessens the quantity of water raised, but it lessens also the force required to turn the machine. The joint ought to be conical, in order that it may be tightened when it becomes loose, and the pressure ought to be removed from it as much as possible. The loss of power, supposing the machine well constructed, arises only from the friction of the water in the pipe, and the friction of the wheel on its axis; and, where a large quantity of water is to be raised to a moderate height, both of these resistances may be rendered inconsiderable. But, when the height is very great, the length of the spiral must be much increased, so that the weight of the pipe becomes extremely cumbersome, and causes a great friction on the axis, as well as a strain on the machinery: thus, for a height of forty feet, Dr. Young found that the wheel required above 100 feet of a pipe which was three-quarters of an inch in diameter; and, more than one-half of the pipe being always full of water, we have to overcome the friction of about eighty feet of such a pipe, which will require twenty-four times as much excess of pressure to produce a given velocity, as if there were no friction. The centrifugal force of the water in the wheel would, also, materially impede its ascent if the velocity were considerable, since it would be always possible to turn it so rapidly as to throw the whole water back into the spoon. The machine which Dr. Young had erected being out of repair, he thought it more eligible to substitute for it a common forcing-pump, than to attempt to make any further improvement in it, under circumstances so unfavorable. But if the wheel, with its pipes, were entirely made of wood, it might in many cases succeed better; or the pipes may be made of tinned copper, or even of earthenware, which might be cheaper and lighter than lead.

The *chain-pump* consists of two square or cy-

lindrical barrels, through which a chain passes, having a great number of flat pistons, or valves, fixed upon it at proper distances. The chain passes round a wheel, fixed at one end of the machine. The teeth of this are so contrived as to receive one-half of the flat pistons, which go free of the sides of the barrel by nearly a quarter of an inch, and let them fold in, and they take hold of the links as they rise. A whole row of the pistons, which go free of the sides of the barrel by nearly a quarter of an inch, are always lifting when the pump is at work, and, as this machine is generally worked with rapidity, they bring up a full bore of water in the pump. It is worked either by one or two handles, according to the labor required.

The many fatal accidents which happen to ships, from the choking of their pumps, makes it an important object in naval affairs to find some machine for freeing ships from water, not liable to so dangerous a defect. The chain-pump, being found least exceptionable in this respect, was adopted in the British navy; but the chain-pump itself is not free from imperfections. If the valves are not well fitted to the cylinders, through which they move, much water will fall back; if they are well fitted the friction of many valves must be considerable, besides the friction of the chain round the sprocket-wheels, and that of the wheels themselves. To which may be added the great wear of leathers, and the disadvantage which attends the surging and breaking of the chain. The preference, therefore, which has been given to chain-pumps over those which work by the pressure of the atmosphere, must have arisen from one circumstance, that they have been found less liable to choke.

In point of friction, of coolness, and of cheapness, the sucking pump has so evidently the advantage over the chain-pump, that it will not fail to gain the preference, whenever it shall be no longer liable to be choked with gravel and with chips.

Buchanan's pump, which, like the common pump, acts by the pressure of the atmosphere, is not liable to the defects incident to other pumps upon that principle, being essentially different from any in general use.

The principal object of its invention was to remove the imperfection of choking, and, in attaining this important end, a variety of collateral advantages have also been produced, which enhance its utility.

The points in which it differs essentially from the common pump, and by which it excels, are, that it discharges the water below the piston, and has its valves lying near each other.

The advantages of this arrangement are—that the sand or other matter, which may be in the water, is discharged without injuring the barrel or the piston-leathers; so that, besides avoiding unnecessary wear and tear, the power of the pump is preserved, and not apt to be diminished or destroyed in moments of danger, as is often the case with the common and chain-pumps—that the valves are not confined to any particular dimensions, but may be made capable of discharging every thing that can rise in the suction-piece, without danger of being choked—that, if there should happen upon any occasion to be an obstruction in the valves, they are both within the reach of a person's hand, and may be cleared at once, without the disjunction of any part of the pump—and that the pump is rendered capable of being instantaneously converted into an engine for extinguishing fire. Besides, it occupies very little space in the hold, and thus saves room for stowage.

But this pump is not confined to nautical uses alone; its adaptation extends to the raising of water in all situations, and with peculiar advantage where it happens to be mixed with sand or substances which destroy other pumps, as, for instance, in alum-works, in mines, in quarries, in the clearing of foundations; and in its double capacity it will be very convenient in gardens, bleaching-grounds, in stable, and farm yards, and in all manufactories, or other places, where there is a necessity for raising water and the risk of fire.

With all these advantages, it is a simple and durable pump, and may be made either of metal or wood, at a moderate expense.

Fig. 1, plate IV. HYDROSTATICS and HYDRAULICS, is a vertical section of the pump, as made of metal, in which A is the suction-piece, B the inner valve, C the outer valve.

The valves are of the kind called clack-valves. Their hinges are generally made of metal, as being more durable than leather.

D the working-barrel, E the piston, G the spout.

The following parts are necessary only when the pump is intended to act as a fire-engine.

H an air-vessel, which is screwed like a hose-pipe, that it may, at pleasure, the more readily be fixed or unfixed.

There is a perforated stopple for the spout, made for receiving such pipes as are common to fire-engines. It is oval and tapered, and, being introduced transversely, upon being pulled back, becomes immediately tight.

These parts being provided, all that is necessary to make the pump act as a fire-engine, after having been used as a sucking-pump, is to plug up the spout with the stopple.

No particular mode being essential in the working of this pump, it may, according to choice, or circumstances, be wrought by all the methods practised with the common pump. In many cases, however, it may be advantageous to have two of them so connected as to have an alternate motion, in which case one air-vessel, and even one suction-piece, might serve both.

The usual method of working pumps, either in distilleries, &c., or on board ships, is to force the water to the top of the barrel, and allow it to run off to a lower level.

It is quite clear that, if the water in this case descends from the top of the pump to a place of delivery much below the top of the pump-barrel, the fall of the water through this height is a mechanical force which is entirely wasted, and which may be actually employed in raising the water through a part of the pump-barrel. Mr. Witty avails himself of this power in a very ingenious manner. 'Instead of letting the water or liquid escape from a common pump, at the

usual place of delivery, I caused it to descend again in a syphon-pipe to the lowest level at which it can conveniently be delivered; and as this descent is considerable in ships, brewhouses, &c., a considerable saving of labor is effected in working pumps by a descending column of water or liquor, counterbalancing as much in length of the rising column in the pump, as the height which it descends in the syphon-pipe, to the place where it can be delivered.' We have no doubt that this invention will be found to be of great practical value, as it relieves the men at the pump of a very great part of their labor. In cases of danger, at sea, it may prove the means of saving both the ship and the crew.

If we consider the water, which in ordinary pumps falls from the top of the barrel to the place of its reception, as a mechanical force which is lost, we may avail ourselves of it, by various contrivances, for assisting in the work to be performed. In Mr. Witty's contrivance, the men at the pump raise the water to the bottom of the short leg of the syphon, and it is then drawn through the syphon by the action of the longer branch. There are many cases, however, when we may allow the men to raise the water to the top of the barrel, and employ the direct force of the descending fluid to work another pump, or perform any other piece of work that may be required.

Mr. Robert Clarke, of Sunderland, has proposed an improvement in the mode of applying men's force to pumping, which is worthy the consideration of seamen. It is to change the posture of standing to sitting, and making the action the same as that of rowing, which, besides that it is by philosophers considered as the most efficacious application of a man's force, is to seamen most particularly so from their habitual practice of it. He objects to the ordinary action of pumping with a brake, as the posture is weak, and requires much force to preserve it. It oppresses the man by over-stretching his loins on one side, and incommodes respiration by the flexure of the body on the other side. Too much motion of the shoulder-joint is required, as the muscles which act on the arm-bone at this joint, are disproportionate to the effort they must make, when the arm vibrates on the shoulder-joints as a centre, for the force to be communicated by the hand. Besides this, the arms themselves are at one instant enfeebled, by being thrown above the head and requiring a pull, and the next instant requiring a pushing effort; which changes of direction, in the exertion and sustaining force, are too continual and rapid for long continuance; in standing, too, the body is a continued dead weight upon the legs.

The action of rowing is powerful to a surprising degree, and so well adapted to a man's ease, that he can continue it a greater length of time without fatigue, than any other mode of exertion; for, though the motion is large, it is made up of easy motions in several joints; the velocity and resistance of which, suit the muscles employed. Very little sustaining force is required; for the body is supported, and returns unloaded to its charge: the breathing also is free. The manner of carrying this into effect is very simple: the lever or brake being bent at right angles at a centre pin, so that it hangs straight down when it is at rest, instead of being horizontal; then to the lower extremity a rod is jointed, which is carried rather in an inclined direction upwards to the seaman, who is seated before the pump with a rest for his feet. The rod has a cross handle, to hold by both hands, and in some cases it may be made long enough for two men to sit side by side upon the same seat; and by drawing and pushing it, in the same manner as rowing, the perpendicular lever is caused to vibrate, and the horizontal arm, or bended part which suspends the pump spear, partakes of the motion sufficiently for pumping.

The latest improvements in ship-pumps are by captain Jekyl. This gentleman has invented an addition to the pump of an air vessel, and a stuffing-box for the rod to pass through, by which it will raise the water to a greater height than the head of the pump, and a hose being attached to the pump spout, by very simple means, the water is conveyed to any desired part of the ship, and thrown in a jet through a nose-pipe with great force, to extinguish fire, if such a calamity should befal a ship, and thus the pump is rendered of two-fold service. The idea of converting the pump to a fire-engine is not new, having been attempted in many different ways by forcing-pumps; but these having pipes proceeding from the lower part of the barrels and valves, which are not very accessible, are always liable to choke up by obstructions, and have not succeeded in general use. The air-vessel has always been in the way, if made of a sufficient size to answer the purpose of equalizing the stream. Captain Jekyl has obviated these objections, and, without altering the material parts of the hand-pump, has rendered it as complete a fire-engine as can be wished. This is explained by fig. 2, plate IV., which is a section of the pump through its whole length. A B C is the iron brake or lever to work it. It is branched at the same extreme end, and has a wooden pole, C, fixed in it, for several men to hold at once: D is the iron stanchion or fulcrum of the brake; it is fixed to the pump-head by means of strong iron hoops at E E and F F, which at the same time strengthen the work of the pump. The centre-pin is to be at a height of two feet six inches above the ship's deck. H are the slings of the pump, united by a firlock or pin to the end of the brake, and suspending the pump-spear I, by means of the joint-piece *g*. I K is the pump-spear, made of copper in the upper part I, and the lower length K of iron: the latter has the bucket M attached to it. The valve of the bucket is made in a very simple and effective manner; the valve being merely a round plate of brass, with a hole through the centre to receive the rod, upon which it rises and falls, and covers the aperture in the bucket. The bucket is a ring of brass, with a cross bar to fix the rod in: it is made in two thicknesses, one above the other, and a cup of leather is held in between them, projecting all round the upper part of the bucket, and turning up, to make a tight fitting in the barrel. The two rings of the bucket are held together by the piston-rod passing through both, and a cross-wedge beneath.

L is the brass chamber in which the bucket works: it is well fitted into the wood of the pump-tree, so that the water cannot leak by it, and is bored smooth withinside. N is the lower box, fitted into the lower part of the pump-tree, beneath the chamber: it has a groove round it into which oakum is placed, and when it is put down makes a tight joint: its valve is of the same construction as that of the bucket, with the addition of a ring or eye on the top of the pin, on which the valve rises and falls. By this eye the box can be drawn up when it needs repair, by first drawing up the bucket of the pump, and putting an iron hook down into this eye. O O P is the air-vessel: this is a cylinder of sheet copper, soldered to a cover of brass; within the centre of it is a tube, likewise soldered to the cover, through which the copper pump-spear passes, and is fitted round at top with a collar of leather and stuffing. To prevent the escape of the water, it is packed with hemp and two rings of leather. R shows the place of two iron bars, fitted through the head of the pump, and confining the cover, O O, of the air-vessel; they are fastened by the wedges *d*: it is by these only that the air-vessel is held down: a circle of leather is first put round the air-vessel, just beneath its lid, and this, being pressed upon the recess in the wood, makes the joint tight. I is the pump nozzle, which delivers the water. When it is used as a fire-engine, a hose is fixed on by its link-joints, and keys or wedges: the nozzle is fixed to the pump by four screw-bolts going through the thickness of the pump, and is fixed in such a direction as will most conveniently lead to a receiver which unites the hoses from all three of the ship's pumps.

Fig. 3 is the link-joint of the hose, T representing the pump-spout, made of cast iron, and screwed to the pump-tree; *e e* is the collar or socket, made of brass, with the hose X bound upon it. This has two trunnions, on which a link, *f*, is fitted, one on each side; these links pass through grooves in the cast-iron piece T, and a key *g*, put down through the link behind it, draws the joint tight, without any screwing or farther trouble. The socket *e e* is fitted into the nozzle, and has a leather ring to make it tight. The outside of the pump is to be hooped at every three feet, to prevent it from bursting by the pressure of the water. The disposition of the three hand-pumps in a ship's well renders their connexion with a common receiver very convenient to bring all the water into one stream, which will then be very powerful, and more capable of extinguishing a fire than any moveable engine. Two hand-pumps are always placed on the starboard side of the main-mast, in the well, and one of them being the cistern pump, used for washing decks, its foot stands upon a small cistern fixed upon the step of the main-mast, and supplied with water by a pipe through the ship's side, with a cock to admit it at pleasure; there is one pump on the larboard side of the mast, three separate hoses being united with each of the pumps by a link-joint at one end, and, with three necks attached by similar joints at the other, bringing all the water into one; and a hose being joined by a link-joint, *l*, to the opposite end of the receiver, conveys the whole water to any part of the ship. The receiver has the three nozzles *k k k* at one end made in a divergent direction, agreeably to the directions in which the hoses come from the three different pumps, and a valve is placed withinside, before each hose, to open inwards, in order that the receiver may be used for one or two pumps, whilst the others are repairing or getting ready, or that, if any of the hoses burst, the water may not escape from the receiver at that nozzle. There are two handles fixed to the receiver, to lift and carry it, as it is to be moveable, and when in use is proposed to be laid on the grating of the main hatchway, as the most central situation, from which the hose may be carried in any direction. Z is a branch pipe, or jet, screwed at the end of the great hose X; and it also unscrews at the extreme end, to fit on jets of different bores, in the same manner as all other fire-engines. In working, the pressure of the water condenses the air contained in the receiver, O O P, into a small space, and its reaction to resume its former bulk equalizes the efflux of water from the nozzle of the pump.

In some experiments it performed as well as could be desired, a single pump forming a very effective engine; but, when the three were combined, it was superior in force to any ever seen, and would throw a stream of an inch in diameter over the main top-mast head of a seventy-four gun ship. Besides, the length of the handle C admitting several men to work at once, an accession of force is gained by a rope *n*, made fast to the brake A B, and conducted through a single block, hooked to the deck at *m*, and thence along the ship's deck. At this any number of men may be applied very advantageously to produce the stroke, leaving those at the handle only to return it by lifting the handle. If the ship proves leaky, and the stuffing-box is thought to be an obstruction to the working of the pump, the air-vessel may be taken out, by drawing the wedges *d*, and taking out the bars R, which confine it; then after taking out the key which connects the joint-piece *g* with the copper rod, also removing the brake, lift out the air-vessel by the two screws of the stuffing-box, and fix on the joint-piece again; but fix the guide-eye H in the lowest pair of holes, so that it will receive the top of the copper rod, and prevent the pump-spear having any play in the slings. In this state it acts as a common hand-pump, but the air-vessel can be restored to its place and be ready for work in two minutes. To prevent any of the work being neglected from carelessness, the inventer proposes that one of the pumps shall be always used to wash the ship by the hose and jet in the morning, which it would do much more effectively than by the present mode of raising the water into buckets; and the force with which the jet of water is thrown would very completely wash into every recess of the gun-carriages, and other places where a brush cannot reach; while, by this constant exercise, the pumps would always be ready, at a moment's notice, on an alarm of fire.

The following simple and ingenious method of working a ship's pump, when the crew are either too few in number, or too much exhausted

to attend to that duty, when the performance is most necessary, namely, in a heavy gale, was put in practice with great success by captain Leslie, of the ship George and Susan, on a late voyage from Stockholm to North America. He fixed a spar aloft, one end of which was ten or twelve feet above the top of his pumps, and the other projected over the stern; to each end he affixed a block, or pulley; he then fastened a rope to the spears of the pump, and, after passing it through both pulleys along the spar, dropped it into the sea astern. To the rope he fastened a cask, 110 gallons measurement, and containing sixty or seventy gallons of water. This cask answered as a balance-weight, and every motion of the ship from the roll of the sea made the machinery work. When the stern descended, or when a sea or any agitation of water raised the cask, the pump-spears descended; and the contrary motion of the ship raised the spears, when the water flowed out. The ship was cleared out in a few hours, and the crew were of course greatly relieved.

In the Persian wheel, water may be raised by means of a stream *d*, plate IV. fig. 4, turning a series of floats, and furnished with buckets *a b*, suspended by strong pins fixed in the side of the rim; but the wheel must be made as high as the water is intended to be raised above the level of that part of the stream in which the wheel is placed. As the wheel turns, the buckets on the one side descend into the water, and then go up full on the other; when they arrive at C they strike against the end of the fixed trough and are overset, and empty the water into the trough; from which it may be conveyed in pipes to the place where it is designed for; and, as each bucket gets over the trough, it falls into a perpendicular position again, and goes down empty, until it comes to the water at *d*, where it is filled as before. On each bucket is a spring, which, going over the top or crown of the bar, raises the bottom of the bucket above the level of its mouth, and so causes it to empty all its water into the trough.

Sometimes this wheel is made to raise water no higher than its axis; and then, instead of buckets hung upon it, its spokes are made of a bent form, and hollow within; these hollows opening into holes on the outside of the wheel, and also into those in the box upon the axis. So that, as the holes dip into the water, it runs into them; and, as the wheel turns, the water rises in the hollow spokes, and runs out in a stream from a series of holes, thus falling into the trough, whence it is conveyed by pipes to its destination.

Nearly allied to the Persian wheel, but much more elegant in its contrivance, is the screw of Archimedes, a machine invented and used by this philosopher, for raising water and draining land in Egypt, about 200 years before the Christian era. The cochlion consists of a succession of buckets or recesses to be filled with the water to be raised; but instead of their being separate and detached, as in the Persian wheel, they are formed by the lower parts of the hollow thread of a screw, and their motion and succession are brought about by turning that screw. This will be better understood by referring to fig. 5, which is a representation of this machine, and in which *v u w x* shows a flexible tube or pipe, wound in a screw-like form round a solid cylinder *y y*, the two extreme ends of which are equipped with pivots, so that the cylinder, with its encircling screw-formed tube, may be made to revolve on its axis by the force of running water, or any other power applied to its upper or lower end. Lastly, this machine must be supported by its two pivots, so as to make an angle with the horizon, as shown in the figure. If now the lower end *v* of the tube be supposed to be covered with water, that water will flow to its own level within the tube, and will occupy the lowest bend *v*; and if now the cylinder, *y y*, be turned round by its handle, in a direction from left to right, the lower end of the spiral tube will become elevated above the surface of the water in the reservoir, and that water which had entered into the tube will have no opportunity of escaping, but, by the motion of the screw-tube, will flow within it, until, at the end of the first revolution, it will be found in the second lower bend *u*. In the mean time the lowest extreme end of the tube will have made a second dip into the water of the reservoir, and will receive a second charge, which, in like manner, will be transferred to *u*, at the next revolution, while the water lately at *u* will be elevated to *w*; until at length, when the cylinder has made as many revolutions as there are turns of the tube round it, each lower bend will become filled with water, whatever may be the length of the cylinder *y y*; and as the extreme upper end *a* of the tube becomes depressed, in each revolution, into the situation of a lower bend, it will there discharge its water into an elevated cistern *b*, placed to receive it. The quantity of water raised by this machine will depend upon the capacity of the screw-pipe, and the angle above the horizon at which it is placed to work; but it will be seen by the figure, that there is room to dispose several pipes, parallel to each other, round the same cylinder, when they will all work simultaneously; or the whole cylinder itself may be made into a hollow screw, by merely placing a thin screw-formed diaphragm or partition round its central axis, which is the most usual form of the machine in practice. On a small scale, it may be constructed by wrapping one or more flexible lead pipes round a solid cylinder of wood, which forms a useful machine for raising water to small heights. It was formerly much used, but owing to its liability t become choked by mud, weeds, and other impediments, and the great difficulty of cleaning it out, it is seldom met with. It has, from its specious appearance of seeming to throw the entire weight of water that it is raising upon its axles, and the little friction with which these may be made to move by friction-rollers, had astonishing powers ascribed to it; but, if investigated, it will be found that the water is merely made to flow up an inclined plane; and whether water or any other weight be drawn up a fixed inclined plane, or it be stationary until moved by an inclined plane being forced under it, as is the case with the

quantities of water contained in the several bends *v*, *u*, *w*, *x*, &c., the mechanical effort will be the same; consequently, this machine possesses no other mechanical advantage over other constructions of pumps, except that its motions are attended by less friction than belongs to most of them.

The rope-pump of Vera, described in most books on hydraulics, consists of an upper and lower pulley, formed in the ordinary manner, but with several grooves in each, in which endless ropes of very loosely spun horse-hair or wool are made to move with great rapidity by a multiplying wheel connected with the upper pulley. The lower pulley, together with a great part of the rope, moves in the water, which is merely brought up by adhering to the ropes, and the rapidity of their motion. This, therefore, is but a very imperfect and rude kind of bucket-pump, and is by no means deserving the place it has so long held in the catalogue of hydraulic machines.

Sarjeant's pump may be considered as a cheap and useful prime mover. It was originally applied to the raising of water at Irton Hall; and a small stream in the neighbourhood was brought by a wooden trough, into which was inserted a piece of two-inch leaden pipe, a part of which is seen at A, plate 4, fig. 6.

The stream of the pipe is so directed as to run into the bucket B, when the bucket is elevated; but so soon as it begins to descend, the stream flows over it, and goes to supply the wooden trough, or well, in which the foot of the forcing-pump C stands, of three inches bore.

D is an iron cylinder, attached to the pump-rod, which passes through it. It is filled with lead, and weighs about 240 lbs. This is the power which works the pump, and forces the water through 420 feet of inch pipe, from the pump up to the house.

At E is fixed a cord, which, when the bucket comes to within four or five inches of its lowest projection, becomes stretched, and opens a valve in the bottom of it, through which the water empties itself.

There is another machine for the purpose of procuring motion and power by water, which was invented by Dr. Barker towards the close of the last century, and which is generally known by the name of Barker's Centrifugal Mill. Its general construction is shown at fig. 7, plate IV., in which *v u* is a metal pipe of considerable height, its top *v* being widened or extended into a funnel shape. The pipe is maintained in its vertical position, as shown in the figure, by resting on a pointed steel pivot turning into a brass box *w* at the lower extremity, while the upper part has a cylindrical steel axis passing through the top *y y* of a frame which supports it: the pipe *v u* is consequently free to move round upon its own axis, which it does with very little friction. Towards the lower extremity of the pipe *v u*, and at right angles to its axis, two or more smaller pipes or arms with closed external ends are inserted as at *z a*, and an adjustable orifice is made at the side of each of these small pipes as near as possible to its end, and placed on opposite sides of such pipes, so that water issuing from them may spout horizontally and in opposite directions, as shown at the letters *z* and *a*. One end of a pipe B communicates with a supply of water which it delivers into the funnel head *v* without touching it in any part, and the supply of this pipe must be so regulated by a cock or otherwise, that it may constantly keep the pipe *u v* filled with water without running over, at the same time that the discharge is going on from the orifices *z a*, which will deliver their water with a force proportionate to the perpendicular height of the column of water contained in *u v*; and, since the holes *z a* are in opposite directions, the water in passing from them will meet with such a resistance from the surrounding air as to throw the pipe *u v*, with its arms and axis *x*, into rapid roratory motion, and this axis may communicate its motion and power to wheel-work or machinery, or even to a mill-stone connected with its upper end. This machine is described and highly spoken of in almost all the books that teach of hydraulic machinery, but it does not appear to have been carried into practical effect in England.

The *centrifugal pump* may be considered as bearing some resemblance to Barker's Mill inverted, as the water in this case rises up the tube A A fig. 8, plate IV., from the reservoir E, and is thrown off by the centrifugal force at the ends of the lateral branch B C. This branch is furnished with valves at the extremities; and, a quantity of water having been poured into the lower vessel E, the cylinder and the lateral branch are also filled with water. The apparatus is then put into motion by turning the handle at G, and the centrifugal force driving out the valves at the extremities of the branch, the water rushes rapidly into the trough D, from which it returns into the reservoir through a hole at *f*. The water at the same time rises through a valve, at the bottom of the tube A A, opening upwards.

The *Water Ram*, or *Bélier Hydraulique*, as it was called by its inventor, M. Montgolfier, of Paris, is a highly useful and simple machine, for the purpose of raising water without the expenditure or aid of any other force than that which is produced by the momentum or moving force of a part of the water that is to be raised; and is one of the most simple and truly philosophical machines that hydraulics can boast. The action of this machine depends entirely upon the momentum that is generated whenever a body is put into motion, and its effect is so great as to give the apparatus the appearance of acting in defiance of the established laws of hydrostatic equilibrium; for a moving column of water of small height is made to overcome and move another column much higher than itself.

The form and construction of the water-ram is shown at fig. 9. Suppose *o* to represent a cistern or reservoir, or the source of a spring which is constantly overflowing and running to waste, by means of a channel a few feet lower than itself, as at the level line *p p*. Instead of permitting the water to run over the sides of *o*, let it be conducted to the level line *p p*, by means of iron or other pipes *q q* connected with the side of the reservoir, and terminating by an

orifice *r*, in which a conical or other valve *s* is placed so as to be capable of effectually closing the pipe when such valve is drawn upwards; *t* is an adjustable weight fixed on to the spindle of the valve *s*, by means of which the valve is kept down and open; any water therefore that is in the cistern *o* will flow down the pipe *q q*, and escape at the orifice *r*, so long as the valve remains down, but, the instant it is raised and shut, all motion of the water is suspended. Thus situated, the adjustment of the weight *t* must take place, and, by adding to or subtracting from it, it must be made just so heavy as to be capable of sinking or forcing its way downwards, against the upward pressure of the water, the force of which will depend upon the perpendicular distance from the surface of the water in *o*, to its point of discharge at *r* (represented by the dotted line *o v*). But the water by moving acquires momentum and new force, and consequently is no longer equal to the column *o v*, to which the valve has been adjusted, but is superior to it, by which it is enabled to overpower the resistance of the weight *t*, and it carries the valve up with it, and closes the orifice *r*. This is no sooner done than the water is constrained to become stationary again, by which the momentum is lost, and the valve and weight once more become superior, and fall, thus reopening the orifice and permitting the water to move again; and, as the pressure of the water and the weight of the valve each become alternately superior, the valve is kept in a constant state of vibration, or of opening and shutting without any external aid, whatever. Such is the principle upon which the motion of the water in the pipe *q q* is produced: but the momentum generated cannot be instantly annihilated; and it is not only of sufficient power to raise the valve *s*, but likewise to burst open the lower end of the pipe *q q*, unless a sufficient vent be provided by which this accumulated force can escape. Accordingly a second valve *u* is placed near the lower end of the pipe *q q*, and is made to open upwards into an air-vessel, having a discharging pipe *x*; and consequently, whenever the valve *s* is closed, the water, which otherwise would have flowed from the orifice *r*, now opens the valve *u* and enters the air-vessel, until the spring of the contained air overcomes the gradually decreasing force of the momentum, when the valve *u* closes, and that at *s* opens to permit the water to make a second blow or pulsation, and in this way the action of the machine continues unceasingly without any external aid so long as it is supplied with water, and remains in repair. A small running stream is necessary for this machine, as the water at *o* should be kept at one constant elevation to ensure the perfection of its action. A much greater quantity of water likewise escapes at the orifice *r*, between the pulsations, than can be raised in the delivering pipe *x*, particularly if it extends to any considerable height; for the comparative quantity of water discharged through *x*, and permitted to run to waste at *r*, must always depend upon the respective perpendicular heights of the pressing column *o v*, and the delivered or resisting column *u x*, and the rapidity of the pulsations will likewise depend on the same circumstances. A very insignificant pressing column *o v* is capable of raising a very high ascending column *u x*, so that a sufficient fall of water may be obtained in almost every running brook, by damming up its upper end to produce the reservoir *o*, and carrying the pipes *q q* down the natural channel of the stream until a sufficient fall be obtained; for a considerable length of descending pipes from *o* to *r* is necessary to insure the certain effect of the machine, since, if the column *q q* is not of sufficient length, its water will be thrown back into the reservoir, instead of entering the air-vessel, which requires to be replenished with air, and this is admitted into it by the self-acting shifting valve, shown at *b* in the shaded part of it, which is an enlarged view of the air-vessel in an improved form; its valve is made by a ball at *a*, having a metal bridle over it to prevent its rising too high.

In taking the height to which water is to be raised by a pump, perpendicular height alone is to be regarded, and not lateral extension, because fluids press according to their perpendicular height. Thus, if a pipe 100 feet long is six feet higher at one end than at the other, the six feet only are to be regarded as the height to which the water must be raised, and the 100 feet may be disregarded, except so far as it produces friction detrimental to the motion of the water. The height of a lift of water must be taken from the surface of the water which is to be lifted to the surface of the cistern, or reservoir, or end of the pipe that is to receive or deliver it, and not from the bottom of the suction-pipe, because that pipe may descend any distance below the surface of the water to be raised without affecting the measurement, since the water will always rise to its own level within that pipe, without the aid of any exertion of force by the pump. Be careful, likewise, to introduce no right-angled or short turns into pipes, if they can be avoided; but let every such turn be a regular curved sweep, and the larger and more regular that sweep is made, the less impediment it will offer to the passage of the water.

In order to determine the force or power necessary to work a pump of any description, the height to which the water is to be raised must always be taken into account; for this height multiplied into the area of the piston, and reduced to any of the usual denominations of weight, will give the amount of resistance to be overcome (friction of the pump only excepted). The size of the pipe containing the water is quite immaterial, provided it be large enough to prevent friction and unnatural velocity in the water; and the entire perpendicular height from the surface of the water raised to the point where it is delivered, whether occupied by suction or feeding-pipe, or delivering pipe from a forcing pump must be added together, and considered as the height of the lift: so that if a lift and force-pump of four inches in diameter, in the working-barrel, has ten feet of three-inch suction-pipe below its piston, and twenty feet of two-inch delivering-pipe (including the length of the working-barrel) above it, the column to be lifted will be equal to thirty feet of four-inch

pipe filled with water. The contents in gallons of thirty feet of four-inch pipe must therefore be found, and, as each imperial gallon of water weighs 10 lbs. avoirdupois, the weight or load upon the pump will be immediately found, to which must be added from one-tenth to one-sixth, according to the construction of the pump, for friction. The load upon an eccentric or any other pump may be found by the same rule, if the effective horizontal area of the piston, or its substitute, be found; and this be in like manner *multiplied* into the height of the lift. It therefore becomes important to know the weight and quantity of water which a certain length of pipe of any given diameter will contain, and a tolerably close approximation to this may be obtained by squaring the diameter of any pipe in inches, and cutting off the last figure of the product by a decimal point, which will nearly give the contents in ale-gallons of one yard in length of such pipe. Thus, for example, if a pipe is six inches in diameter, 6 times 6 make 36, and introducing the decimal point would reduce this number to 3·6, so that one yard of such pipe would contain three gallons and six-tenths. If a three-inch pipe had been taken, then $3 \times 3 = 9$; consequently there remains but one figure to cut off. The gallons' place must therefore be supplied by a cypher, thus, 0, and the yard of such pipe would contain but nine-tenths of a gallon.

For greater certainty, however, the following table and rules are introduced. They are extracted from Brunton's Compendium of Mechanics; a recent little work, published at Glasgow, and which is replete with useful information :—

TABLE of the Contents of a Pipe one inch diameter for any required Height.

Feet high.	Quantity in Cub. In.	Weight in Avoir. Oz.	Gallons, Wine Mea.
1	9·42	5·46	0·0407
2	18·85	10·92	·0816
3	28·27	16·38	·1224
4	37·70	21·85	·1632
5	47·12	27·31	·2040
6	56·55	32 77	·2423
7	65·97	38·23	·2448
8	75·40	43·69	·3264
9	84·82	49·16	·3671
10	94·25	54·62	·4080
20	188·49	109·24	·8160
30	282·74	163·86	1·2240
40	376·99	218·47	1·6300
50	471·24	273·09	2·0400
60	565·49	327·71	2·4480
70	659·73	382·33	2·8560
80	753·98	436·95	3·2640
90	848·23	491·57	3·6700
100	942·48	546·19	4·0800
200	1884·96	1092·38	8·1600

Though the above table only gives the contents of a pipe one inch in diameter, it will serve as a standard for pipes of any other size, by observing the following

Rule.—Multiply the numbers found in the table against any height by the square of the diameter of the pipe, and the product will be the number of cubic inches, avoirdupois ounces, and wine gallons of water, that the given pipe will contain.

Example.—How many wine gallons of water are contained in a pipe six inches diameter, and sixty feet long :—

$2{\cdot}4480 \times 36 = 88{\cdot}1280$ wine gallons.

The wine gallon contains 231 cubic inches, and the new imperial gallon 277·274 cubic inches; therefore, to reduce the wine to the imperial gallon, divide by 1·20032; and for a like reduction of the ale gallon, which contains 282 cubic inches, divide by 0·98324.

HYDROSULPHURETS. Compounds of sulphureted hydrogen with the salifiable bases.

HYDROTHIONIC Acid. Sulphureted hydrogen, the hydrosulphuric acid of M. Gay Lussac.

HYDROTIC, *n. s.* Fr. *hydrotique;* Gr. ὕδωρ. Purger of water or phlegm.

He seems to have been the first who divided purges into *hydroticks* and purgers of bile. *Arbuthnot.*

HYDRUNTUM, in ancient geography, a noble and commodious port of Calabria, from which there was a short passage to Apollonia. (Pliny) famous for its antiquity, and for the fidelity and bravery of its inhabitants; now called Otranto. Long. 19° 15′ E., lat. 40° 12′ N.

HYEMANTES, in the primitive church, offenders who were not allowed to enter the porch of the churches with other penitents, but were obliged to stand without, exposed to the inclemency of the weather, even in winter.

HYEN, *n. s.* } Fr. *hyene;* Lat. *hyæna.* An
Hye'na, *n. s.* } animal like a wolf; said fabulously to imitate human voices.

I will weep when you are disposed to be merry; I will laugh like a *hyen,* when you are inclined to sleep. *Shakspeare.*

Out, out, *hyena;* these are thy wonted arts,
And arts of every woman false like thee.
Milton. Samson Agonistes.

The *hyena* was indeed well joined with the beaver, as having also a bag in those parts, if thereby we understand the *hyena* odorata, or civet cat.
Browne's Vulgar Errours.

Oh the bewitching tongues of faithless men!
'Tis thus the false *hyena* makes her moan
To draw the pitying traveller to her den. *Otway.*

A wonder more amazing would we find;
The *hyena* shews it of a double kind;
Varying the sexes in alternate years,
In one begets, and in another bears.
Dryden's Fables.

The keen *hyena,* fellest of the fell. *Thomson.*

Tearing, and grinning, howling, screeching, swearing,
And with *hyena* laughter, died despairing.
Byron. Don Juan.

HYGEIA, or Hygiæa, Greek, Ὑγιεια, in mythology, the daughter of Æsculapius, and the goddess of health, among the ancient Greeks, called by the Romans Salus. See Salus.

HYGINUS (Caius Julius), a grammarian, the freedman of Augustus, and the friend of Ovid,

was born in Spain, or, according to others, in Alexandria. He wrote many works, all of which are lost, except his Fabularum Liber, and Astronomicon Poeticon, lib. iv., and even these are come down to us very imperfect. The best edition is that of Munker, in the Mythographi Latini; 2 vols. 8vo. 1681.

HYGROM'ETER, *n. s.* Fr. *hygrometre;* Gr. ὑγρὸς and μετρεω. An instrument to measure the degrees of moisture.

A sponge, perhaps, might be a better *hygrometer* than the earth of the river. *Arbuthnot on Air.*

The HYGROMETER, HYGROSCOPE, or NOTIOMETER, is used for measuring the degrees of dryness and moisture of the atmosphere, as the barometer and thermometer measure its different degrees of gravity and warmth, although this instrument is far from being yet so perfect as these. There are three general principles on which hygrometers have been constructed: 1. The lengthening and shortening, or twisting and untwisting, of strings by dryness and moisture; 2. The swelling and shrinking of solid substances by moisture or dryness; and, 3, By the increase or decrease of the weight of particular bodies, which absorb the humidity of the atmosphere.

There are various kinds of hygrometers; for whatever body either swells by moisture, or shrinks by dryness, is capable of being formed into a hygrometer. Such are woods of most kinds, particularly deal, ash, poplar, &c. Such also is catgut, the beard of a wild oat, and twisted cord, &c. The best and most usual contrivances for this purpose are as follows: 1. Stretch a common cord or a fiddle-string along a wall, passing it over a pulley; fixing it at one end, and to the other end hanging a weight, carrying a style or index. Against the same wall fit a plate of metal, graduated, or divided into any number of equal parts; and the hygrometer is complete. For it is constantly observed, that moisture sensibly shortens cords and strings; and that, as the moisture evaporates, they return to their former length again. The same is observed of a fiddle-string; and hence such strings are apt to break in damp weather, when not slackened by the screws of the violin. Hence it follows, that the weight will ascend when the air is more moist, and descend again when it becomes drier; by which means the index will be carried up and down, and, by pointing to the several divisions on the scale, will show the degrees of moisture or dryness. 2. For a more accurate hygrometer, strain a whipcord or catgut over several pulleys and proceed as before for the rest of the construction. Nor does it matter whether the several parts of the cord be parallel to the horizon, or perpendicular to it, or in any other position; the advantage of this over the former method being merely the having a greater length of cord in the same compass; for the longer the cord, the greater is the contraction and dilatation, and consequently the degrees of variation of the index over the scale, for any given change of moisture in the air. 3. Fasten a twisted cord or harpstring to a hook at A, plate HYGROMETER, fig. 1, and suspend by it a weight B carrying an index C nearly touching the horizontal board or table on which is described the circular scale D E. Upon an increase or decrease of the humidity of the air, the index will show the quantity by twisting, and consequently the increase or decrease of moisture or dryness. Those Dutch toys called weather-houses, wnere a small image of a man, and one of a woman, are fixed upon the ends of an index, are constructed upon this principle. For the index, being sustained by a cord or twisted catgut, turns backwards and forwards, bringing out the man in wet weather, and the woman in dry. 4. Fasten one end of a cord or catgut A B, fig. 2, to a hook at A; and to the other end a ball D of about 1 lb. weight; upon which draw two concentric circles, and divide them into any number of equal parts, for a scale; then fit a style or index E C into a proper support at E, so as the extremity C may almost touch the divisions of the ball. Here the cord twisting or untwisting will indicate the change of moisture, by the successive application of the divisions of the circular scale, as the ball turns round to the index C. An hygrometer may be made of the thin boards of ash or fir, by their swelling or contracting. But these, and all the other kinds of this instrument above described, become in time sensibly less and less accurate; till, at last, they lose their effect entirely, and suffer no alteration from the weather. But the following sort is much more durable, serving for many years with tolerable accuracy. To the extremity of the balance, fig. 3, fix at E a sponge, or other body, that easily imbibes moisture. To prepare the sponge, it may be proper first to wash it in water very clean; and, when dry again, in water or vinegar in which there has been dissolved sal ammoniac, or salt of tartar; after which let it dry again. Now, if the air become moist, the sponge will imbibe it and grow heavier, and consequently will preponderate, and turn the index towards C; on the contrary, when the air becomes drier, the sponge becomes lighter, and the index turns towards A; thus showing the state of the air. Mr. Gould, in the Philosophical Transactions, instead of a sponge, recommends oil of vitriol, which grows sensibly lighter or heavier from the degrees of moisture in the air; so that, being saturated in the moistest weather, it afterwards retains or loses its acquired weight, as the air proves more or less moist. The alteration in this liquor is so great, that in fifty-seven days it has been known to change its weight from three drachms to nine; and has shifted the tongue or index of a balance thirty degrees. So that in this way a pair of scales may afford a very nice hygrometer. Oil of sulphur or campanum, or oil of tartar per deliquium, or the liquor of fixed nitre, may be used instead of the oil of vitriol. This balance may be contrived in two ways; by either having the pin in the middle of the beam, with a slender tongue a foot and a half long, pointing to the divisions on an arched plate, as in fig. 3; or the scale with the liquor may be hung to the point of the beam near the pin, and the other extremity made so long as to describe a large arch on a board placed for that purpose, as in fig. 4. It may be observed, with regard to hygrometers of wood,

that the wood shrinks most in summer, and swells most in winter, but is most liable to change in the spring and fall; that this motion happens chiefly in the day-time, there being scarcely any variation in the night; and that there is a motion even in dry weather, the wood swelling in the morning, and shrinking in the afternoon: also that the wood by night as well as by day, usually shrinks when the wind is in the north, north-east, and east, both in summer and winter; that by constant observation of the motion and rest of the wood, with the help of a thermometer, the direction of the wind may be told nearly without a weather-cock.

Drs. Hales and Desaguliers contrived another form of sponge hygrometer. They made an horizontal axis, having a small part of its length cylindrical, and the remainder tapering conically with a spiral thread cut in it, after the manner of the fuzee of a watch. See fig. 5. The sponge is suspended by a fine silk thread to the cylindrical part of the axis, upon which it winds. This is balanced by a small weight, W, suspended also by a thread, which winds upon the spiral fuzee. When the sponge grows heavier, in moist weather, it descends and turns the axis, and so draws up the weight; which, coming to a thicker part of the axis, becomes a balance to the sponge, and its motion is shown by an attached scale; and vice versa, when the air becomes drier. Salt of tartar, or any other salt, or pot ashes, may be put into the scale of a balance, and used instead of the sponge.

De Luc's contrivances for an hygrometer are very ingenious. Finding that even ivory swells with moisture, and contracts with dryness, he made a small and very thin hollow cylinder of ivory, open only at the upper end, into which is fitted the under or open end of a very fine long glass tube, like that of a thermometer. Into these is introduced some quicksilver, filling the ivory cylinder, and a small part of the length up the glass tube. The consequence is this: When moisture swells the ivory cylinder, its bore or capacity grows larger, and consequently the mercury sinks in the fine glass tube; and, vice versa, when the air is drier, the ivory contracts, and forces the mercury higher up the tube of glass. An instrument thus constructed is in fact also a thermometer, and must necessarily be affected by the vicissitudes of heat and cold, as well as by those of dryness and moisture. It is a known fact, that a hair will stretch when moistened, and contract when dried; and M. de Saussure found, by repeated experiments, that the difference between the greatest extension and contraction, when the hair is properly prepared, and has a weight of about three grains suspended by it, is nearly one-fortieth of its whole length, or one inch in forty. This circumstance suggested the idea of a new hygrometer. To render these small variations of the length of the hair perceptible, an apparatus was contrived, in which one of the extremities of the hair is fixed, and the other, bearing the counterpoise above-mentioned, surrounds the circumference of a cylinder, which turns upon an axis to which a hand is adapted, marking upon a dial, in large divisions, the almost insensible motion of this axis. About twelve inches high is recommended as the most convenient and useful: and, to render them portable, a contrivance is added, by which the hand and the counterpoise can be occasionally fixed. But M. de Luc, in his Idées sur la Meteorologie, vol. i., opposed M. de Saussure's plan, on the ground that all hairs, if immersed in water, first lengthen and then shorten. He was answered by Saussure, who, at the same time, published a detailed account of his instrument.

In plate HYGROMETER, fig. 6, there is a representation of his whole original instrument, with the hair and other appendages complete. The lower extremity of the hair, *a b*, is held by the screw pincers *b*, more distinctly represented at B; and, by a screw at the end of these, the hair is fastened to the bottom plate C. The upper extremity, *a*, of the hair is held by the under chaps of the double pincers *a*. These pincers below hold the hair, and above fasten a very fine narrow slip of silver, carefully annealed, which rolls round the arbor or cylinder *d*, a separate figure of which is shown, D F, fig. 7. This arbor, which carries the needle or index E in the separate figure, is cut in the shape of a screw; and the intervals of the threads of this screw have their bases flat, and are cut square so as to receive the slip of silver that is fastened to the pincers *a*, and joined in this manner with the hair. M. de Sausure observes that hair alone, fixed immediately to the arbor, would not do; for it curled upon it, and acquired a stiffness that the counterpoise was not able to surmount. The arbor was cut in a screw form, in order that the slip of silver in winding upon it should not increase the diameter of the arbor, nor ever take a situation too oblique and variable. The slip is fixed to the arbor by a small pin F. The other extremity of the arbor, D, is shaped like a pulley, flat at the bottom, so as to receive a fine supple silken string, to which is suspended the counterpoise *g* in the large figure, and G in the side one. This counterpoise is applied to distend the hair; and acts in a contrary direction to that of the hair, and the moveable pincers to which the hair is fixed. If, then, the hair should be loaded with the weight of four grains, the counterpoise must weigh four grains more than the pincers. The arbor at one end passes through the centre of the dial, and turns therein, in a very fine hole, on a pivot made very cylindrical, and well polished: at the other end is also a similar pivot, which turns in a hole made in the end of the arm of the cock. M. de Saussure had hygrometers made with hairs fourteen inches long; but he found one foot sufficient. The arbor is three-fourths of a line in diameter at the base between the threads of the screw, or the part on which the slip winds. The variations, when a hair properly prepared is applied to it, are more than an entire circumference, the index describing about 400° in moving from extreme dryness to extreme humidity.

M. Saussure has even made smaller instruments to be carried in the pocket, and to make experiments with under small receivers; they were only seven inches high by two inches broad; which, notwithstanding their variations, were

very sensible. In the preparation of the hair, it is necessary to free it of its natural unctuosity, which in a great measure deprives it of its hygrometrical sensibility. A number of hairs are boiled in a lie of vegetable alkali; and among these are to be chosen for use such as are most transparent, bright, and soft: particular precautions are necessary for preventing the straining of the hair, which renders it unfit for the intended purpose. The two fixed points of the hygrometer are the extremes both of moisture and dryness. The former is obtained by exposing it to air completely saturated with water, by placing it in a glass receiver standing in water, the sides of which are kept continually moistened. The point on the dial, at which the hand after a certain interval remains stationary, is marked 100. The point of extreme dryness, not absolute dryness, for that does not exist, but the greatest degree of it that can be obtained, is produced by introducing repeatedly into the same receiver containing the instrument, and standing now upon quicksilver, certain quantities of deliquescent alkaline salts, which absorb the moisture of the air. This hygrometer is considered by M. Saussure as possessed of every property requisite for such an instrument: as, it points out the smallest variation of moisture in the air: its indications are quick: it is always consistent: several of them agree: it is affected only by aqueous vapors: and its variations are in proportion to those of the air.

The best hygrometer upon the third principle, viz. that of the alteration of the weight of substances, by attracting the moisture of the air, and for ascertaining the quantity as well as the degree of moisture in the variation of the hygrometer, is that of Mr. Coventry of London. The account he gives of it is as follows:—'Take two sheets of fine tissue paper, such as is used by hatters; dry them carefully at about two feet distance from a tolerably good fire, till after repeatedly weighing them in a good pair of scales no moisture remains. When the sheets are in this perfectly dry state, reduce them to exactly fifty grains; the hygrometer is then fit for use. The sheets must be kept free from dust, and exposed a few minutes in the open air; after which may be always known, by weighing them, the exact quantity of moisture they have imbibed. For many years, adds he, the hygrometer has engrossed a considerable share of my attention; and every advantage proposed by others, either as it respected the substances of which the instrument was composed, or the manner in which its operations were to be discerned, has been impartially examined. But I have never seen an hygrometer so simple in itself, or that would act with such certainty or so equally alike, as the one I have now described. The materials of which it is composed, being thin, are easily deprived wholly of their moisture; which is a circumstance essentially necessary in fixing a datum from which to reckon, and which, I think, cannot be said of any substance hitherto employed in the construction of hygrometers: with equal facility they imbibe or impart the humidity of the atmosphere, and show with the greatest exactness when the least alteration takes place.' For easier weighing the paper, take a piece of round tin or brass the size of a crown piece, through the centre of which drill a hole, and also three others round it at equal distances: then cut about 100 papers; and, after putting them under the tin or brass, drive through each hole a strong pin into a board, in order to round them to the shape of the plate: the papers must then be separated and exposed to the air a few hours with that already weighed, and so many of them taken as are equal to the weight already specified. This done, thread them together through these holes made by the pins, putting between every paper on each thread a small bead, to prevent the papers from touching each other, and also that the air may be more readily admitted. The top of the hygrometer is covered with a card cut to the same size; and which, by its stiffness, supports all the papers, and keeps them in proper shape. Before the papers are threaded, the beads, silk, card, and a thin piece of brass about the size of a sixpence, which must be placed at the bottom, and through which the centre string passes, must be weighed with the greatest exactness, to bring them to a certain weight, suppose fifty grains; now the paper in its driest state, being of equal weight, they will weigh together 100 grains; consequently, what they weigh more at any time is moisture. To obviate the difficulty of trying experiments with weights and scales, Mr. Coventry contrived a machine or scale by which to determine at one view the humidity or dryness of the atmosphere. This, with its case, is represented by fig. 8. The front and back of the case are glass; the sides fine gauze, which excludes the dust and admits the air; the case is about ten inches high, eight inches broad, and four inches deep. A, a brass bracket in front, behind which, at about three inches and a half distance, is another; these support the axis of the index E, also of the beam D, and another which supports the stem B, to which the ivory scale of divisions C is fixed. G, a brass scale suspended in the usual manner to the end of a beam D, and weighing exactly 100 grains. This scale is an exact counterpoise to the papers I, and the different apparatus. The manner of suspension is as follows:—The axis *g*, of the beam, which is made of brass, instead of hanging on pivots as in common scales, turns with two steel edges *k k*, fixed in the extremities of the brass axis: these edges are shaped like the edge of a knife, and act on two steel concave edges *l*, *l*, in order to render the friction as small as possible. D is a fine scale beam fixed at right angles with the axis *g*. E, the steel index fixed to the under side of the same axis. F, a brass sliding weight: *h* is the axis that holds the stem B to which the scale of divisions C is fixed. A, A, the brass brackets which support the whole by four screws, two of which are seen at *i*, *i*, that screw the brackets to the top of the case. The axis of the scale of divisions is hung on pivots, one of which is seen at *m*, that, should the case not stand level, the stem B may always be in a perpendicular situation. The hygrometer, before use, should be thus adjusted:—To the end of the beam where the hygrometer is suspended, hang a weight of 100 grains, which is equal to the weight of

the scale; then move the sliding-weight F up or down the index E, till one grain will cause the index to traverse neither more nor less than the whole scale of divisions; then add half a grain to the scale, in order to bring the index to 0; and the instrument, after taking off the 100 grain weight and hanging on the papers, is fit for use; then put grain weights in the scale till the index is brought within compass of the scale of divisions. Example: H is three grains on the brass scale, and the index points at 10; consequently there are three grains and $\frac{10}{100}$ths of a grain of moisture in the papers. If four grain weights are kept, viz. 1, 2, 4, and 5, they will make any number from one to nine, which are as many as will be wanted. Sometimes the index will continue traversing within the scale of divisions for many days without shifting the weights; but, if otherwise, they must be changed as occasion may require. 'One great advantage (says Mr. Coventry) of this hygrometer, above all others that have attracted my notice, is that it acts from a certain datum, namely, the dry extreme; from which all the variations towards moist are calculated with certainty: and, if constructed with that precision represented by the drawing, it will afford pleasure to the curious in observing the almost perpetual alteration of the atmosphere, even in the most settled weather. In winter it will be constantly traversing from about 8 A. M. till 4 or 5 P. M. towards dry; and in summer, from about 4 A.M. till 6 or 7 P.M. when the weather is hot and gloomy, the hygrometer discovers a very great change towards moisture; and, when clear and frosty, that it contains a much greater quantity of moisture than is generally imagined'

HYGROMETRY, the art or science of measuring the moisture of the atmosphere. See Hygrometer.

HY'GROSCOPE, *n. s.* Fr. *hygroscope;* Gr. ὑγρος and σκοπέω. An instrument to show the moisture and dryness of the air, and to measure and estimate the quantity of either extreme.—Quincy.

Moisture in the air is discovered by *hygroscopes.*
Arbuthnot.

Hygroscope is commonly used in the same sense with hygrometer, but Wolfius makes a difference from the etymology of the words. The hygroscope (he says) only shows the changes of humidity or dryness in the air, but the hygrometer measures them.

HYLA, in ancient geography, a river of Mysia Minor, famous for the death of Hylas. It runs by Prusa, whence it seems to be the same with the Ryndacus, which runs north-west into the Propontis.

HYLAS, in fabulous history, son of Theodamus, and favorite of Hercules. He was ravished by the nymphs of a fountain as he was taking out water; and afterwards drowned in the Hyla.

HYLOZOISTS, υλη, matter, and ζωη, life, a sect of atheists among the ancient Greek philosophers, who maintained that matter had some natural perception, without animal sensation, or reflection in itself considered; but that this imperfect life occasioned that organisation whence sensation and reflection afterwards arose. Of these, some held only one life, which they called a plastic nature, presiding regularly and invariably over the whole corporeal universe, which they represented as a kind of large plant or vegetable: these were called the cosmoplastic and stoical atheists, because the stoics held such a nature, though many of them supposed it to be the instrument of the deity. Others thought that every particle of matter was endued with life, and made the mundane system to depend upon a certain mixture of chance and plastic or orderly nature united together. These were called Stratonici from Strato Lampsacenus, a disciple of Theophrastus, called also Physicus, who was first a celebrated Peripatetic, and afterwards formed this new system of atheism for himself.

HYM, *n. s.* A species of dog (unless it is by mistake for lym.—Johnson.)

Avaunt, you curs
Mastiff, greyhound, mungril grim,
Hound or spaniel, branch or *hym;*
Or bobtail tike, or trundle tail,
Tom will make him weep and wail.
Shakspeare.

HY'MEN, *n. s.* } Greek, υμην,
Hymene'al, *n. s.* & *adj.* } υμεναιος. The
Hymene'an, *n. s.* & *adj.* } god of marriage: the virginal membrane: a marriage song: any thing pertaining to marriage.

And wedded had he with full blissful chere,
King Pandiones fairè doughter dere,
That hight Progne, the floure of hire countie,
Though Juno liste not at the fest to be,
Ne *Hymen,* that the god of weddyng is.
Chaucer. Legende of Good Women.

Run now you shepherd swains; ah! run you thither,
Where this fair bridegroom leads the blessed way:
And haste you lovely maids, haste you together
With this sweet bride, while yet the sun-shine day
Guides your blind steps; while yet loud summons call,
That every wood and hill resounds withal,
Come *Hymen, Hymen,* come, drest in thy golden pall.
Fletcher's Purple Island.

And heavenly choirs the *hymenean* sung.
Milton.

For her the spouse prepares the bridal ring;
For her white virgins *hymeneals* sing. *Pope.*

The suitors heard, and deemed the mirthful voice
A signal of her *hymeneal* choice. *Id. Odyssey.*

Hymen, or Hymenæus, in ancient mythology the son of Bacchus and Venus, and the god of marriage. He was invoked in epithalamiums, and other matrimonial ceremonies. The poets crown this deity with a chaplet of roses, and represent him enervated with pleasures, dressed in a yellow robe and yellow shoes, with a torch in his hand. The new married couple bore garlands of flowers on the wedding day; which custom also obtained among the Hebrews, and even among Christians during the first ages of the church, as appears from Tertullian.

Hymen, Υμην, in anatomy, is a thin membrane or skin, sometimes circular, of different breadths, more or less smooth, and sometimes semilunar, formed by the union of the internal membrane of the great canal with that on the inside of the alæ, resembling a piece of fine parchment. This membrane is stretched in the

neck of the womb of virgins, below the nymphæ, leaving in some subjects a very small opening, in others a larger, and in all rendering the external orifice narrower than the rest of the cavity, and to be broken when they are deflowered; an effusion of blood following the breach. See ANATOMY. The hymen is considered as the test of virginity, an opinion which is very ancient. See Deuteronomy 22, 13. In infants it is a fine thin membrane, not very conspicuous, because of the natural straitness of the passage itself, which does not admit of any great expansion in so little room. This membrane grows more distinct, as well as firm, by age, and it is sometimes very strong and even impervious, when incision becomes necessary.

HYMENÆA, the bastard locust tree; a genus of the monogynia order, and decandria class of plants: natural order thirty-third, lomentaceæ. CAL. quinquepartite: there are five petals, nearly equal; the style is intorted; the legumen full of meally pulp. There is but one species, viz.

H. courbarilla, or the courbaril, a large tree which grows naturally in the Spanish West Indies. The trunk is covered with a ligh ash-colored bark; is often more than sixty feet high, and three in diameter. The branches are furnished with dark green leaves, which stand by pairs on one common foot-stalk, diverging from their base in manner of a pair of shears when opened. The flowers come out in loose spikes at the ends of the branches, and are yellow, striped with purple. Each consists of five petals placed in a double calyx, the outer leaf of which is divided into five parts, and the inner one is cut into five teeth at its brim. In the centre are ten declining stamina, longer than the petals, surrounding an oblong germen, which becomes a thick, fleshy, brown pod, four or five inches long and one broad, with a suture on both edges, and includes three or four purplish seeds, somewhat of the shape of Windsor beans, but smaller. The seeds are covered with a light brown sugary substance, which the Indians scrape off and eat with great avidity, and which is very pleasant and agreeable. At the principal roots, under ground, is found collected in large lumps a yellowish-red transparent gum, which, when dissolved in rectified spirit of wine, affords a most excellent varnish, and is the gum anime of the shops.

HYMENOPTERA, from *υμην*, membrane, and *πτερον*, a wing, in the Linnæan system of zoology, an order of insects, having four membranaceous wings; the tails of the females are furnished with stings, which in some are used for instilling poison, and in others for merely piercing the bark and leaves of trees, and the bodies of other animals, in which they deposit their eggs. See ENTOMOLOGY.

HYMETHUS, or HYMETTUS, in ancient geography, a mountain of Attica near Athens, famous for its marble quarries, and for its excellent honey. See GREECE. Pliny says that Crassus first fetched marble columns from it.

HYMN, *n. s.*, *v. a.*, & *v. n.* } Fr. *hymne*;
HYMN'ICK, *adj.* } Gr. *υμνος*, *υμνεω*.

A song of praise or adoration; an encomiastic song to some superior being; to praise, or worship, or sing songs of thanksgiving: hymnic, relating to hymns, or spiritual songs.

Doe thou vouchsafe with thy love-kindling light
To' illuminate my dim and dulled eyne,
And beautifie this sacred *hymne* of thyne.
Spenser's Hymnes.

As I erst in the praise of mine own dame,
So now in honour of thy mother dear,
An honourable *hymn* I eke should frame. *Spenser.*

Our solemn *hymns* to sullen dirges change;
Our bridal flowers serve for a buried corse. *Shakesp.*

When steel grows
Soft as a parasites silk, let *hymns* be made
An overture for the wars. *Id. Coriolanus.*

There is an *hymn* sung; but the subject of it is always the praises of Adam, and Noah, and Abraham, concluding ever with a thanksgiving for the nativity of our Saviour. *Bacon.*

He rounds the air, and breaks the *hymnick* notes
In birds', heaven's choristers, organick throats;
Which, if they did not die, might seem to be
A tenth rank in the heavenly hierarchy. *Donne.*

They touched their golden harps, and *hymning* praised
God and his works. *Milton.*

Whose easier business were to serve their lord
High up in Heaven, with songs to *hymn* his throne,
And practised distance, to cringe, not fight. *Id.*

Farewell, you happy shades,
Where angels first should practise *hymns*, and string
Their tuneful harps, when they to heaven would sing.
Dryden.

He had not left alive this patient saint,
This anvil of affronts, but sent him hence,
To hold a peaceful branch of palm above,
And *hymn* it in the quire. *Id. Spanish Friar.*

How the soldier's rough strain seems
Softened by distance to a *hymn*-like cadence!
Byron. Deformed Transformed.

A HYMN, Isidore remarks, is properly a song of joy, full of the praises of God, and is distinguished from threna, which is a mourning song, full of lamentation. St. Hilary, bishop of Poictiers, is said to have been the first that composed hymns to be sung in churches, and was followed by St. Ambrose. In the Greek Liturgy there are four kinds of hymns; but the word is not taken in the sense of a praise offered in verse, but simply of a laud or praise. The angelic hymn, or gloria in excelsis, makes the first kind; the trisagion, the second; the cherubic hymn, the third; and the hymn of victory and triumph, called *επινικιος*, the last. The hymns of the ancients generally consisted of three sorts of stanzas; one of which, called strophe, was sung by the band as they walked from east to west; another, called antistrophe, was performed as they returned from west to east; the third part or epode, was sung before the altar. The Jewish hymns were accompanied with trumpets, drums, and cymbals.

HYOIDES, in anatomy, the bone at the root of the tongue. See ANATOMY.

HYOSCYAMUS, henbane: a genus of the monogynia order, and pentandria class of plants: natural order twenty-eighth, luridæ. COR. funnel-shaped and obtuse: stamina inclining to one side: CAPS. covered and bilocular. There are several species, one of which, viz.

H. niger, or common henbane, is a native of Britain. It grows on road-sides, and among

rubbish. It is a biennial plant, with long fleshy roots which strike deep into the ground, sending out several large soft leaves, deeply flashed on their edges; the following spring the stalks come up, about two feet high, garnished with flowers standing on one side in a double row, sitting close to the stalks alternately. They are of a dark purplish color, with a black bottom; and are succeeded by roundish capsules, which open with a lid at the top, and have two cells filled with small irregular seeds. The seeds, leaves, and roots of this plant, as well as of all other species of this genus, are poisonous: and many well attested instances of their bad effects are recorded; madness, convulsions, and death, being the common consequence. In a smaller dose, they occasion giddiness and stupor. It is said that the leaves scattered about a house will drive away mice.—The juice of the plant, evaporated to an extract, is prescribed in some cases as a narcotic; in which respect it may be a powerful medicine if properly managed. The dose is from half a scruple to half a drachm. Goats are not fond of the plant; horses, cows, sheep, and swine, refuse it.

To HYP, *v. a.* Barbarously contracted from hypochondriack. To make melancholy; to dispirit.

I have been to the last degree *hypped* since I saw you. *Spectator.*

HYP'ALLAGE, *n. s.* Gr. *ὑπαλλαγή*. A figure by which words change their cases with each other.

HYPANTE, or HYPERPANTE, a name given by the Greeks to the feast of the presentation of Jesus in the temple.—This word, which signifies lowly or humble meeting, was given to this feast from the meeting of old Simeon and Anna the propheteſs in the temple, when Jesus was brought thither.

HYPATIA, a learned and beautiful lady of antiquity, the daughter of Theon, a celebrated philosopher and mathematician, and president of the famous Alexandrian school, was born at Alexandria about the end of the fourth century. She made such progress in philosophy, geometry, astronomy, and the mathematics, that she was esteemed the most learned person of her time. At length she was thought worthy to succeed her father in that distinguished and important employment, the government of the school of Alexandria; and to teach from the chair of Ammonius and Hierocles. Her fame was so extensive, and her worth so universally acknowledged, that she had a very crowded auditory. One of her pupils was the celebrated Synesius, afterwards bishop of Ptolemais, who every where bears the strongest and most grateful testimony to her abilities and virtues. When Nicephorus intended to pass the highest compliment on the princess Eudocia, he thought he could not do it better than by calling her another Hypatia. But while Hypatia shone the brightest ornament of Alexandria, a kind of civil war which broke out between Orestes the governor, and St. Cyril the patriarch, proved fatal to the lady. In 415 about 500 monks attacked the governor, and would have killed him had he not been rescued by the townsmen; but, the respect which Orestes had for Hypatia causing her to be traduced among the mob, who dragged her from her chair, tore her to pieces, and burned her limbs. Cyril has been suspected of fomenting this tragedy, and Dr. Cave endeavours to remove the imputation of such a horrible action from the patriarch; calling the Alexandrian mob, levissimum hominum genus, 'a very trifling inconstant people.' But though Cyril should neither have been the perpetrator, nor the contriver of Hypatia's death, yet he did not discountenance it; for he received the dead body of Ammonius, one of the most forward in the riot, and pronounced a panegyric upon the ruffian, as having died a martyr for the truth. This transaction. so disgraceful to the church of Alexandria, took place A. D. 415 in the reign of Theodosius II. Hypatia published Commentaries on Apollonius's Conics, Diophantus's Arithmetic, and other works.

HYPECOUM, wild cumin: a genus of the digynia order, and tetandria class of plants; natural order twenty-fourth, corydales: CAL. diphyllous: the petals four: the exterior two larger and trifid: the fruit a pod. There are seven species, all low herbaceous plants with yellow flowers, and easily propagated by seeds. The juice is of a yellow color, resembling that of celandine, and is affirmed by some eminent physicians to be as narcotic as opium. From the nectarium the bees collect great quantities of honey.

HY'PER, *n. s.* A word barbarously curtailed by Prior from hypercritic.—Johnson. A hypercritic: one more critical than necessity requires. Prior did not know the meaning of the word. The force of the Greek preposition, however, which is the etymon of this word, is to increase the force or meaning of those words with which it is found in composition, as may be seen by the examples:—

Criticks I read on other men,
And *hypers* upon them again. *Prior.*

HYPERBATON, in grammar, a figurative construction, inverting the natural and proper order of words and sentences. The several species of the hyperbaton are, the anastrophe, the hysteron-proteron, the hypallage, synchysis, tmesis, parenthesis, and the hyperbaton strictly so called. See ANASTROPHE.

HYPERBATON, strictly so called, is a long retention of the verb which completes the sentence. Instances occur in Virgil, wherein the verb is placed at the distance of nine lines from the nominative.

HYPER'BOLA, *n. s.* / HYPER'BOLE, *n. s.* / HYPERBOL'ICAL, *adj.* / HYPERBOL'IC, *adj.* / HYPERBOL'ICALLY, *adv.* / HYPERBOL'IFORM, *adv.* Fr. *hyperbole;* Gr. *ὑπερ* and *βάλλω*. In geometry, a section of a cone made by a plane, so that the axis of the section inclines to the parallel leg of the cone, which in the parabola is opposite to it, and in the ellipsis intersects it. The axis of the hyperbolical section will meet also with the opposite side of the cone, when produced above the vertex.—Harris. Hyperbole a figure in rhetoric by which any thing is increased or diminished beyond the exact truth; as, he runs faster than lightning. His possessions are fallen to dust. He was so gaunt,

the case of a flagelet was a mansion for him.—Shakspeare. Hyperbolic, hyperbolical, having the nature of an hyperbole, exaggerated, or extenuated, beyond the truth: hyperboliform, having the form of an hyperbola.

Terms unsquared
Which, from the tongue of roaring Typhon dropt,
Would seem *hyperbolas*.
Shak.peare. Troilus and Cressida.

Taffata phrases, silken terms precise,
Three-piled *hyperboles*, spruce affectation,
Figures pedantical, these Summer flies,
Have blown me full of maggot ostentation.
Shakspeare.

Yet may all be solved, if we take it *hyperbolically*.
Browne.

They were above the *hyperboles*, that fond poetry bestows upon its admired objects. *Glanville.*

It is parabolical, and probably *hyperbolical*, and therefore not to be taken in a strict sense. *Boyle.*

The horny or pellucid coat of the eye riseth up, as a hillock, above the convexity of the white of the eye, and is of an *hyperbolical* or a parabolical figure.
Ray on the Creation.

Cancellated in the middle with squares, with triangles before, and behind with *hyperbolic* lines.
Grew's Musæum.

Hyperboles, so daring and so bold,
Disdaining bounds, are yet by rules controlled;
Above the clouds, but yet within our sight,
They mount with truth, and make a tow'ring flight.
Granville.

Had the velocities of the several planets been greater or less than they are, or had their distances from the sun, or the quantity of the sun's matter, and consequently his attractive power, being greater or less than they are now, with the same velocities, they would not have revolved in concentrick circles, but have moved in *hyperbolas* very eccentrick.
Bentley.

The common people understand raillery, or at least rhetorick, and will not take *hyperboles* in too literal a sense. *Swift.*

Scylla is seated upon a narrow mountain, which thrusts into the sea a steep high rock, and *hyperbolically* described by Homer as inaccessible.
Broome's Notes on the Odyssey.

HYPERBOLA. See CONIC SECTIONS.

HYPERBOLE, in rhetoric. See ORATORY. Lord Kames, in his Elements of Criticism, observes, that 'an object uncommon with respect to size, either very great of its kind or very little, strikes us with surprise; and this emotion forces upon the mind a momentary conviction that the object is greater or less than it is in reality: the same effect, precisely, attends figurative grandeur or littleness, and hence the hyperbole, which expresses this momentary conviction. A writer is generally more successful in magnifying by a hyperbole than in diminishing. The reason is, that a minute object contracts the mind, and fetters its power of imagination; but that the mind, dilated and inflamed with a grand object, moulds objects for its gratification with great facility. Longinus cites the following ludicrous instance of a diminishing hyperbole from a comic poet;—'he was owner of a plot of ground not larger than a Lacedemonian letter.' But, for the reason now given, the hyperbole has by far the greater force in magnifying objects. It is unnecessary to quote examples. Homer, Virgil, Shakspeare, and all our best poets abound with them, and many are to be found in Scripture. See Gen. xiii. 15, 16; and John xxi. 25. The nicest point of all is to ascertain the natural limits of the hyperbole, beyond which, being overstrained, it has a bad effect. Longinus with great propriety compares this kind of hyperbole to a bow-string, which relaxes by overstraining, and produces an effect directly opposite to what is intended.'

HYPERBOLIC CONOID, a solid formed by the revolution of a cone about its axis.

HYPERBOLICUM ACUTUM, a solid made by the revolution of the infinite area contained between the curve of the hyperbola and its asymptote. This produces a solid, which, though infinitely long, and generated by an infinite area, is demonstrated by Torricelli to be equal to a finite solid body.

HYPERBO'REAN, *n. s.* Fr. *hyperborien*; Lat. *hyperboreus*. Northern.

HYPERBOREAN, in ancient geography, was applied to those people and places which were situated to the north of the Scythians. The ancients had very little acquaintance with these Hyperborean regions; all they tell us of them is very dubious, much of it false. Diodorus Siculus says, the Hyperboreans were thus called, because they dwelt beyond the wind Boreas; υπερ signifying beyond, and Βορεας, Boreas, the north-wind. This etymology is more natural than that of Rudbeck, who would have the word to be Gothic, and to signify nobility. Herodotus doubts whether there were any such nations as the Hyperborean. Strabo, who believes there are, does not take Hyperborean to signify beyond Boreas or the north; the preposition υπερ, he supposes only to form a superlative, and to mean most northern. Most modern geographers, as Hoffman, Cellarius, &c., place the Hyperboreans in the north parts of Europe, among the Siberians and Samoieds; and think the Hyperboreans of the ancients were those who lived farthest to the north. The Hyperboreans of our days are those Russians who inhabit between the Volga and the White Sea. According to Cluvier, the name Celtes was synonymous with that of Hyperboreans.

HYPERCATALECTIC, *adj.* in Greek and Latin poetry, is applied to a verse that has one or two syllables too much, or beyond the regular and just measure; as,

Musæ sorores sunt Minervæ.

HYPERCRIT'IC, *n. s.* } Fr. *hypercritique*; Gr. υπερκριτικος. A critic captious beyond use or reason.
HYPERCRIT'ICAL, *adj.* }

Those *hypercriticks* in English poetry differ from the opinion of the Greek and Latin judges, from the Italians and French, and from the general taste of all ages. *Dryden.*

We are far from imposing those nice and *hypercritical* punctilios, which some astrologers oblige our gardeners to. *Evelyn.*

Such *hypercritical* readers will consider my business was to make a body of refined sayings, only taking care to produce them in the most natural manner. *Swift.*

HYPERDULIA, in the Romish theology (from υπερ, above, and δουλια, worship), the

worship rendered to the holy virgin. The worship offered to the saints is called dulia; and that to the virgin hyperdulia, as being superior.

HYPERIA, in ancient geography, the seat of the Phæacians near the Cyclops. Some take it to be Camarina in Sicily; according to others it is supposed to be Melita, an adjoining island. This is confirmed by Apollonius Rhodius. The Phæacians afterwards removed to Corcyra, being expelled by the Phœnicians, who settled in Melita before the Trojan war, on account of the commodious harbours.

HYPERICUM, St. John's wort, a genus of the polyandria order, and polyadelphia class of plants; natural order twentieth, rotaceæ: CAL. quinquepartite; the petals five; the filaments many, and coalited at the base into five pencils: CAPS. is a pencil. Of this genus there are eighty-eight species, most of them hardy, deciduous shrubs, and under-shrubby plants, adorned with oblong and oval simple foliage, and pentapetalous yellow flowers in clusters. The most remarkable are,

1. H. androsæmum, tutsan or park leaves, which has an upright under-shrubby stalk, two feet high, branching by pairs opposite; and, at the ends of the stalks, clusters of small yellow flowers appear in July and August, and are succeeded by roundish berry-like black capsules. This plant is hardy, and grows naturally in many parts of Britain. It has long held a place in the medicinal catalogues; but its virtues are not much valued at present. The leaves given in substance are said to destroy worms. By distillation they yield an essential oil. The flowers tinge spirits and oils of a fine purple color. Cows, goats, and sheep, eat the plant; horses and swine refuse it. The dried plant, boiled in water with alum, dyes yarn of a yellow color; and the Swedes give a fine purple tinge to their spirits with the flowers.

2. H. ascyron, or dwarf American St. John's wort, has spreading roots, sending up numerous slender, square stalks, a foot long; oval, spear-shaped, close-sitting, smooth leaves, by pairs opposite; and, at the end of the stalks, large yellow flowers. It is a hardy plant.

3. H. Canariense, has shrubby stalks, dividing and branching six or seven feet high; oblong, close-sitting leaves by pairs; and, at the ends of the branches, clusters of yellow flowers appearing in June and July. This species and the hircinum propagate by suckers.

4. H. hircinum, or stinking St. John's wort. It rises three or four feet high, with several shrubby two-edged stalks from the root, branching by pairs opposite at every joint; oblong, oval, close-sitting, opposite leaves; and, at the ends of all the young shoots, clusters of yellow flowers. Of these there are three varieties; one with strong stalks, six or eight feet high, broad leaves, and large flowers; the other with strong stalks, broad leaves, and without any disagreeable odor; the third has variegated leaves. All these varieties are shrubby and hardy plants. They flower in June and July in such numerous clusters, that the shrubs appear covered with them; and produce abundance of seeds in autumn.

5. H. monogynum, the one-styled China hypericum, has a shrubby purplish stalk, about two feet high; oblong, stiff, smooth, close-sitting leaves, of a shining green above, and white underneath; clusters of small yellow flowers, with colored cups, and only one style, flowering the greatest part of the year. This species is propagated by layers and cuttings, planted in pots, and plunged in a hot-bed.

HYPERIDES, an orator of Greece, and a disciple of Plato and Isocrates, who governed the republic of Athens. He defended with great zeal and courage the liberties of Greece; but was put to death by Antipater's order, A. A. C. 322. He composed many orations, of which only one is extant. He was one of the ten celebrated orators of Greece; and, though the intimate friend of Demosthenes, accused him of taking bribes, and obtained his banishment.

HYPERIUS (Andrew Gerard), a learned divine of Ypres. He was educated in France; but, embracing Protestant principles, he came to England, and afterwards settled as professor of divinity at Marpurg, where he died in 1564. His works make seven vols. folio.

HYPER'METER, *n. s.* Greek, *ὑπερ* and *μέτρον*. Any thing greater than the standard requires.

When a man rises beyond six foot, he is an *hypermeter*, and may be admitted into the tall club.
Addison.

HYPERMNESTRA, in fabulous history, one of the fifty daughters of Danaus, king of Argos, the only one who refused to obey her father's bloody order. See DANAIDES and DANAUS.

HYPERSARCO'SIS, *n. s.* Gr. *ὑπερσάρκωσις*, *ὕπερ* and *σαρκος*. The growth of fungous or proud flesh.

Where the *hypersarcosis* was great, I sprinkled it with precipitate, whereby I more speedily freed the ulcer of its putrefaction. ***Wiseman.***

HYPERTHYRON, in architecture, a sort of table, usually placed over gates or doors of the Doric order, above the chambranle, in form of a frieze.

HY'PHEN, *n. s.* Gr. *ὑφὲν*. A note of conjunction; as, vir-tue, ever-living.

HYPNO'TIC, *n. s.* Gr. *ὕπνος*. Any medicine that induces sleep.

HYPNUM, feather-moss, in botany, a genus of the natural order of musci, and the cryptogamia class of plants. The antheræ are operculated, or covered with a lid; the calyptera smooth; the filament lateral, and rising out of a perichætium, or tuft of leaflets different from the other leaves of the plant. There are 156 species, many of them natives of Great Britain. The most remarkable are,

1. H. parietinum, which has shoots nearly flat and winged, undivided for a considerable length, and the leaves shining; but the old shoots do not branch into new ones. It grows in woods and shady places, and is used for filling up the chinks in wooden houses, whence the trivial name.

2. H. proliferum is of a very singular structure, one shoot growing out from the centre of another; the veil is yellow and shining; the lid with a kind of long bill; the leaves not shining;

sometimes of a yellowish, and sometimes of a deep green. This moss covers the surface of the earth in the thickest shades, through which the sun never shines, and where no other plant can grow

HYPOBOLE, or subjection, from *υπο*, and *βαλλω*, I cast, in rhetoric, a figure, when several things are mentioned, and each of them is refuted in order. When complete it consists of three parts; a proposition, an enumeration of particulars with their answers, and a conclusion. Thus Cicero, upon his return from banishment, vindicates his conduct in withdrawing so quietly, and not opposing the faction that ejected him. See ORATORY.

HYPOCAUSTUM, from *υπο* and *καω*, to burn, among the ancient Greeks and Romans, a subterraneous place, where was a furnace to heat the baths. Hypocaustum was also a kind of kiln to heat their winter parlours. The remains of a Roman hypocaustum were discovered under ground at Lincoln in 1739. We have an account of these remains in the Philos. Trans. No. 461.

HYPOCHÆRIS, hawk's-eye, in botany, a genus of the polygamia æqualis order, and syngenesia class of plants; natural order forty-ninth, compositæ. The receptacle is paleaceous: CAL. a little imbricated; the pappus glumy. There are five species, of which the most remarkable is the

H. maculata, or spotted hawk's-eye, a native of Britain. It grows on high grounds. The leaves are oblong, egg-shaped, and toothed; the stem almost naked, generally with a single branch; the blossoms yellow, opening at 6 A. M. and closing at 4 P. M. The leaves are boiled and eaten like cabbage. Horses are fond of this plant when green, but not when dry. Cows, goats, and swine eat it; sheep are not fond of it.

HYPOCHON'DRES, *n. s.* } Fr. *hypocondre*;
HYPOCHON'DRIAC, *adj.* } Gr. *ὑποχόνδριον*.
HYPOCHONDRI'ACAL, *adj.* } The two regions

lying on each side of the cartilago ensiformis, and those of the ribs, and the tip of the breast, which have in one the liver, and in the other the spleen.—Quincy. Hypochondriac, melancholy; because this disease was formerly supposed to be connected with the state of the liver, which is placed in the right hypochondrium.

Cold sweats are many times mortal, and always suspected; as in great fears, and *hypochondriacal* passions, being a relaxation or forsaking of the spirits.
Bacon's Natural History.

The blood, moving too slowly through the celiack and mesenterick arteries, produces various complaints in the lower bowels and *hypochondries*; from whence such persons are called hypochondriack. *Arbuthnot.*

Socrates laid down his life in attestation of that most fundamental truth, the belief of one God: and yet he's not recorded either as fool or *hypochondriack*.
Decay of Piety.

HYPOCHONDRIASIS, in medicine. See MEDICINE.

HYP'OCIST, *n. s.* Gr. *ὑπόκιστις*; Fr. *hypociste*.

Hypocist is an inspissated juice considerably hard and heavy, of a fine shining black colour, when broken. The stem of the plant is thick and fleshy; and much thicker at the top than towards the bottom. The fruits contain a tough glutinous liquor, gathered before they are ripe: the juice is expressed, then formed into cakes. *Hill.*

HYPOCIST, or HYPOCISTIS is obtained from the sessile asarum, and greatly resembles the true Egyptian acacia. The juice is evaporated over a very gentle fire, to the consistence of an extract, and, when formed into cakes, is exposed to the sun to dry. It is an astringent of considerable power; is good against diarrhœas and hæmorrhages of all kinds; and may be used in repellent gargarisms in the manner of true acacia; but it is rarely met with genuine, the German acacia being usually sold under its name. See ASARUM.

HYPOC'RISY, *n. s.* } Gr. *υποκρισις* and
HYP'OCRITE, *n. s.* } *υποκριτης*. Dissi-
HYPOCRIT'ICAL, *adj.* } mulation with re-
HYPOCRIT'ICALLY, *adv.* } gard to the moral or

religious character; an insincere dissembling person: falsely; in a dissembling manner.

A wise man hateth not the law; but he that is an *hypocrite* therein, is as a ship in a storm.
Ecclus. xxxiii. 3.

Thou shalt not shrive thee for vaine glorie, ne for *ypocrisie*, ne for no cause, but only for the doute of Jesu Crist and the hele of thy soule.
Chaucer. The Persones Tale.

He heartily prays some occasion may detain us longer: I dare swear he is no *hypocrite*, but prays from his heart. *Shakspeare.*

Who can describe
Women's *hypocrisies*? their subtle wiles,
Betraying smiles, feigned tears, inconstancies?
Otway's Orphan.

Next stood *Hypocrisy* with holy leer,
Soft smiling and demurely looking down;
But hid the dagger underneath the gown.
Dryden.

Fair *hypocrite*, you seek to cheat in vain;
Your silence argues, you ask time to reign. *Id.*

Now you are confessing your enormities; I know it by that *hypocritical*, down-cast look. *Id.*

Kings and priests are in a manner bound
For reverence sake to be close *hypocrites*. *Id.*

Beware, ye honest: the third circling glass
Suffices virtue; but may *hypocrites*,
Who slily speak one thing, another think,
Hateful as hell, still pleased unwarned drink on,
And through intemp'rance grow awhile sincere.
Philips.

Whatever virtues may appear in him, they will be esteemed an *hypocritical* imposture on the world; and, in his retired pleasures, he will be presumed a libertine. *Rogers.*

The making religion necessary to interest might increase *hypocrisy*; but if one in twenty should be brought to true piety, and nineteen be only *hypocrites*, the advantage would still be great. *Swift.*

Hypocrisy is much more trouble than open infidelity and vice; it wears the livery of religion, and is cautious of giving scandal: nay, continued disguises are too great a constraint: men would leave off their vices, rather than undergo the toil of practising them in private. *Id.*

Let others skrew their *hypocritick* face. *Id.*

If I am nothing—
For nothing shall I be an *hypocrite*,
And seem well pleased with pain. *Byron.*

HYPOGAS'TRICK, *adj.* Fr. *hypogastrique*; Gr. *ὑπο* and *γαστηρ*. Seated in the lower part of the belly.

The swelling we supposed to rise from an effusion of serum through all the *hypogastrick* arteries. *Wiseman.*

HYPAGASTRIC, an appellation given to the internal branch of the iliac artery.

HYPOGASTRIUM. See ANATOMY.

HYPOGE'UM, or HYPOGÆUM, *n. s.* Gr. ὕπο and γη. A name which the ancient architects gave to all the parts of a building that were under ground, as cellars and vaults. It was also used by the Greeks and Romans for subterraneous tombs in which they buried their dead.

HYPOGEUM, in astrology, a name given to the celestial houses below the horizon: especially the imum cœli, or bottom of heaven.

HYPOGLOSSI, externi, or majores, in anatomy, the ninth pair of nerves, called also linguales et gustatorii. See ANATOMY.

HYPOGLOSSIS, or HYPOGLOTTIS, of υπο, under, and γλωττα, tongue, in anatomy, a name given to two glands of the tongue, situated under it, near the venæ ranulares. There are other two, one on each side of it. They serve to filtrate a kind of serous matter, of the nature of saliva, which they discharge into the mouth by little ducts near the gums.

HYPOLITE (St.), in France. See HIPPOLYTE.

HYPOMOCHLION, the fulcrum or prop of a lever, or the point which sustains its pressure in raising or lowering bodies. It is also used for a roller set under a lever, or under stones, timber, &c., to assist in removing them.

HYPONITRIC ACID. See NITRIC ACID.

HYPOPHOSPHORIC ACID. See PHOSPHORIC ACID.

HYPOSCENIUM, in antiquity, a partition under the Logeum, or pulpit of the Greek theatre, appointed for the music.

HYPOSTASIS, *n. s.* } Fr. *hypostase*; Gr.
HYPOSTAT'ICAL, *adj.* } υποστασις. Distinct subsistence; personality, as applied to the holy Trinity: hypostatical, constituent as distinct ingredients; distinctly; personal.

Let our Carneades warn men not to subscribe to the grand doctrine of the chymists, touching their three *hypostatical* principles, till they have a little examined it. *Boyle.*

The oneness of our Lord Jesus Christ, referring to the several *hypostases* in the one eternal, indivisible, divine nature, and the eternity of the Son's generation and his co-eternity and consubstantiality with the Father, are assertions equivalent to those comprised in the ancient simple article. *Hammond.*

HYPOSTASIS literally signifies substance, or subsistence, but is used in theology for person. Thus we hold that there is but one nature or essence in God, but three hypostases or persons. This term is of a very ancient standing in the church. St. Cyril repeats it several times, as well as the phrase union according to hypostasis. The first time it occurs is in a letter from that father to Nestorius, where he uses it instead of προσωπον, the word we commonly render person, which did not seem expressive enough. This term occasioned great dissentions in the ancient church, both among the Greeks and the Latins. In the council of Nice hypostasis was defined to denote the same with essence or substance; so that it was heresy to say that Jesus Christ was of a different hypostasis from the Father; but custom altered its meaning. In the necessity they were under of expressing themselves strongly against the Sabellians, the Greeks used the word hypostasis, and the Latins persona; which proved the occasion of endless disagreement. The phrase τρεις υποστασεις, used by the Greeks, offended the Latins, who translated υποστασις by substantia. The barrenness of the Latin tongue in theological phrases allowed them but one word for the two Greek ones, ουσια and υποστασις; and thus disabled them from distinguishing essence from hypostasis. They therefore chose rather to use the term tres personæ and tres hypostases.—An end was put to these logomachies in a synod held at Alexandria about A. D. 362, at which St. Athanasius assisted: after which the Latins made no scruple of saying tres hypostases, nor the Greeks three persons.

HYPOSULPHURIC ACID. See SULPHURIC ACID.

HYPOTHEC, or HYPOTHECA, Gr. υποθηκη, a thing subject to obligation; in the civil law, an obligation, whereby the effects of a debtor are made over to his creditor to secure his debt. As the hypotheca is an engagement for the security of the creditor, various means have been made use of to secure to him the benefit of the convention. The use of the pawn or pledge is the most ancient, which is almost the same with the hypotheca; all the difference consisting in this, that the pledge is put into the creditor's hands; whereas, in a simple hypotheca, the thing remained in the possession of the debtor. It was found more easy to engage an estate by a civil covenant than by an actual delivery; accordingly it was first practised among the Greeks; and from them the Romans borrowed it; only the Greeks, the better to prevent frauds, used to fix some visible mark on the thing, that the public might know it was hypothecated or mortgaged by the proprietor; but the Romans, looking on such advertisements as injurious to the debtor, forbade the use of them. The Roman lawyers distinguished four kinds of hypothecas: the conventional, which was with the will and consent of both parties; the legal, which was appointed by law, and for that reason called tacitly the prætor's pledge, when, by the flight or non-appearing of the debtor, the creditor was put in possession of his effects; and the judiciary, when the creditor was put in possession by virtue of a sentence of the court.

HYPOTH'ENUSE, *n. s.* Fr. *hypotenuse*; Gr. ὑποτείνουσα. The line that subtends the right angle of a right-angled triangle; the subtense.

The square of the *hypothenuse*, in a right-angled triangle, is equal to the squares of the two other sides. *Locke.*

HYPOTHENUSE. See GEOMETRY.

HYPOTH'ESIS, *n. s.* }
HYPOTHET'ICAL, *adj.* } Fr. *hypothese*; Gr. ὑποθεσις. A
HYPOTHET'ICALLY, *adv.* } supposition; a system formed upon some principle not proved:

hypothetical, including a supposition: conditionally.

The mind casts and turns itself restlessly from one thing to another, till at length it brings all the ends of a long and various *hypothesis* together; sees how one part coheres with another, and so clears off all the appearing contrarieties that seemed to lie cross, and make the whole unintelligible. *South.*

With imagined sovereignty
Lord of his new *hypothesis* he reigns:
He reigns: how long? till some usurper rise:
And he too, mighty thought, mighty wise,
Studies new lines, and other circles feigns.
Prior.

The only part liable to imputation is calling her a goddess: yet this is proposed with modesty and doubt, and *hypothetically*. *Broome.*

Conditional or *hypothetical* propositions are those whose parts are united by the conditional particle if; as, if the sun be fixed, the earth must move. *Watts.*

HYPOTHESIS, in disputation. False hypotheses are often made, in order to draw the antagonist into absurdities; and even in geometry truths are often deducible from false hypotheses. Every hypothetical proposition may be distinguished into hypothesis and thesis; the first rehearses the conditions under which any thing is affirmed or denied; and the latter is the thing itself affirmed or denied. Thus, in the proposition, a triangle is half a parallelogram, if the bases and altitudes of the two be equal; the latter part is the hypothesis, 'if the basis,' &c., and the former the thesis, 'a triangle is half a parallelogram.' In strict logic we are never to pass from the hypothesis to the thesis; that is, the principle supposed must be proved, before we require the consequence to be allowed.

HYPOTHESIS, in physics, &c., denotes a system formed to account for some phenomenon or appearance of nature; such as gravity, magnetism, the deluge, the tides, &c. The real causes of natural things generally lie very deep; observation and experiment are in most cases extremely slow, and the human mind is very impatient: hence we often invent something that may seem like the cause, and which appears calculated to answer the several phenomena, so that it may possibly be the true cause.

HYPOTIPOSIS. See ORATORY.

HYPOXIS, in botany, a genus of the monogynia order, and hexandria class of plants; natural order tenth, coronariæ: COR. is divided into six parts, and persisting, superior: CAPS. narrowing at the base: CAL. a bivalved glume. Species thirteen, natives of warm climates.

HYPSICLES, an ancient mathematician of Alexandria, who flourished under Marcus Aurelius. He wrote a work entitled Anaphoricus, or A Book of Ascensions, printed in Greek and Latin at Paris in 1680.

HYPSICRATES, an ancient Phœnician historian, who wrote a history of Phœnicia in his native tongue, which was saved from the flames of Carthage when that city was destroyed, and translated into Greek.

HYPSIPYLE, in fabulous history, the daughter of Thoas, queen of Lemnos. All the women in the island having conspired to murder the men, in revenge for their husbands having preferred their female slaves to them, she saved her father's life. The Argonauts, soon after landing at Lemnos, rendered the women pregnant, and Hypsipyle had twins by Jason. Being afterwards banished by her subjects, she was taken by pirates, and sold to Lycurgus, king of Nemæa.

HYPSISTARII, from ὑψιστος, highest, a sect of heretics in the fourth century; so called from the profession they made of worshipping the most high God. Their doctrine was a compound of Paganism, Judaism, and Christianity. They adored the most high God with the Christians; but they also revered fire and lamps with the Heathens, and observed the sabbath, and the distinction of clean and unclean things with the Jews. They bore a near resemblance to the Euchites, or Massalians.

HYRAX, the saphan, or ashkoko, in zoology, a genus of the mammalia class of animals, and of the order of glires. The generic characters are, two broad and distinct fore teeth above; four contiguous, broad, flat notched, fore teeth below; and four large grinders on each side in both jaws. The fore feet have four toes, the hind feet only three. There is no tail, and the clavicles are wanting. There are two species.

1. H. Capensis, the Cape ashkoko, has flat nails on all the toes, except one toe of each hind foot, which is armed with a sharp-pointed claw. It inhabits the Cape of Good Hope; is about the size of a rabbit, being about fifteen inches long; the head is short, with the back part very thick, and the snout very short and blunt; the eyes are small; the ears oval and open, brown, woolly, and half hid in the fur; the legs are very short, the upper joints of both being concealed beneath the skin; the hind legs are rather longer than the fore; the feet are large, black, and naked; the body is short, thick, and contracted, with a prominent belly, and is covered with a soft woolly fur, of a yellowish-brown or grayish color, hoary at the roots; the sides are of a dirty whitish gray, and along the back is a brownish stripe. This fur is interspersed with longer and coarser black hairs, and a few very coarse long bristles. The fore feet have four short, scarcely divided, thick toes, furnished with flat nails; the two outer toes of the hind feet are similar, but the inner toe is longer, and has a sharp claw. This animal has a sharp voice, and acute sense of hearing; its gait is very wavering and unsteady, owing to the shortness of its thighs, and unequal length of the hind and fore legs; notwithstanding which it is very active, and moves by leaps; it is very cleanly, lives entirely on vegetable food, drinks little, is fond of heat, and burrows in the ground. In manners and general appearance this animal resembles the marmot and cavy; in the conformation of its toes it has some analogy with the maucauco; but, from the circumstances of the teeth, it cannot be ranked with the last; and the peculiarity of the feet has caused Gmelin to separate it from both of the former.

2. H. Syriacus, the Syrian ashkoko, of Bruce and Schreber, has soft tender nails on all the toes. It inhabits Syria and Ethiopia. The body of this species is more lengthened than that of the former, and the snout more oblong. The

fur is of a reddish-gray color, like that of the wild rabbit; the throat, breast, and belly, being white; all over the body a number of long, strong, and polished hairs, are scattered among the fur. The body and head of the individual described by Mr. Bruce measured seventeen inches; the ears are broad, open, and rounded; each side of the mouth is garnished with long whiskers: in walking, which is performed creeping low with the belly almost touching the ground, the hind feet are used as far as the heel; all the toes have short, broad, weak, flat nails, except the inner toe of the hind foot, which is provided with a flat crooked nail somewhat longer than the rest; the soles of the feet are formed of fleshy naked protuberances divided by furrows. It lives mostly about the mouths of caves or clefts in rocks, is gregarious, feeds entirely on vegetables, is mild, feeble, timid, and easily tamed, and has no voice or cry. Mr. Bruce is of opinion, that this animal is the gannim, or daman Israel, of the Arabs, and the saphan of sacred Scripture, which has erroneously been translated the rabbit. Its flesh is very white, but is not eaten by the Abyssinians or Mahommedans. He is also of opinion, that it ruminates, or chews the cud.

HYRCANIA, in ancient geography, a country of the Farther Asia, lying south-east of the Mare Hyrcanum; with Media on the east, Parthia on the south, and Margiana on the west, famous for its tigers, vines, figs, and olives.

Hyrcania, the metropolis of the above country, thought to be the Tape of Strabo, the Syrinx of Polybius, the Zeudracarta of Arrian, and the Asaac of Isidorus Characenus.

Hyrcania, an ancient town of Lydia, in the campus Hyrcanus, near Thyatira; destroyed by an earthquake in the reign of Tiberius; so called from colonists from Hyrcania. The people were called Hyrcani Macedones, because mixed with Macedonians.

HYRST, Hurst, Herst. } Are all from the Saxon hyrst, a wood or grove.

HYSSOP, *n. s.* Fr. *hyssope*; Lat. *hyssopus*. A verticillate plant.

The *hyssop* of Solomon cannot be well conceived to be our common *hyssop*; for that is not the least of vegetables observed to grow upon walls; but rather some kind of capillaries, which only grow upon walls and stony places. *Browne.*

It hath been a great dispute, whether the *hyssop* commonly known is the same which is mentioned in Scripture. *Miller.*

Hyssop. See Hyssopus.

Hyssop, Hedge. See Gratiola.

Hyssop, Mountain. See Thymbra.

HYSSOPUS, hyssop; a genus of the gymnospermia order, didynamia class of plants. There are three species; but only one of them is cultivated for use: viz.

H. officinalis, the common hyssop: it has under shrubby, low, bushy stalks, growing a foot and a half high; small, spear-shaped, close-setting, opposite leaves, with several smaller ones rising from the same joint: and all the stalks and branches terminated by erect whorled spikes of flowers of different colors in the varieties. They are very hardy plants; and may be propagated either by slips or cuttings, or by seeds. The leaves have an aromatic smell, and a warm pungent taste. Besides the general virtues of aromatics, they are particularly recommended in humoral asthmas, coughs, and other disorders of the breast and lungs; and are said to promote expectoration greatly. Hyssop was generally used in purifications amongst the Jews by way of sprinkling. Sometimes they add a little wool to it of a scarlet color. They dipped a bunch of hyssop, some branches of cedar and red wool, in water mingled with the blood of a bird, in purifying lepers.

HYSTASPES, a noble Persian of the royal race of the Achæmenides, the father of king Darius I. He was the first who introduced the learning and sciences of the Indian Brahmins into Persia. Ctesias says he was killed by a fall from a mountain, whither he had gone to see a royal monument erected by Darius.

HYSTERIA, or the hysteric affection, from *υστερα*, the womb, a disease in women, called also suffocation of the womb, and vulgarly fits of the mother. It is a spasmodico-convulsive affection of the nervous system, proceeding from the womb. See Medicine, Index.

HYSTER'ICAL, *adj.* Hyster'ic, *adj.* Hyster'ics, *n. s.* } Gr. *υστερικὸς*. Fits of women, supposed to proceed from disorders in the womb: a state troubled with these disorders.

In *hysterick* women the rarity of symptoms doth oft strike an astonishment into spectators. *Harvey.*

Many *hysterical* women are sensible of wind passing from the womb. *Floyer on the Humours.*

Parent of vapours, and of female wit,
Who gave the *hysterick* or poetic fit. *Pope.*

This terrible scene made too violent an impression upon a woman in her condition, and threw her into a strong *hysterick* fit. *Arbuthnot and Pope.*

A kind of wild and horrid glee,
Half epileptical and half *hysterical.*
Byron. Don Juan.

HYSTERON Proteron, in grammar and rhetoric, a species of hyperbaton, wherein the proper order of construction is so inverted, that the part of any sentence which should naturally come first is placed last: as in this of Terence, Valet et vivit, for vivit et valet: and in the following of Virgil, Moriamur, et in media arma ruamus, for In media arma ruamus, et moriamur.

HYSTRIX, in zoology, the porcupine, a genus of quadrupeds belonging to the order of glires. The characters are these: they have two fore teeth, obliquely divided both in the upper and under jaw, besides eight grinders; and the body is covered with quills or prickles. There are five species, viz.

1. H. cristata, the crested porcupine, has four toes on the fore feet, five on the hind feet, a crested head, a short tail, and the upper lip is divided like that of a hare. The length of the body is about two feet, and the height about two and a half. The body is covered with prickles, some of them nine or ten inches long, and about one-fourth of an inch thick. Like the hedgehog, he rolls himself up in a globular form, in which position he is proof against the attacks of the most rapacious animals. The prickles are

exceedingly sharp, and each of them has five large black and as many white rings, which succeed one another alternately from the root to the point. These quills the animals can erect or let down at pleasure; when irritated he beats the ground with his hind feet, erects his quills, shakes his tail, and makes a considerably rattling noise with his quills. Most authors have asserted that the porcupine, when irritated, darts his quills to a considerable distance against the enemy. But count Buffon and some other late naturalists, after repeatedly irritating him without effect, assure us, that he possesses no such power. He says, indeed, that when the creature was much agitated with passion, some of the quills, which adhered but slightly to the skin, would fall off, particularly from the tail; and this circumstance, he imagines, has given rise to the mistake. The porcupine, though originally a native of Africa and the Indies, can live and multiply in the more temperate climates of Spain and Italy. Pliny, and every other natural historian since Aristotle, tell us, that the porcupine conceals itself during winter, and brings forth its young in eighty days. But these circumstances remain to this day uncertain. The porcupine, in a domestic state, is not a fierce or ill-natured animal; with his fore feet, which are strong and sharp, he can cut through a strong board; he eats bread, fruits, roots, &c.; he does considerable damage when he gets into a garden.

2. H. dorsata, or Canada porcupine, the urson of Buffon, has four toes on the fore feet, five on the hind feet; and has quills only on the back, which are short, and almost hid among the long hair. He is about two feet long. This species inhabits North America as high as Hudson's Bay; and makes its nest under the roots of great trees. It will also climb among the boughs, which the Indians cut down when one is in them, and kill the animal by striking it over the nose. They are very plentiful near Hudson's Bay; and many of the trading Indians depend on them for food. They feed on wild fruits and bark of trees, especially juniper; eat snow in winter, and drink water in summer, but avoid going into it. When they cannot avoid their pursuer, they will sidle towards him, in order to touch him with the quills, which seem but weak weapons of offence; for, on stroking the hair, they will come out of the skin sticking to the hand. The Indians stick them in their noses and ears, to make holes for the placing their ear-rings and other finery: they also trim the edges of their deer-skin habits with fringes made of the quills, or cover with them their bark boxes.

ii. H. dorsata alba, the white Canadian porcupine, is a variety mentioned by M. Pennant, of a uniform white color.

3. H. macroura has five toes both on the hind and fore feet; his tail is very long and the prickles are elevated. He inhabits the isles of the Indian Archipelago, and lives in the forests.

4. H. Mexicana, the Mexican porcupine, the hoitzlacuatzin, or the coendon of Buffon, is of a dusky color, with very long bristles intermixed with the down: the spines three inches long, slender, and varied with white and yellow; scarcely apparent except on the tail, which Hernandez says is thicker and shorter than that of the prehensilis. He adds that the tail from the middle to the end is free from spines; and that he grows to the bulk of a middle-sized dog. His length is eighteen inches from the nose to the tail; the tail nine French measure, but taken from a mutilated skin. He inhabits the mountains of Mexico, lives on fruits, and may be easily tamed. The Indians pulverise the quills, and say they are very efficacious in gravelly cases; and applied whole to the forehead will relieve the most violent head-ache. They adhere till filled with blood, and then drop off. Count Buffon confounds this species with the prehensilis, of which he makes it a third variety; but Pennant, who had seen a specimen, ranks it as a distinct species, in which he is followed by Kerr.

5. H. prehensilis, or the Brasilian porcupine, has four toes on the fore feet, five on the hind, and a long tail. It is considerably less than the cristata, being only seventeen inches long from the point of the muzzle to the origin of the tail, which is nine inches long; and the legs and feet are covered with long brownish hair; the rest of the body covered with quills interspersed with long hair; the quills are about five inches long, and about one-twelfth of an inch in diameter. He feeds upon birds and small animals. He sleeps in the day like the hedge-hog, and searches for his food in the night. He climbs trees, and supports himself by twisting his tail round the branches. He is generally found in the high grounds of America from Brasil to Louisiana, and the southern parts of Canada. His flesh is esteemed very good food.

HYTHE, or Hithe, an old market town of Kent and one of the Cinque Ports, had formerly four churches, and was, according to Leland, 'a very great town in length.' At present it has neither port nor buildings of any moment; the beach being nearly a mile from the town.

Queen Elizabeth in the seventeenth year of her reign, granted a charter of incorporation to the mayor, twelve jurats, and twenty-four common-council men of the town and port of Hythe, who, with the freemen, making about 140 in number, choose the two barons or members of parliament, returned by the town.

The houses are chiefly situated in one long street, running parallel with the sea, but having smaller ones branching off at right angles. The court-hall and market-place are in the centre of the town; the latter was built by Philip viscount Strangford, who represented this port in parliament in the twelfth of Charles II. All the houses on the side of the hill have an uninterrupted view of the sea southward, Romney Marsh, and the adjacent country. The old market, on Saturdays, has been long disused, though the farmers have for some time held a meeting on Thursdays, for selling their corn.

There are two hospitals, or alms-houses, in the parish of Hythe; one called St. Bartholomew's, and the other St. John's. The former was founded by Haimo, bishop of Rochester, about the year 1336, and is situated at a short distance south-westward from the church. There are ten poor persons, five men and five women, and 100

acres of land belonging to this foundation. It is under the management of three trustees, now called wardens, chosen by the mayor and corporation. The hospital of St. John is situated at the east end of the town in High Street. Its revenues are at present derived from fifty-four acres of land. The number and qualifications of the poor relieved are at the discretion of the trustees, and there are six apartments for their accommodation. The church is a spacious old structure, consisting of a nave, chancel, two aisles, and north and south transepts, with a tower at the west end. From the centre rises a low tower, of early English architecture. It occupies a very elevated situation on the acclivity of the hill above the town. The room over the porch is the Town Hall, where the mayor and other members of the corporation are chosen. In the crypt or vault, under the east of the chancel, is piled a vast quantity of human skulls and bones; the mass being twenty-eight feet in length, and eight feet in height and breadth. They are supposed to have been the remains of Britons, slain in a bloody battle fought on the shore between this place and Folkstone, with the retreating Saxons in the year 456; and to have attained their whiteness by lying for some time exposed to the sea spray. Several of the skulls have deep cuts in them. A military canal commences at this place, and proceeds to the neighbourhood of Appledore.

I & J.

I is the ninth letter in the alphabet, and considered both as a vowel and a consonant, though as the vowel and consonant differ in form as well as sound they may be more properly accounted two letters. It is called in the Hebrew, *Jod*; Chald. *Jud*; Arab. *Jc*; Assyr. *Jothim*; Ægypt. *Joquum*, *Jamin*; Arm. *Inni*, *Je*, *Jech*; Gr. Ιωτα; Lat. *I*: it is a personal pronoun, answering to the Gr. εγω, and Lat. *ego*; Goth. *ik*; Sax. *ic*; Dut. *ich*; as *I*, accusative *me*, from Gr. με; plural *we*; accus. plu. *us*. Me is sometimes written for I, and I was often used in common conversation for yea, aye, yes: I is the first person as opposed to all others, as I *myself*, used emphatically. I, at the beginning of a word in the common edition and even the MS. of Chaucer, often represents a corruption of the Sax. prepositive expletive particle Ge, which, in some editions of his works, is represented by *y*.

There is none greater in this house than *I*.
Gen. xxxix. 9.

Be of good cheer, it is *I*; be not afraid.
Matt. xiv. 27.

I have now ben a court-man all my lif;
And God it wot, though *I* unworthy be,
I have stonden in ful gret degree
Abouten lordes of ful high estat:
Yet had *I* never with non of hem debat;
I never hem contraned, trewely
I wot wel, that my lord can more than *I*;
What that he saith, *I* holde it firme and stable
I say the same or elles semblable.
Chaucer. The Merchantes Tale.

I do not like these several councils, *I*.
Shakspeare.

Hath Romeo slain himself? Say thou but *I*,
And that bare vowel, *I*, shall poison more
Than the death-darting eye of cockatrice. *Id.*

Did your letters pierce the queen?
—*I*, sir; she took 'em and read 'em in my presence
And now and then an ample tear trilled down. *Id.*

What shall *I* do to be for ever known,
And make the age to come my own?
I shall like beasts or common people die,
Unless you write my elegy. *Cowley.*

Hence, and make room for *me*.
When chance of business parts *us* two,
What do our souls, *I* wonder, do? *Id.*

Thus, having passed the night in fruitless pain,
I to my longing friends return again.
Dryden's Æneid.

Sweet contemplation elevates my sense,
While *I* survey the works of providence. *Gay.*

Of night impatient, *we* demand the day,
The day arrives and for the night *we* pray.
Blackmore.

There is but one man whom she can have, and that is *me*. *Clarissa.*

I vowel has a long sound, as fine, thine, which is usually marked with an *e* final; and a short sound, as sin, thin. Prefixed to *e* it makes a diphthong of the same sound with the soft *i*, or double *e*, *ee*: thus field, yield, are spoken as feeld, yeeld; except friend, which is spoken frend. Subjoined to *a* or *e* it makes them long, as fail, neigh: and to *o* makes a mingled sound, which approaches more nearly to the true notion of a dipthong, or sound composed of the sounds of two vowels, than any other combination of vowels in the English language, as oil, coin. The sound of *i*, before another *i*, and at the end of a word, is always expressed by *y*.

It is pronounced by throwing the breath suddenly against the palate, as it comes out of the larynx, with a small hollowing of the tongue, and nearly the same opening of the lips as in pronouncing *a* or *e*. The ancients sometimes changed *i* into *u*; as decumus for decimus; maxumus for maximus, &c. I and J have long been considered as one letter by grammarians, with different sounds and powers, according to its position; and Mr. Bayle, in his Historical and Critical Dictionary, also arranges Y along with them. As a numeral, I signifies one, and stands for so many units as it is times repeated: thus I, one; II, two; III, three, &c.; and when put before a higher numeral, it subtracts its value, as IV, four; IX, nine, &c. But, when set after it, so many are added to the higher numeral as there are I's added: thus VI is 5 + 1, or six; VII, 5 + 2, or seven; VIII, 5 + 3, or eight. The ancient Romans likewise used Iↀ, for 500, CIↀ for 1000, Iↀↀ for 5000, CCIↀↀ for 10,000, Iↀↀↀ for 50,000, and CCCIↀↀↀ for 100,000.

JAAR, a river of the kingdom of the Nether-.ands, which rising in the province of Liege, near Tongres, falls into the Meuse at Maestricht.

JAB'BER, *v. a.* } Scot. *gabben;* from *gab,*
JAB'BERER, *n. s.* } the mouth; Belg. *gabberan.* To talk inarticulately, indistinctly, or idly. See GABBER.

Out-cant the Babylonian labourers
At all their dialects of *jabberers.* *Hudibras.*
We scorn, for want of talk, to *jabber*
Of parties. *Swift.*

JABLONSKI (Daniel Ernest), a learned Polish Protestant divine, born at Dantzic in 1660. He became successively minister of Magdeburg, Lissa, Koningsberg, and Berlin; and was at length ecclesiastical counsellor, and president of the Academy of Sciences at the latter. He took great pains to effect a union between the Lutherans and Calvinists; and wrote some works which are esteemed, particularly Meditations on the Origin of the Scriptures, &c. He died in 1741.

JABLONSKI (Paul Ernest), the son of the above, was born at Berlin, and became professor of divinity at Frankfort on the Oder. He wrote, 1. Disquisitio de lingua Lycaonica; 2. De Memnone Græcorum; 3. Institutiones Historiæ Ecclesiasticæ, 2 vols. 8vo.; 4. Pantheon Ægypticorum, 3 vols. 8vo. He died in 1757.

JABLONSKI (Theodore), counsellor of the court of Prussia, and secretary of the Royal Academy of Sciences at Berlin, was also a man of distinguished merit. He published in 1711 a French and German Dictionary; a Course of Morality in 1713; a Dictionary of Arts and Sciences in 1721; and translated Tacitus de Moribus Germanorum into high Dutch in 1724.

JACATRA, a district and formerly a kingdom of Java, of which Batavia is the capital. The last of its sovereigns being subdued by the Dutch East India Company's troops, in the year 1619, they have ever since been possessed of it. The country comprised thirty districts, containing together 33,914 families, or 203,484 inhabitants, and is watered and fertilised by several rivers, most of which, however, are little better than rivulets in the dry season. Its productions are coffee, sugar, and rice, indigo, cotton-yarn, turmeric, and cadjang or lentiles, from which last the inhabitants express oil.

JA'CENT, *adj.* Lat. *jacens.* Lying at length.

So laid, they are more apt in swagging down to pierce than in the *jacent* posture.
Wotton's Architecture.

JACHAL, a river of Chili, in the province of Cuyo, which runs east, and loses itself in a lake. It has a small town of the same name near it.

JACI, JACI D'AQUILA, or JACI REALE, a maritime town in the Val di Demona, on the coast of Sicily, situated near the foot of Mount Ætna. It is protected by a fort; and the river Acis, from which the town anciently took its name, forms a harbour here. The buildings are chiefly of indurated lava, in which the country abounds. The inhabitants manufacture considerable quantities of linen. The environs are fertile in fruit, silk, hemp, and flax. Population 11,000. Ten miles N. N. E. of Catania, and fifteen south by west of Taormind.

JA'CINTH, *n. s.* (For hyacinth.) The same with hyacinth. A gem of a deep reddish-yellow, approaching to a flame color, or the deepest amber.—Woodward.

The same properties I find ascribed to the *jacinth,* and topaze. They allay anger, grief; diminish madness; much delight and exhilarate the mind.
Burton. Anatomy of Melancholy.

JACK, *n. s.* Probably from the Fr. *Jaques,* James, says Dr. Johnson: but there was a Sax. ȝeoȝ and Goth. *jog, jugg,* from *og, ug,* young, meaning a young lad.

The diminutive of John. Used as a general term of contempt for saucy or paltry fellows

Sire Robert or sire Hue,
Or *Jakke,* or Rauf, or whoso that it were.
Chaucer. The Reves Tale.
So hidous was the noise, a benedicite!
Certes he *Jakke* Straw and his meinie
Ne maden never shoutes half so shrille,
Whan that they wolden any Fleming kille,
As thilke day was made upon the fox.
Id. The Nonnes Preestes Tale.
Go fro the window, *Jacke* fool! she said.
Id. The Milleres Tale.
And many a *Jacke* of Dover hast thou sold
That hath been twies hot and twies cold.
Id. Prologue to the Cokes Tale.
You will perceive that a *Jack* gardant cannot
Office me from my son Coriolanus. *Shakspeare.*
Every *Jack* slave hath his belly-full of fighting, and I must go up and down like a cock that nobody can match. *Id.*
I have in my mind
A thousand raw tricks of these bragging *jacks,*
Which I will practise. *Id. Merchant of Venice.*

The name of instruments which supply the place of a boy, as an instrument to pull off boots.

Foot boys, who had frequently the common name of *Jack* given them, were kept to turn the spit, or to pull off their master's boots; but when instruments were invented for both those services, they were both called *jacks.* *Watts's Logick.*

An engine which turns the spit.

The ordinary *jacks,* used for roasting of meat, commonly consist but of three wheels. *Wilkins.*

The excellencies of a good *jack* are, that the *jack*-frame be forged and filed square; that the wheels be perpendicularly and stongly fixed on the squares of the spindles; that the teeth be evenly cut, and well smoothed; and that the teeth of the worm-wheel fall evenly into the groove of the worm. *Moxon.*

A cookmaid, by the fall of a *jack* weight upon her head, was beaten down. *Wiseman's Surgery.*

Some strain in rhyme; the muses on their racks
Scream, like the winding of ten thousand *jacks.*
Pope.

A young pike.

No fish will thrive in a pond where roach or gudgeons are, except *jacks.* *Mortimer's Husbandry.*

Fr. *Jacque.* A coat of mail.

The residue were on foot, well furnished with *jack* and skull, pike, dagger, bucklers made of board, and slicing swords, broad, thin, and of an excellent temper. *Hayward.*

A cup of waxed leather.

Dead wine, that stinks of the borrachio, sup
From a foul *jack,* or greasy maple cup. *Dryden.*

A small bowl thrown out for a mark to the bowlers.

'Tis as if one should say, that a bowl equally poised, and thrown upon a plain bowling-green, will run necessarily in a direct motion; but, if it be made with

a bypass, that may decline it a little from a straight line, it may acquire a liberty of will, and so run spontaneously to the *jack*. *Bentley.*

A part of the musical instrument called a virginal.

In a virginal, as soon as ever the *jack* falleth, and toucheth the string, the sound ceaseth. *Bacon.*

The male of animals.

A *jack* ass, for a stallion, was bought for three thousand two hundred and twenty-nine pounds three shillings and four pence. *Arbuthnot on Coins.*

A support to saw wood on.—Ainsworth.

The color or ensigns of a ship.—Ainsworth.

A cunning fellow who can turn to any thing, in the following phrase.

Jack of all trades, show and sound ;
An inverse burse, an exchange under ground.
Cleaveland.

JACK BOOTS, *n. s.* From jack, a coat of mail. Boots which serve as armour to the legs.

A man on horseback, in his breeches and *jack boots*, dressed up in a commode and a night rail. *Spectator.*

JACK BY THE HEDGE, *n. s.* Erysimum alliaria.

Jack by the hedge is an herb that grows wild under hedges, is eaten as other sallads are, and much used in broth. *Mortimer.*

JACK PUDDING, *n. s.* Jack and pudding. A zani; a merry Andrew.

Every *Jack pudding* will be ridiculing palpable weaknesses which they ought to cover. *L'Estrange.*

A buffoon is called by every nation by the name of the dish they like best: in French jean pottage, and in English *jack pudding*. *Guardian.*

Jack pudding, in his party-colored jacket,
Tosses the glove, and jokes at ev'ry packet. *Gay.*

JACK WITH A LANTERN. An ignis fatuus.

JACKALE'NT, *n. s.* Jack in Lent, a poor starved fellow. A simple sheepish fellow.

You little *jackalent*, have you been true to us ?
—Ay, I'll be sworn.
Shakspeare. Merry Wives of Windsor.

JACK'ANAPES, *n. s.* Jack and ape.

Monkey; an ape.

A coxcomb; an impertinent.

Which is he ?
—That *jackanapes* with scarfs. *Shakspeare.*

People wondered how such a young upstart *jackanapes* should grow so pert and saucy, and take so much upon him. *Arbuthnot.*

JACKDA'W, *n. s.* Jack and daw. A cock daw; a bird taught to imitate the human voice.

To impose on a child to get by heart a long scroll of phrases, without any ideas, is a practice fitter for a *jackdaw* than for any thing that wears the shape of man. *Watts.*

JACKA'L, *n. s.* Fr. *chacal*. A small animal supposed to start prey for the lion.

The Belgians tack upon our rear,
And racking chase-guns through our sterns they send ;
Close by their fireships, like *jackals* appear,
Who on their lions, for the prey attend. *Dryden.*

The mighty lion before whom stood the little *jackal*, the faithful spy of the king of beasts.
Arbuthnot and Pope.

JA'CKET, *n. s.* Fr. *jacquet*. A short coat; a close waistcoat.

In a blue *jacket*, with a cross of red.
Hubberd's Tales.

She fell upon the *jacket* of the parson, who stood gaping at her *L'Estrange.*

And hens, and dogs, and hogs are feeding by ;
And here a sailor's *jacket* hangs to dry. *Pope.*

The water rushed through in a way quite puzzling,
While they thrust sheets, shirts, *jackets*, bales of muslin,
Into the opening. *Byron. Don Juan.*

To beat one's *jacket*, is to beat the man.

JACKSON, a county of the United States, in Indiana, west of Clark and Jefferson counties, north of Washington, east of Orange, and south of Indian county. It is watered by White River and its creeks, and was laid out in 1815.

JACKSON, a county of the United States, in West Tennessee. Its chief town is Williamson.

JACKSON, CAPE, or POINT JACKSON, a cape on the coast of New Holland. Long. 175° 10′ E., lat. 40° 54′ S.

JACOB, Heb. עקוב, i. e. a supplanter. The son of Isaac and Rebekah, was born A. M. 2168, and A. A. C. 1836. The history of this patriarch is recorded in Genesis xxv.—l. He died in Egypt in the 147th year of his age, and was honorably interred in Abraham's burying-place, near Hebron.

JACOB (Giles), an eminent lawyer, born at Romsey in Southamptonshire in 1686. He is principally known for his Law Dictionary in 1 vol. folio, which has been often printed. He also wrote two dramatic pieces; and a Poetical Register, containing the lives and characters of English dramatic poets. He died in 1744.

JACOB (Henry), celebrated as the founder of the first Independent, or Congregational church in England, was a native of Kent, and received his academical education at St. Mary's Hall, Oxford. Having entered into holy orders, he was made precentor of Corpus Christi College, and afterwards obtained the benefice of Cheriton in Kent. In the year 1604 he published Reasons taken out of God's Word, and the best of Human Testimonies, proving the Necessity of Reforming our Churches of England. The publication of this, and of another work, against what was falsely called 'learned preaching,' drew down upon him the persecution of bishop Bancroft, and to avoid this persecution he fled to Holland. At Leyden he met with Mr. Robinson, with whom he had frequent conferences, and became a convert to what were then called Brownist principles, since known by the name of Independency. In Holland he published several treatises, and upon his return he avowed a design of setting up a separate congregation upon the model of those in Holland. This, in a short time, he carried into effect, and thus laid the foundation of the first Independent Congregational church in England. He was elected pastor of the church, and continued with his people till the year 1624, when, being desirous of entering on a more enlarged sphere of usefulness, he went to Virginia, where he soon afterwards died. He was author of many publications, which were highly esteemed in his day.

JACOB'S LADDER, *n. s.* Polemonium; the same with Greek valerian.

JACOB'S STAFF, *n. s.* A pilgrim's staff. Staff concealing a dagger. A cross staff; a kind of astrolabe.

JACOB BEN HAJIM, a rabbi famous for the

collection of the Masora in 1515, together with the text of the Bible, the Chaldaic paraphrase, and Rabbinical commentaries.

JACOB BEN NAPHTHALI, a famous rabbi of the fifth century: he was one of the principal Masorets, and bred at the school of Tiberias in Palestine with Ben Aser. The invention of the vowel points, and of accents to facilitate the reading of the Hebrew, are ascribed to these two rabbies: and said to have been begun in an assembly of the Jews held at Tiberias, A. D. 476.

JACOBÆUS (Oliger), a celebrated professor of physic and philosophy at Copenhagen, born in 1651 at Aarhusen in Jutland, where his father was bishop. Christian V. intrusted him with the management of his grand cabinet of curiosities; and Frederick IV., in 1698, made him counsellor of his court of justice. He wrote many medical works, and some excellent poems.

JAC'OBINE, *n. s.* A pigeon with a high tuft.—Ainsworth.

JACOBINS, in history, the name of one of the principal parties in the French revolution, so called from their meeting in the hall of the Jacobin Friars at Paris. Many of them were members of the constituent national assembly of France, and many more were deputies to the different conventions which succeeded it. They are represented as having been determined enemies to monarchy, aristocracy, and the Christian religion. The origin of this sect or party has been ascribed to M. Voltaire, 'who, being weary,' as he said himself, 'of hearing people repeat, that twelve men were sufficient to establish Christianity, resolved to prove that one might be sufficient to overthrow it. Full of this project, he swore, before 1730, to dedicate his life to its accomplishment; and for some time he flattered himself that he should enjoy alone the glory of destroying the Christian religion. He found, however, that associates would be necessary; and, from the numerous tribe of his admirers and disciples, he chose D'Alembert and Diderot as the most proper persons to co-operate with him in his designs. He contrived to embark in the same cause with Frederick II. of Prussia, who wished to be thought a philosopher, and who of course deemed it expedient to talk and write against a religion he had never studied, and into the evidence of which he had probably never deigned to enquire. This royal adept was one of the most zealous of Voltaire's coadjutors, till he discovered that the philosophists were waging war with the throne as well as with the altar. The abbé Barruel says, that 'at its very first appearance, this sect counted 300,000 adepts; and it was supported by 2,000,000 of men, armed with torches and pikes, and all the firebrands of the revolution;' and, he adds, that it was 'the coalition of a triple sect, of a triple conspiracy, in which, long before the revolution, the overthrow of the altar, and the ruin of the throne, had been debated and determined.' See FRANCE.

JAC'OBITE, *n. s.* & *adj.* } Lat. *jacobus.* A
JAC'OBITISM, *n. s.* } term applied to those who disseminated the doctrines of one Jacob, a Syrian, which taught the single nature of Christ in opposition to the received doctrine of his two-fold character as human and divine: also a term of political import, applied to those who were attached to the cause of king James II. This word is also used for Jacobin, or White Friar.

> Sometimes am I hore and olde,
> Now I am yong and stout and bolde,
> Now am I Robert now Robin,
> Now Frere Minor, now *Jacobin.*
>
> *Chaucer. Romaunt of the Rose.*

> He [James] made puritans in his time, as Jansenists have been since made in France, and *Jacobites* in Britain by calling men so, and by treating them as such. *Bolingbroke.*

JACOBITES, a term of reproach bestowed on persons who, vindicating the doctrines of passive obedience and non-resistance to princes, disapproved of the revolution of 1688, and asserted the supposed rights of the Stuart family.

JACOBITES, in church history, a sect of Christians in Syria and Mesopotamia; so called either from Jacob, a Syrian, who lived in the reign of the emperor Mauritius, or from one Jacob, a monk who flourished in 550. They are of two sects, some following the rites of the Latin church, and others continuing separated from it. There is also a division among the latter, who have two rival patriarchs. They hold but one nature in Jesus Christ; with respect to purgatory, and prayers for the dead, they are of the same opinion with the Greeks and other eastern Christians: they consecrate unleavened bread at the eucharist, and are against confession, believing that it is not of divine institution.

JACOBS (Jurian), an eminent Swiss painter, born in 1610. He was the disciple of F. Snyders, and painted portraits, historical pieces, and animals, particularly the latter, in a masterly manner. He died in 1664.

JACOBUS, a gold coin, worth 25*s.* so called from king James VI. See COIN. There are two kinds of jacobus, the old and the new; the former valued at 25*s.* weighing six pennyweights ten grains; the latter called also carolus, valued at 23*s.*, weighing five pennyweights twenty grains.

JACQUELOT (Isaac), a French protestant divine, born at Vassy, in 1647. On the revocation of the edict of Nantes, he retired to the Hague, and thence to Berlin, where he was made chaplain to the king of Prussia. While he lived at Berlin, he entered into a warm controversy with Mr. Bayle on the doctrine advanced in his dictionary favoring Manicheism, which continued until his death. In this dispute M. Jacquelot declared in favor of the Remonstrants. He wrote, 1. Dissertations sur l'Existence de Dieu; 2. Dissertations sur le Messie; 3. Lettres á Messieurs les Prelates de l'Eglise Gallicane; 2 vols. of Sermons, &c. He was employed in finishing an important work on the divine authority of the holy Scriptures, when he died suddenly in 1708, aged sixty-one.

JACQUINIA, in botany, a genus of the monogynia order, and pentandria class of plants: COR. is decemfid; the stamina inserted into the receptacle; the berry monospermous. Species five, natives of the West Indies.

JACTITA'TION, *n. s.* Lat. *jactito.* Tossing motion; restlessness; heaving. A term in the canon law for a false pretension to marriage.

f the patient be surprised with *jactitation*, or great oppression about the stomach, expect no relief from cordials. *Harvey.*

JACULATION, *n. s.* Lat. *jaculatio, jaculor.* The act of throwing missive weapons.

So hills amid' the air encountered hills,
Hurled to and fro with *jaculation*. *Milton.*

JADDESSES, an inferior order of priests in Ceylon, who have the care of the chapels appropriated to the genii, a third order of gods among these idolaters. These priests are applied to by the people in times of disease or calamity, who offer a cock to appease the anger of the demons.

JADE, *n. s.*, *v. a.*, & *v. n.* } The etymology
JA'DISH, *adj.* } is doubtful: Min-
JA'DED, *adj.* } sheu derives it
JA'DRY, *n. s.* } from the Hebrew

jadah, rejicere; Skinner from gaad, a goad, or spur. A horse without spirit; a hired horse; a worthless nag; an ironical appellation of a young woman; a species of stone: to jade is to tire; harass; weary, applied originally to horses: to overbear, crush, or degrade: to sink. Jadish, vicious, when applied to a horse; unchaste; incontinent; frolicsome: jaded, wearied; exhausted: jadry, the properties of a bad or vicious horse, now obsolete.

Be blithe, although thou ride upon a *jade*.
What though thin horse be bothe foule and lene,
If he wol serve thee, recke thee not a bene:
Loke that thyn herte be mery evermo.
Chaucer. Prologue to the Nonnes Preestes Tale.

With his banners, and his well-paid ranks,
The ne'er-yet-beaten horse of Parthia
We've *jaded* out o' the field.
Shakspeare. Anthony and Cleopatra.

I do not now fool myself, to let imagination *jade* me; for every reason excites to this. *Shakspeare.*

When they should endure the bloody spur,
They fall their crest, and, like deceitful *jades*,
Sink in the trial. *Id. Julius Cæsar.*

The horsemen sit like fixed candlesticks,
With torchstaves in their hand; and their poor *jades*
Lob down their heads, dropping the head and hips.
Shakspeare.

The honourable blood
Must not be shed by such a *jaded* groom. *Id.*

If we live thus tamely,
To be thus *jaded* by a piece of scarlet,
Farewell nobility. *Id. Henry VIII.*

It is good in discourse to vary and intermingle speech of the present occasion with arguments: for it is a dull thing to tire and *jade* any thing too far. *Bacon.*

Shall these, these old *jades*, pass the flower
Of youth, that you have, pass you. *Chapman.*

So have I seen with armed heel,
A wight bestride a commonweal,
While still the more he kicked and spurred,
The less the sullen *jade* was stirred. *Hudibras.*

That horsed us on their backs, to show us
A *jadish* trick at last, and throw us. *Id.*

Alas, what wights are these that load my heart!
I am as dull as winter-starved sheep
Tired as a *jade* in overloaden cart. *Sidney.*

If fleet dragon's progeny at last
Proves *jaded*, and in frequent matches cast
No favour for the stallion we retain,
And no respect for the degenerate strain.
Dryden.

The plain nag came upon the trial to prove those to be *jades* that made sport with him. *L'Estrange.*

'Tis to no boot to be jealous of a woman; for if the humour take her to be *jadish*, not all the locks and spies in nature can keep her honest. *Id.*

The mind once *jaded*, by an attempt beyond its power, is very hardly brought to exert its force again. *Locke*

Many offer at the effects of friendship, but they do not last: they are promising in the beginning, but they fail and *jade* and tire in the prosecution. *South.*

You see now and then some handsome young *jades* among them: the sluts have very often white teeth and black eyes. *Addison.*

False steps but help them to renew their race,
As, after stumbling, *jades* will mend their pace.
Pope.

In diamonds, pearl, and rich brocades,
She shines the first of battered *jades*,
And flutters in her pride. *Swift.*

But, she, the cunningest *jade* alive,
Says, 'tis the ready way to thrive. *Stepney.*

There are seasons when the brain is overtired or *jaded* with study or thinking; and upon some other accounts animal nature may be languid or cloudy, and unfit to assist the spirit in meditation. *Watts.*

Sated with nature's boons, what thousands seek,
With dishes tortured from their native taste,
And mad variety to spur beyond
Its wiser will the *jaded* appetite! *Armstrong.*

JAEN, an extensive province of the eastern part of Andalusia, Spain, surrounded by the provinces of Granada, Murcia, Cordova, and La Mancha. Its territorial extent is 4730 square miles; and its population about 207,000. The north is occupied by the Sierra Morena, which separates it from La Mancha: another lofty chain divides it from Granada. These districts are in a great measure covered with wood: in the central part of the province the soil is in some places rich, in others barren and sandy; the climate in the plains is hot, and in certain situations unhealthy. With bad cultivation, this province produces wine, oil, silk, and corn, in considerable abundance, especially along the Guadalquivir. It was formerly famous for its horses. The minerals of common occurrence are salt, lead, and copper; the only manufactures woollen and silk. The chief towns are Jaen, Ubeda, Baeza, and Anduxa. The chief river is the Guadalquivir, but there are a number of smaller streams. Jaen was formerly the smallest of the Andalusian monarchies, and remained in the hands of the Moors till 1243, when it was conquered by Ferdinand II. king of Castile. The king of Spain is still styled king of Jaen.

JAEN, a considerable city of Spain, the capital of the province of this name, is situated on the banks of the Guadalbulon, at the foot of a mountain composed almost entirely of marble. It is surrounded by walls and towers, is neatly built, and has several handsome churches and squares. It is a bishop's see, and the cathedral is a noble building. Water is distributed to all parts of the town by means of public fountains. Jaen was a well-known place in the time of the Romans: it was then called Oringi or Oningi; and its ancient ruins, among others an aqueduct, attest its importance. It flourished also under the Moors, when its manufactures of silk are said to have been of importance. Population

about 28,000. It is about thirty-six miles north of Granada.

Jaen de Bracamoros, a government of Colombia, in Quito, bounded on the north by Loja and Quixos y Macas; on the east by Maynas; on the west by Piura; and on the south by Caxamarca or Chacapoyas in Peru. Its southern and western frontiers limit the territories of Peru.

The climate here is hot, though the rains are not so violent or lasting as in Quixos. The summer is the pleasantest season, as the heat, the rains, and the tempests, abate during that period.

The pongo de Manseriche, or strait by which the False Maranon passes the Andes, is partly in this district. The embarkation on the Lauricocha, the present name for a river which was, until very lately, supposed to be the Maranon, is usually at Chuchunga, a village of Bracamoros, in 5° 29′ S. lat. four days' journey from Jaen, the river not being navigable nearer than this, on account of the rapids. All the rivers of Jaen flow into the Lauricocha, or descend into the deserts of the Maranon, to join that noble stream. The rivers of this government formerly produced a great deal of gold, but no exertions are made to procure it at present.

Those parts of this country which are under cultivation are very fertile, but nearly the whole government is covered with forests. The cacao flourishes very much. Tobacco is produced in great quantities: and the cigars of Jaen are universally sought after in Peru, Chili, and Quito. Cotton trees are also abundant, and their produce constitutes a great part of the trade of the inhabitants. Animals peculiar to the wilds of Jaen are the cougar or puma, the jaguar, and the great black bear of the Andes. They have also a very large animal called danta, as big as an ox; its skin is white, and it has a horn in the middle of its head bending backwards. The woods are well stocked with reptiles and birds.

Its commerce in cotton, tobacco, and mules, is brisk; and carried on chiefly with the provinces of Peru and Quito, in return for European articles.

The post communication is carried on down the rivers: the Indian who carries the letters wraps them in his dress, which he ties round his head, and travelling with a great knife in his hand with which he clears the underwood which may obstruct his road when obliged to land. He descends, swimming for two days, the river of Guacabamba, or Chamaya (full of rapids), and then the Amazons, to Tomependa, a village of Jaen. The postman passes the rapids by land, and generally carries with him a log of bombax or balsa, in order to rest himself on in the water.

Native Indians are found here in large hordes; and migrating from one hunting ground to another. Jaen the capital is in 5° 25′ S. lat. on the Chinchipe: its inhabitants are about 4000. Valladolid, Loyola, and Santiago de las Montanes are also chief towns.

JAFFA, the ancient Joppa, is a town of Palestine on the Mediterranean. See Joppa. It is now inhabited by Turks and Arabs with a mixed race of Armenians, Greeks and Maronites. The Christians sects have each small convents. The town, standing on an eminence, is rather handsome; it contains about a thousand inhabitants, and is the usual landing place of the pilgrims, who come by sea to visit Jerusalem. It it surrounded by a stone wall, with several alternate squares and round towers, and in the centre is an old ruined citadel. Its ancient haven is choked up, and the road is rocky and uneven; a great surf also beats on the shore. The neighbourhood abounds in citrons, lemons, and oranges; and Dr. Clarke says he no where tasted equally fine water melons: the chief trade is in these fruits and the importation of rice from Egypt. The customs are levied by the pacha of Gaza. Jaffa, being in 1799 taken by Buonaparte, became the scene of that massacre of prisoners of which Sir Robert Wilson first published the account. Four days after its surrender, he says, 3800 men were led to a field near the town, and publicly shot. Dr. Clarke saw here the fragments of bodies imperfectly buried; but he did not hear of the massacre: but Buonaparte himself partially acknowledged it to lord Ebrington and Mr. Warden; and justified it on the ground that these were prisoners who, after being taken and dismissed on parole, had afterwards joined the garrison of Jaffa. But see our article Napoleon. Forty miles west of Jerusalem. Long. 34° 53′ E., lat. 32° 2′ N.

JAFFNAPATAM, a district, or rather a distinct island. at the northern extremity of the island of Ceylon, directly opposite to Negapatam in the southern Carnatic. It is of an oblong shape, and from its maritime situation it escapes the intensely hot winds which prevail on the continent. The climate is, therefore, on the whole healthy, the cultivation superior, and fruits, vegetables, and game, abundant. Sheep have been reared with considerable success. Dr. Davy supplies us with two analyses of the soils of this island. One of a soil of a tobacco field, which is manured by means of sheep, like turnip-ground in England; the other of rice-ground, which receives no manure, but is carefully irrigated. The tobacco soil, of a reddish-brown color, collected when perhaps partially exhausted, the crop not having been long taken off the ground, consisted of

95·5	siliceous sand, colored by iron, with a few particles of calcareous matter.
2·0	vegetable matter.
2·5	water.
100·0	

The rice-soil, of a light gray color, containing a good deal of straw in a finely-divided state, consisted of

95·5	siliceous sand, with traces of iron, carbonate of lime and alumine.
2·5	vegetable matter.
2·0	water.
100·0	

Cinnamon and pepper are produced also in sufficient quantity to be occasionally articles of foreign commerce. Dependent on Jaffna district, and at a small distance, are several islands of no

great size, which the Dutch have named Delft, Harlem, Leyden, and Amsterdam. In these islands are bred horses and cattle, as from their excellent pasture they are well adapted for this purpose. The woods towards Kandy are inhabited by an extraordinary race of savages, known by the name of Bedahs or Vaddahs, supposed to be the original inhabitants of the country.

JAFFNA, a fortified town of Ceylon, is the capital of the foregoing island or district, and possesses a good citadel. It was taken, after a short resistance, by the British troops, in 1795. Here is a flourishing manufacture of cotton goods. The inhabitants are Mahommedans; but since Ceylon was taken by the English many of the country-born Dutch families have settled in this place, as being cheaper and healthier than Columbo. It is garrisoned by the British troops, and is esteemed the second town of Ceylon.

JAGEPORE, or JEHAZPORE, a large town of the province of Orissa, Hindostan, capital of a district of the same name, situated on the south side of the Byturnee, which is here nearly half a mile broad. It is a straggling place, and has a manufacture of cotton cloths. The independent rajah of this place, in the year 1243, not only repelled the Afghauns from his own territory, but pursued them into Bengal, and laid siege to Gour. These princes retained their independence till 1568, when all Orissa was subdued by Callapahar, the general of Solyman Kerany, king of Bengal. During the Mahommedan governments it was also a place of consequence; and until they were expelled by the Mahrattas.

JAGG, *v. a.* & *n. s.* } Welsh *gagaw*; Teut.
JAG'GY, *adj.* } *zacke*. To cut into in-
JAG'GEDNESS, *n. s.* } dentures; to cut into teeth, as a saw; to produce rough and irregular edges: jagg, a protuberance; a denticulation; the state produced in any thing which is hacked or mangled.

Some leaves are round, some long, some square, and many *jagged* on the sides.
Bacon's Natural History.

The *jagging* of pinks and gilliflowers is like the inequality of oak leaves; but they never have any small plain purls. *Bacon.*

First draw rudely your leaves, making them plain, before you give them their veins by *jaggedness*.
Peacham on Drawing.

The figure of the leaves is divided into so many *jaggs* or escallops, and curiously indented round the edges. *Ray.*

Take off all the staring straws, twigs, and *jaggs* in the hive, and make them as smooth as possible.
Mortimer's Husbandry.

His tow'ring crest was glorious to behold;
His shoulders and his sides were scaled with gold;
Three tongues he brandished when he charged his foes?
His teeth stood *jaggy* in three dreadful rows.
Addison.

The banks of that sea must be *jagged* and torn by the impetuous assaults, or the silent underminings of waves; violent rains must wash down earth from the tops of mountains. *Bentley.*

An alder-tree is one among the lesser trees, whose younger branches are soft, and whose leaves are *jagged*. *Watts.*

Amid those angles, infinitely strained,
They joyful leave their *jaggy* salts behind. *Thomson.*

JAGGERNAUT. See JUGGERNAUT.

JAGHIRE, a district of the Carnatic, Hindostan, included in the collectorship of Chincleput. It extends from Madras northward to the Pullicat Lake; southwards to Allumparva; and westward beyond Conjeveram; being about 108 miles along shore, and forty-seven inland in the widest part, containing altogether 2440 square miles. See CHINCLEPUT.

JAGHIRE, in the Indian polity, a grant of land from a sovereign to a subject, revocable at pleasure, but generally a life-rent.

JAGO (Richard), an ingenious poet, vicar of Snitterfield in Warwickshire, and rector of Kimcote in Leicestershire. He was the intimate friend and correspondent of Shenstone, with whom he studied at University College, Oxford. He took the degree of A. M. July 9th, 1739. He was author of several poems in the fourth and fifth volumes of Dodsley's Collection, and published a Sermon on the Causes of Impatience, preached at Harbury in Warwickshire, where he was vicar. He also wrote a poem, entitled Edge-hill, for which he obtained a large subscription in 1767; and The Blackbirds, a beautiful elegy, in the Adventurer. He died May 28th, 1781.

JAGO (St.), or YAGO, the principal of the Cape Verd Islands, is forty miles long and twenty broad. It is mountainous, and barren, but with a few fertile spots which produce abundance of fruits and vegetables

St. Jago, the capital, is situated in a valley, but does not now contain more than half a dozen families.

Porto Praya, near the middle of the south side, is one of the best roads among these islands; being perfectly safe, except from the middle of August to the beginning of November, when southerly winds blow with great violence. The bay is about one mile and a half wide between the points, and the same depth, with from fourteen to four fathoms. On its west side is a small island called Quails, Green, or French Island, and off the west point of the bay, round Tuberon point, is a ledge of breakers running out one-third of a mile.

A fort is built on the cliff, at the head of the bay, and mounts a few iron guns. Midway between St. Jago and Bonavista is the Leton reef of coral on which the Lady Burgess East Indiaman was wrecked in 1807; abundance of fish are found near it.

JAGO (St.), a town and province of Chili, bounded by that of Aconcagua to the north, the Andes to the east, the river Maypo to the south, and Melipilla to the west. The province is fifteen leagues in extent from east to west, and twelve from north to south, watered by the rivers Mapocho, Colina, and Zampa, and by several other beautiful streams. It also contains the lake Pudaguel, about three leagues in length. It is the most fertile part of Chili, producing great quantities of corn, wine, and fruits, particularly peaches. The mountains of Caren also abound with gold mines, and that part of the Andes which is attached to it with silver. The former are worked only in the summer months, namely, December, January, February, and March.

Twenty leagues from the town, which stands on the Mapocho River, is the great mine of Kempu. Further towards the south is another, named Maipo, the metals of which are lowered down by engines from a very lofty mountain, called San Simon: here also are the mines De San Pedro Nolasco, which yield a considerable portion of massy silver. On the east of this place is Valle Blanco, where silk-worms breed. Besides these mines there are five lavaderos, or washing-places, in the mountain of Guindo, and some other veins in the old asiento of Tiltil. The top of Calen is covered with lavaderos of the richest gold. This province has also copper and tin mines; and in Lampa are three of silver and one of lead. In the small settlement of Montenegro a vein of jasper has been lately discovered.

The town of St. Jago is of noble appearance. The great square measures 450 feet on each side. In the midst is a handsome bronze fountain. The north side is occupied by the palaces of the presidents of the audience and city, beneath which are the public prisons. On the western are the cathedral and the palace of the archbishop. The private houses are handsome and pleasant, but, on account of earthquakes, are usually of but one story. There is a suburb to the south, called St. Isidore, separated from the city by a street four times as broad as the others called Cannada. Here is also what was once a royal university. Inhabitants altogether about 46,000. Fifty-five miles E. S. E. of Valparaiso.

Jago (St.), a town of the island of Cuba, on the south coast, and founded by Don Diego Velasquez in 1514. It has a fine port, defended by two castles and a battery, which was long considered as the capital of the island, but is now much reduced. It is the see of a bishop, and stands on a river of the same name about six miles from the sea.

Jago (St.), de Alangi, a town of Mexico, the capital of Veragua, is situated in a fertile country, producing maize, plantains, &c., with plenty of cattle, in which a regular trade is carried on with Panama. It has some mines in its district, and contains an elegant hospital: 110 miles south-west of Porto-Bello.

Jago (St.), de Cacem, a large town in the south-west of Portugal, in the province of Alentejo, on the bay called Laguna de Pera: thirty-six miles south of Setubal.

Jago (St.), de los Cavalleros, a town of the island of St. Domingo, ninety miles north of St. Domingo. Long. 75° 32′ W., lat. 19° 36′ N.

Jago (St.), de Compostella. See Compostella

JAGRA, or Giarra, a country of Western Africa, to the south of the Gambia. It is about fifty miles from the sea, and rich in corn, particularly rice, and cotton. Park says, that the king and queen were, on one occasion, both put to death, in consequence of the former having disclosed to his wife the secret of Mumbo Jumbo.

JAJGUR, a town, fortress, and district of Hindostan, in the province of Ajmeer. It formerly belonged to the rajah of Odeypore, but now to Kotsch. The fortress stands on a hill, and is strong: the district contains eighty-four villages, most of which are inhabited by a Hindoo tribe called Meena, who have the singular custom of the younger brothers marrying the widows of the elder: they are a predatory people, and carry off all the children of the villages they attack.

In this district the palmira flourishes, and is both cheap and abundant. The tari, or fermented juice, and the jagory, or inspissated juice, of this tree (the borassus flabelliformis) are more esteemed than those of the wild date.

JAIL, *n. s.* } Fr. *geol.* A prison:
Jail'bird, *n. s.* } jailbird, one who has been
Jail'er, *n. s.* } in a jail. See Gaol. It is written either way, but commonly by later writers jail.

This is as a *jailer*, to bring forth
Some monstrous malefactor. *Shakspeare.*

Away with the dotard, to the *jail* with him.
Id.

A dependent upon him paid six thousand pounds ready money, which, poor man, he lived to repent in a *jail*. *Clarendon.*

This *jail* I call the house of liberty
To thine, whose doors my feet shall never enter.
Milton. Samson Agonistes.

Seeking many means to speak with her, and ever kept from it, as well because she shunned it, seeing and disdaining his mind, as because of her jealous *jailers*. *Sidney.*

His power to hollow caverns is confined;
There let him reign, the *jailer* of the wind;
With hoarse commands his breathing subjects call,
And boast and bluster in his empty hall.
Dryden.

Palamon, the pris'ner knight,
Restless for foe, arose before the light;
And, with his *jailer's* leave, desired to breathe
An air more welcome than the damp beneath.
Id.

He sighed and turned his eyes, because he knew
Twas but a larger *jail* he had in view. *Id.*

One *jail* did all their criminals restrain,
When now the walls of Rome can scarce contain.
Id.

Mark how the palace lifts a lying front,
Concealing often in magnific *jail*
Proud want; a deep unanimated gloom!
Thomson.

There the sycophant, and he
That with bare-headed, and obsequious bows,
Begs a warm office, doomed to a cold *jail*,
And groat per diem, if his patron frown.
Cowper.

JA'KES, *n. s.* Of uncertain etymology. A house of office.

I will tread this inbolted villain into mortar, and daub the walls of *jakes* with him. *Shakspeare.*

Their sordid avarice rakes
In excrements, and hires the very *jakes*.
Dryden.

Some have fished the very *jakes* for papers left there by men of wit. *Swift.*

JA'LAP, *n. s.* Fr. *jalap*; low Lat. *jalapium.*

Jalap is a firm and solid root, of a wrinkled surface, and generally cut into slices, heavy and hard to break; of a faintish smell, and of an acrid and nauseous taste. It had its name jalapium, or jalapa,

from Xalapa, a town in New Spain, in the neighbourhood of which it was discovered; though it is now principally brought from the Madeiras. It is an excellent purgative where serous humours are to be evacuated. *Hill's Mat. Med.*

JALAP. See CONVOLVULUS. This root is brought in thin transverse slices from Xalapa in New Spain. Such pieces should be chosen as are most compact, hard, weighty, dark-colored, and bound most with black circular striæ. Slices of bryony root, when mixed with those of jalap, may be easily distinguished by their whiter color and less compact texture. Jalap in substance, taken in a dose of about half a dram in plethoric, or cold phlegmatic habits, proves an effectual, and in general a safe purgative. In hypochondriacal disorders, and hot bilious temperaments, it gripes violently, but rarely takes effect as a purge. An extract made by water purges almost universally, but weakly, and has a considerable effect by urine. The root remaining after this process gripes violently. The pure resin, prepared by spirit of wine, occasions most violent gripings, and other distressing symptoms, but scarce proves at all cathartic: triturated with sugar or with almonds into the form of an emulsion, or dissolved in spirits, and mixed with syrups, it purges plentifully in a small dose, without occasioning much disorder: the part of the jalap remaining, after the separation of the resin, yields to water an extract, which has no effect as a cathartic, but operates powerfully by urine. Its officinal preparations are an extract made with water and spirit, a simple tincture and compound powder. By M. Henry's analysis, the constituents of this root are,

	Jal. sain.
Resin . .	48
Extract . . .	140
Starch . . .	102
Woody fibre . .	210
	500

JALEMUS, in antiquity, a kind of mournful song, used upon occasion of death, or any other affecting accident. Hence the Greek proverbs, *ταλεμω οικροτερος*, i. e. more sad than a jalemus; *εις της ταλεμης εγγραπτεος*, worthy to be ranked among jalemuses.

JALLONKADOO, a considerable country of Western Africa, which includes the sources of the Bafing, and of almost all the other rivers which form the Senegal. It is mountainous, and in many parts barren. The inhabitants are governed by a number of petty chiefs, commonly at enmity with each other; and their language differs considerably from that of the Mandingos, though there is a great affinity in many words. Caravans travel for five days here without seeing a human habitation; and if any of the party is unable to keep up with the rest, he has little hope but of perishing with hunger, or by wild beasts.

JALNAH, a district of Hindostan, in the province of Aurungabad, situated between the nineteenth and twentieth degrees of northern latitude. It was taken by the British from the Mahrattas in 1803, and by them ceded to the Nizam.

JALNAH, or JALNAPORE, a town and fortress of Hindostan, the capital of the above district, is now the head-quarters of the nizam's subsidiary force. The town and fort are on opposite sides of the river. Long. 76° 34′ E., lat. 19° 45′ N.

JALOFFS, or OUALOFFS, are a people of Africa, who occupy most of the country between the lower part of the Gambia and that of the Senegal. Their territory is reckoned by Mr. Golberry to occupy 4800 square leagues. They are of handsome person for negroes, their color being a fine bright black, and their features, upon the whole, regular and graceful. They boast of being the most ancient nation in this part of Africa, and were formerly subject to a common sovereign, called the Burb-y-Jaloff, who still occupies a considerable country in the interior. The Jaloffs profess Mahommedanism, but combine with it many of their own superstitions. They are fearless hunters and brave warriors. Those inhabiting the towns rank also among the most expert thieves in the world, using their toes with the same dexterity as their fingers. They excel in the manufacture of cotton cloth, to which they give a superior dye; and great quantities of a particular bean are exported to Morocco for the purposes of dyeing. The language of the Jaloffs is agreeable and soft; but they have a singular mode of numeration, using as its basis the number five; and all their calculations are performed by the motion of the fingers, for they write nothing.

JAM, *n. s.* Arab. *jama*. A conserve of fruits boiled with sugar and water.

JAMAICA, the most considerable and valuable of the British West India Islands, is separated from the west end of St. Domingo, by the channel called by our seamen the Windward Passage. The island is 150 miles long and forty broad, containing 4,080,000 acres; thus distributed:

690,000 acres are under sugar canes, and wood for the use of the sugar-works.
700,000 in pasture.
350,000 all other species of agriculture.

1,740,000, leaving upwards of 2,000,000 of acres of unproductive mountain land, of which not above a quarter is improvable.

The Blue Mountains are an elevated ridge, which runs through the island longitudinally, and is covered with vast forests of mahogany, lignum vitæ, iron wood, log-wood, brazilletto, and many other heavy and close-grained woods. On the north, at a small distance from the sea, the land rises in small round-topped hills, feathered with spontaneous groves of pimento, under whose shade is a beautiful turfy carpet. This side of the island is also finely watered, every valley having its rivulet and every hill its cascade, many of which tumble from overhanging cliffs into the sea. In the back ground a vast amphitheatre of forest presents itself, melting gradually into the distant Blue Mountains, whose heads are lost in the clouds. On the south coast the picture is more sublime, but less pleasing. The mountains, approaching the sea in stupendous ridges, first present to the na

vigator a scene of magnificent savageness; but on nearing the land the picture softens, cultivated spots being perceived on the sides of the hills, and at last the vast savannahs, covered with sugar canes, stretching from the sea to the foot of the mountains, offer the pleasing indication of human industry.

Jamaica has upwards of 100 rivers, rising in the mountains and running with torrent rapidity to the sea. This rapidity, as well as the obstructions from rocks, renders them unnavigable by any thing but canoes. The deepest is Black River on the south coast, which flows gently through a considerable tract of level country, and is navigable by flat boats thirty miles. The island has also some medicinal springs, warm, sulphureous, and chalybeate.

Appearances of metals are observed in the island, but the industry of the English colonists has always been more wisely employed in the certain profits of agriculture.

The climate of this island, even on the coasts, is temperate, the medium heat at Kingston throughout the year being 80° and the least 70°. In ascending towards the mountains, the temperature quickly alters with the elevation. Eight miles from Kingston the maximum is but 70°; at fourteen miles, where the elevation is 4200 feet, the general range is 55° to 65°, and the minimum in winter 44°. On the highest summit, called Blue Mountain Peak, 7431 feet above the sea, the range in the summer is from 47° at sunrise to 58° at noon, and the minimum in winter is 42°.

Besides the staple exports, consisting of sugar, indigo, coffee and cotton, the cultivated vegetables of Jamaica are maize, Guinea corn, and calavances, for the food of the negroes; and almost all the kitchen vegetables of Europe, together with many indigenous ones, as the sweet potatoe, yam, eddoe root, callaloo (a kind of spinach, and the commonest substitute for greens), cassava, okery, &c.

Few of the northern European fruits thrive, but the indigenous ones are numerous and delicious; the principal are the plantain, cocoanut, guava, sour-sop, sweet-sop, papaw custard apple, mammee apple, avocado pear, star apple, cashew apple, granadilla, prickly pear, pine apple, &c. The orange, lime, lemon, mango, and grape have been naturalised, as well as the cinnamon tree, of which there are now considerable plantations. The horned cattle, sheep, and hogs, of the island are abundant and their flesh excellent. The indigenous quadrupeds of Jamaica are the armadillo, the opossum, the racoon, the agouti, the pecare or Mexican hog, the musk-rat, the alco, and the monkey. Of these only the agouti and the monkey now remain. Of the lizard there are many varieties. The woods and marshes abound in great variety of wild fowl, some of them of exquisite flavor. Of these the most highly esteemed is the ortolan or October bird, or rice bird of South Carolina. These birds arrive in South Carolina in the month of September, to devour the rice; and, remaining there about three weeks, arrive in prodigious flights in Jamaica, about the month of October. Parrots are still found in the groves. The following was the progressive population of Jamaica to 1812 :—

	Whites.	Free people of color.	Slaves.
1658	4,500		1,400
1670	7,500		8,000
1734	7,644		86,146
1746	10,000		112,428
1768	17,947		176,914
1775	18,500	3,700	190,914
1787	30,000	10,000	250,000
1805	—	—	280,000
1812	—	—	359,812

The official value of the imports from Jamaica into England, and exports to the island :

	Imports.	Exports.
1809	£4,068,897	£3,033,234
1810	4,303,337	2,303,179

The principal objects of export from the island were,

	Coffee.	Sugar.	Rum.	Pimento.	Cotton.
	cwt.	*cwt.*	*galls.*	*lbs.*	*lbs.*
1809	214,415	1,104,612	3,470,250	2,219,367	1,886,748
1810	252,808	1,611,422	3,428,452	2,372,964	1,798,172

In 1807, when the exports were somewhat inferior to the above years, the number of vessels that cleared out from the island was,

	Vessels.	Tonnage.	Seamen.
For Great Britain . . .	242	63,471	7748
For Ireland	10	1,231	91
For British America . . .	66	6,133	449
For the United States . . .	133	13,041	493
For the Foreign West Indies .	22	1,903	155
For Africa	1	109	8
Total . .	474	85,888	9344

The *revenues* are perpetual and annual. The perpetual revenue law, which was passed in the year 1728, raises about £12,000 per annum. The other public revenues are derived from occasional grants of the legislature. The principal taxes consist of a duty of twenty shillings per head on all negroes imported, a duty on all rum and other spirits consumed within the island, a poll tax on all slaves and stock, and a rate on rents and wheel carriages. There is also a penalty imposed on all persons who fail to keep one white person for every thirty blacks, which has become a productive source of revenue.

Jamaica is divided into three counties, viz.

	Parishes.	Town.	Villages.
Middlesex .	8	1	13
Surrey . .	7	2	8
Cornwall .	5	3	6

The capital is St. Jago de la Vega, or Spanish Town, on the river Cobre, six miles from the south coast, and in the county of Middlesex. It contains about 5000 inhabitants, and is the residence of the governor, whose palace is a magnificent building.

The *legislature* of the island is composed of the governor, a council nominated by the crown, consisting of twelve gentlemen, and a house of assembly containing forty-three members, elected by the freeholders. The power of making laws is vested in the assembly and the governor, who has the privilege of a veto on the acts of the legislative body; and a further power of rejection is reserved to the crown. Until his majesty's pleasure is known, however, laws are valid.

The two towns of the county of Surrey are Kingston and Port Royal; the latter situated on a narrow sandy peninsula that separates Port Royal Bay from Kingston Harbour. In 1692 this town contained 2000 houses, when an earthquake swallowed nine-tenths of it, covering the houses with seven fathoms water. It was immediately rebuilt, but ten years after it was destroyed by fire, and being again rebuilt, was a third time destroyed by a hurricane in 1722. This succession of calamities caused the inhabitants to remove to Kingston, on the west side of the harbour, five miles from Port Royal; and here the chief government offices have been built, but the royal naval arsenal, for careening and refitting ships, is at Port Royal.

The town of Kingston contains about 2000 well-built houses: the harbour can hold 1000 ships, and those of 200 lay at the quays. Both the harbour and bay are protected by strong fortifications, which place them beyond all possible insult from an enemy.

The towns of the county of Cornwall are, Savannah le Mar, which, being destroyed by the hurricane of 1780, now contains but sixty to seventy houses: it is at the south-west end of the island. Montego Bay Town, on the north coast, contains 225 houses: seventy large ships and eighty smaller vessels load here annually. Falmouth, the third town, is also on the north coast, on the south side of Martha Brea Harbour; including the villages of Martha Brea and the Rock, the number of houses is 250. Thirty large ships, besides small vessels, load here for England.

The villages of Jamaica are generally small hamlets on the bays, where the produce is shipped in the droggers to be conveyed to the ports of clearance. The few other places worthy of mention are Lucea Harbour on the north coast, and Bluefields and Carlisle Bay on the south.

Jamaica was discovered in 1494 by Columbus. He was shipwrecked on it in 1503; and remained here on this occasion, in considerable distress, more than twelve months. A Spanish colony was established on it in the year 1509; all whose establishments were abandoned in 1655, except St. Jago de la Vega. Diego, the son of Columbus, according to the powers granted to his father by the king of Spain, appointed Esquivel, a noble Castilian, as governor of the newly discovered island, in the year 1506, who built a town, called Sevilla Nueva, near the spot where Columbus was shipwrecked. In the year 1596 Sir Anthony Shirley invaded and plundered Jamaica, and about forty years afterwards it was again plundered by a party of English, under colonel Jackson. In the year 1655 this island was taken by the English, under the command of Penn and Venables, who had been sent by Cromwell to seize on Hispaniola: it was afterwards settled by 3000 soldiers, disbanded from the parliamentary army; and these were followed by 1500 royalists. From this time the colony has gradually increased in importance, though its tranquillity has been occasionally disturbed by the inroads of the Maroons, the slaves of the Spanish settlers, who, on the surrender of the island to the English, fled to the mountains, where they have since lived in an almost savage state. In 1738 a treaty was concluded with them, by which their freedom was secured, along with a grant of 1500 acres of land. They remained peaceable till the year 1795, when a new war commenced between them and the white inhabitants. Being vigorously attacked, however, and the barbarous expedient of blood-hounds being resorted to, for the purpose of tracing their haunts, they were at last compelled to surrender at discretion to their enemies the whites, by whom about 600 of them were transported to Nova Scotia. Long. 76° 45′ W., lat. 18° 12′ N.

JAMB, *n. s.* Fr. *jambe*, a leg. Any sup porter on either side, as the posts of a door.

> No timber is to be laid within twelve inches of the foreside of the chimney *jambs*. *Moxon.*

IAMBE, in fabulous history, a servant girl of Metanira, afterwards wife of Celeus, king of Eleusis, who endeavoured to exhilarate Ceres, when she travelled in search of Proserpine. From the humor she displayed on that occasion, free and satirical verses are said to have been called iambics.

IA'MBIC, *n. s.* Fr. *iambique*; Lat. *iambicus*. Verses composed of iambic feet, or a

short and long syllable alternately: used originally in satire, therefore taken for satire.

In thy felonious heart though venom lies,
It does but touch thy Irish pen, and dies:
Thy genius calls thee not to purchase fame
In keen *iambicks*, but mild anagram. *Dryden.*

IAMBICS, in ancient poetry. See IAMBUS. There are two kinds of iambics, viz. dimeter and trimeter; the former contains four feet, and the latter six. See VERSE.

JAMBLICUS, a celebrated Platonic philosopher of Colchis, whom Julian equals to Plato. He was the disciple of Anatolius and Porphyry, and died in the reign of Constantine the Great.

JAMBLICUS, another celebrated Platonic philosopher, born at Apamea, in Syria, and nearly contemporary with the former. Julian wrote several letters to him, and it is said he was poisoned under the reign of Valens. It is not certainly known to which of the two we ought to attribute the works in Greek under the name of Jamblicus, viz. 1. The History of the Life of Pythagoras, and the sect of the Pythagoreans. 2. An Exhortation to the Study of Philosophy. 3. A piece against Porphyry's letter, on the mysteries of the Egyptians.

IAMBUS, in the Greek and Latin prosody, a poetical foot, consisting of a short syllable followed by a long one; as in

⏑ – ⏑ – ⏑ –
Θεȣ λεγω, Dei meas.

Horace calls the iambus pes citus, a swift rapid foot. The name, according to some, took its rise from Iambus, the son of Pan and Echo, who invented this foot. Others derive it from Iambe, queen of Eleusis. Others from the Greek ιος, poison; or ιαμβιζω, I rail; because iambics were at first only used in satire.

JAMES I., king of Scotland in 1423, fell into the hands of his enemies in his thirteenth year, when flying from the snares of his ambitious uncle, who governed his dominious, and was suspected of designs against his life. Having secretly embarked for France, the ship was taken by an English privateer off Flamborough Head; and the prince and his attendants, among whom was the earl of Orkney, were confined in a neighbouring castle until they were sent to London. He was detained till summer 1417, when Henry V. carried him with him into France in his second expedition. Hector Boece tells us, that Henry IV. and V. furnished their royal prisoner with the best teachers in all the arts and sciences; and that, by their assistance, he made great proficiency in every part of learning; that he became a perfect master in grammar, rhetoric, poetry, music, and all the secrets of natural philosophy, and was inferior to none in divinity and law. Above a century after his death he was celebrated in Italy by Alexander Tassoni, a writer of undoubted credit: 'We may reckon among moderns (says he) James, king of Scotland, who not only composed many sacred pieces of vocal music, but also of himself invented a new kind of music, plaintive and melancholy, different from all other; in which he hath been imitated by Carlo Gesualdo, prince of Venosa, who, in our age, hath improved music with new and admirable inventions.' As James I. was one of the most accomplished princes that ever filled a throne, he was also one of the most unfortunate. After spending almost twenty years in captivity, and encountering many difficulties on his return into his native kingdom, he was murdered by assassins in the prime of life. Only three of his poems are now extant, viz. Christ's Kirk on the Green, Peebles at the Play, and the King's Quair.

JAMES II., king of Scotland, succeeded his father in 1447, when not seven years of age; and was killed at the siege of Roxburgh in 1460, aged twenty-nine.

JAMES III. succeeded his father in 1460, in the seventh year of his age. The most striking feature in his character was his excessive fondness for the fine arts, and for those who excelled in them, on whom he bestowed his confidence and favor. This excited in his fierce and haughty nobles dislike and contempt of their sovereign, and indignation against the objects of his favor; which produced the most pernicious consequences, and ended in a rebellion that proved fatal to James, who was slain in 1488, aged thirty-six.

JAMES IV. succeeded his father in 1488. He subdued his rebellious subjects; and afterwards, taking part with Louis XII. against Henry VIII. of England, he was slain in the battle of Flodden-Field in 1513, aged forty-one. His Latin epistles are classical, compared with the barbarous style of the foreign princes with whom he corresponded. The attention he paid to the civilisation of his people, and his distribution of justice, merit the highest praise.

JAMES V. king of Scotland, in 1513, was but eighteen months old when his father lost his life. When of age, he assisted Francis I. of France against the emperor Charles V., for which service Francis gave him his eldest daughter in marriage in 1535. This princess died in two years; and James married Mary of Lorraine, daughter of Claud, duke of Guise, and widow of Lewis of Orleans, by whom he had one child, the unfortunate Mary queen of Scots, born only eight days before his death, which happened December 14th, 1542, in his thirty-fifth year.

JAMES I. king of England, and VI. of Scotland, was the son of Mary queen of Scots, whom he succeeded in Scotland in 1567, as he did Elizabeth in England in 1603. Strongly attached to the Protestant religion, he signalised himself in its support; which gave rise to the conspiracy of the Papists to destroy him and all the English nobility by the gunpowder plot, discovered November 5th, 1605. The chief glory of this king's reign consisted in the establishment of new colonies, and the introduction of some manufactures. The nation enjoyed peace, and commerce flourished during his reign. Yet his administration was despised both at home and abroad for, being the head of the Protestant cause in Europe, he did not support it in the war of Bohemia; abandoning his son-in-law, the elector palatine; negociating when he should have fought, deceived at the same time by the courts

of Vienna and Madrid; and continually sending illustrious ambassadors to foreign powers, but never making a single ally. He valued himself much upon his polemical writings; and was so fond of theological disputations, that he founded, for this express purpose, Chelsea College; which was converted to a much better use by Charles II. His Basilicon Doron, Commentary on the Revelation, writings against Bellarmine, and his Dæmonologia, or Doctrine of Witchcraft, are sufficiently known. There is a collection of his writings and speeches in one folio volume. Several other pieces of his are extant; some of them in the Caballa, others in MS. in the British Museum, and others in Howard's collection. He died in 1625, in the fifty-ninth year of his age, and twenty-third of his reign.

James II. of England and VII. of Scotland, grandson of James I., succeeded his brother Charles II. in 1685. A bigot from his infancy to the Romish religion and hierarchy, he sacrificed every thing to establish them, in direct contradiction to the experience he had acquired, during the long reign of his brother, of the genius and character of the people he was to govern. Guided by the Jesuit Peters, his confessor, and the infamous chancellor Jeffries, he violated the laws enacted for the security of the Protestant religion; and he rather chose to live and die, as he believed, a saint, than to support the dignity of his ancestors, or perish beneath the ruins of his throne. The consequence was the revolution in 1688. James II. died in France in 1710, aged sixty-eight. He wrote, 1. Memoirs of his own Life and Campaigns to the Restoration; the original of which is preserved in the Scotch College at Paris. This piece is printed at the end of Ramsay's Life of Marshal Turenne. 2. Memoirs of the English Affairs, chiefly naval, from the year 1660 to 1673. 3. The Royal Sufferer, king James II., consisting of meditations, soliloquies, vows, &c., composed at St. Germain's.

James (Dr. Thomas), a learned English critic and divine, born about 1571. He was educated at Winchester, and studied at Oxford, where he took his degree of D.D. and was appointed keeper of the public library. He distinguished himself by the arduous undertaking of publishing a catalogue of the MSS. in each college library at both universities. He was elected to this office in 1602, and held it eighteen years, when he resigned it. In the convocation held with the parliament at Oxford, in 1625, of which he was a member, he moved to have proper commissioners appointed to collate the MSS. of the fathers in all the libraries in England, with the Popish editions, in order to detect any forgeries; but, this proposal not meeting with the desired encouragement, he engaged in the laborious task himself, which he continued until his death in 1629. He left behind him a great number of learned works.

James (Robert), M.D., an English physician of great eminence, and particularly distinguished by his fever powder, was born at Kinverston, in Staffordshire, 1703. He was of St. John's College in Oxford, where he took the degree of A.B., and afterwards practised physic at Sheffield, Litchfield, and Birmingham. Thence he removed to London, became a licentiate in the College of Physicians, practised physic, and, in 1743, published a Medicinal Dictionary, in 3 vols. folio. Soon after he published an English translation, with a Supplement, by himself, of Rammazini de Morbis Artificum; to which he prefixed a piece of Frederic Hoffman upon Endemial Distempers, 8vo. In 1746 he published the Practice of Physic, 2 vols. 8vo.; in 1760 on Canine Madness, 8vo.; in 1764 a Dispensatory, 8vo. In 1755, the king being at Cambridge, he was admitted M. D. by mandamus. In 1778 were published a Dissertation upon Fevers, and a Vindication of the Fever Powder, 8vo.; with a short Treatise on the Disorders of Children. This was the eighth edition of the Dissertation, of which the first was printed in 1751; and the purpose of it was, to set forth the success of this powder, as well as to describe more particularly the manner of administering it. The Vindication was posthumous and unfinished: for he died March 23d, 1776, while employed upon it.

James (St.), surnamed Major, or the Greater, the son of Zebedee, and the brother of John the evangelist, was born at Bethsaida, in Galilee. The only authentic accounts we have of him are recorded by the evangelists. It is believed that St. James first preached the gospel to the dispersed Jews; and afterwards returned to Judea, where he preached at Jerusalem, when the Jews excited Herod Agrippa against him, who put him to a cruel death about A. D. 44. Thus he was the first of the apostles who suffered martyrdom. St. Clement, of Alexandria, relates, that his accuser was so struck with his constancy, that he became converted, and suffered with him. The Spaniards pretend that they had St. James for their apostle, and boast of possessing his body.

James (St.), surnamed Minor, or the Less, an apostle, the brother of Jude, and the son of Cleophas and Mary, the sister of the mother of our Lord, is called in Scripture the Just, and the brother of Jesus, who appeared to him in particular after his resurrection. He was the first bishop of Jerusalem, when Ananias II., high priest of the Jews, caused him to be condemned, and delivered him into the hands of the people and the Pharisees, who threw him down from the steps of the temple, when a fuller dashed out his brains with a club, about the year 62. His life was so holy, that Josephus considers the ruin of Jerusalem as a punishment inflicted on that city for his murder. He was the author of the epistle which bears his name.

James (St.), an hospital and burying ground near Basil, in the Helvetic republic, and near the small river Birs. It is famous for a desperate battle fought by about 3000 Swiss against an army of 30,000 French, commanded by the dauphin, afterwards Louis XI., in which only thirty-two of the former remained alive, desperately wounded, on the field of battle. Sixteen that escaped from the field were branded with infamy, for not having sacrificed their lives in defence of their country. The conqueror himself, who was compelled to retire with his army into

Alsace, declared that such another victory would ruin it.

James (St.), Epistle of, a canonical book of the New Testament, being the first of the catholic or general epistles; which are so called, as not being written to one but to several Christian churches. It is addressed partly to believing and partly to infidel Jews.

James (St.), of the Sword, San Jago del Espada, a military order in Spain, instituted in 1170, by Ferdinand II. king of Leon and Gallicia, to stop the incursions of the Moors; three knights obliging themselves by a vow to secure the roads. A union was proposed and agreed to in 1170 between these and the canons of St. Eloy; and the order was confirmed by the pope in 1175. The highest dignity is that of grand master, which is held by the king of Spain. The knights are obliged to make proof of their descent from families that have been noble for four generations on both sides; they must also make it appear that these their ancestors have neither been Jews, Saracens, nor heretics; nor even called in question by the inquisition. The novices are obliged to serve six months in the galleys, and to live a month in a monastery. Formerly they took a vow of celibacy, but Alexander III. gave them permission to marry. They now make no vows but of poverty, obedience, and conjugal fidelity; to which, since 1652, they have added that of defending the immaculate conception of the holy virgin. Their habit is a white cloak, with a red cross on the breast. This is esteemed the most considerable of all the military orders in Spain; the king carefully preserves the office of grand master in his family, on account of the rich revenues and offices, whereof it gives him the disposal. The number of knights is much greater now than formerly, all the grandees choosing rather to be received into this than into the order of the golden fleece; insomuch as this gives them many considerable privileges in all the provinces of Spain, but especially in Catalonia.

James River, or the James, or the Fluvanna, a large navigable river of Virginia, which rises on the west side of Jackson's Mountain, and, running a south-west course, under the name of Jackson's River, receives Carpenter Creek from the Allegany Mountains, after which it is named James River; thence, running south-east, it waters eight counties of Virginia, and at last falls into Chesapeake Bay near James Town. Its navigation is interrupted at Richmond by falls.

James's Powder, a medicine prepared by Dr. R. James, of which the basis has been long known to chemists, though the particular receipt for making it lay concealed in chancery till made public by Dr. Monro, who gives the following copy of it: 'Take antimony, calcine it with a continued protracted heat, in a flat, unglazed, earthen vessel, adding to it from time to time a sufficient quantity of any animal oil and salt, well dephlegmated; then boil it in melted nitre for a considerable time, and separate the powder from the nitre by dissolving it in water.' Dr. Monro adds, that 'when the doctor first administered his powder, he used to join one grain of a mercurial preparation to thirty-eight grains of his antimonial powder; but in the latter part of his life he often declared that he had long laid aside the addition of the mercurial.' Dr. James, at the end of the receipt given into chancery, says 'the dose of these medicines is uncertain; but in general thirty grains of the antimonial, and one grain of the mercurial, is a moderate dose.' Of this medicine Dr. Monro says, 'Like other active preparations of antimony, it sometimes operates with great violence, even when given in small doses; at other times a large dose produces very little visible effects. I have seen three grains operate briskly, both upwards and downwards; and I was once called to a patient to whom Dr. James had himself given five grains of it, and it purged and vomited the lady for twenty-four hours, and in that time gave her between twenty and thirty stools; at other times I have seen a scruple produce little or no visible effect. So far as I have observed, I think that the dose of this powder to an adult, is from five to twenty grains; and that when it is administered, one ought to begin by giving small doses. Where patients are strong, and a free evacuation is wanted, this is a useful remedy: and it may be given, in small repeated doses, as an alterative in many cases; but where patients are weakly, and in low fevers, it often acts with too great violence; and I have myself seen instances, and have heard of others, where patients have been hurried to their graves by the use of this powder in a very short time.'

JAMESONE (George), an excellent painter, justly termed the Vandyck of Scotland, was the son of Andrew Jamesone, architect; and was born at Aberdeen in 1586. He studied under Rubens, at Antwerp; and, after his return, applied with indefatigable industry to portraits in oil, though he sometimes practised in miniature, and also in history and landscapes. His largest portraits were somewhat less than life. His excellence consists in delicacy and softness, with a clear and beautiful coloring; his shades not charged, but varnished, with little appearance of the pencil. When king Charles I. visited Scotland, in 1633, the magistrates of Edinburgh employed Jamesone to make drawings of the Scottish monarchs; with which the king was so pleased, that, enquiring for the painter, he sat to him, and rewarded him with a diamond ring from his own finger. Jamesone always drew himself with his hat on, either in imitation of his master Rubens, or on having been indulged in that liberty by the king when he sat to him. Many of Jameson's works are in both the colleges of Aberdeen; and he is said to have drawn the Sybils from living beauties in that city. His best works are from 1630 to his death, which happened at Edinburgh in 1644.

JAMTLAND, a mountainous province of Sweden, near Norway, of an oval form, seventy miles long and sixty broad, annexed to Sweden by the treaty of Roschild, in 1658. It abounds with mines of copper, lead, salt-petre, alum, lapis ollarius, rock-crystals, &c. It is thinly peopled, but the east part is fertile in corn, &c.

JAMYN (Amadis), a celebrated French poet in the sixteenth century. He is esteemed the rival of Ronsard, who was his contemporary and

friend. He was secretary to Charles IX., and lied about 1585. He wrote, 1. Poetical Works, 2 vols.; 2. Philosophical Discourses to Pasicharis and Rodanthe, with Seven Academical Discourses; 3. A Translation of the Iliad of Homer, begun by Hugh Sabel, and finished by Jamyn; with a translation into French verse of the three first books of the Odyssey.

JANE OF FLANDERS was the wife of John le Mountfort, a competitor for the dukedom of Brittany upon the death of John III. This duke, lying without issue, left his dominions to his niece Jane, wife of Charles de Blois, nephew to the king of France; but John Mountfort, brother to the late duke, though by a second marriage, claimed the duchy, and was received as successor by the people of Nantes. The greatest part of the nobility swore fealty to Charles de Blois. This dispute occasioned a civil war; in the course of which John was taken prisoner, and sent to Paris. This misfortune would have ruined his party, had not his interest been supported by the extraordinary abilities of his wife, Jane. Bold, daring, and intrepid, she fought like a warrior in the field; shrewd, sensible, and sagacious, she spoke like a politician in the council; and, endowed with the most amiable manners and winning address, she was able to move the minds of her subjects by the force of her eloquence, and mould them to her pleasure. She was at Rennes when she received the news of her husband's captivity; but that disaster served only to rouse her native courage and fortitude. She forthwith assembled the citizens; and, holding in her arms her infant son, recommended him to their care and protection in the most pathetic terms, as the male heir of their ancient dukes, who had always governed them with lenity and indulgence, and to whom they had ever professed the most zealous attachment. She declared herself willing to run all hazards with them in so just a cause; pointed out their resources in the alliance of England; earnestly beseeching them to make one vigorous effort against a usurper, who, being forced upon them by the intrigues of France, would, as a mark of his gratitude, sacrifice the liberties of Brittany to his protector. The people, moved by the affecting appearance, and animated by the noble conduct of the princess, vowed to live and die with her in defending the rights of her family; and their example was followed by almost all the citons. The countess went from place to place, encouraging the garrisons of the several fortresses, and providing them with every thing necessary for their subsistence; after which she shut herself up with her son in Hennebon, where she resolved to wait for the succours which Edward III. had promised to send to her assistance. Charles de Blois, accompanied by the dukes of Burgundy and Bourbon, and many other noblemen, took the field with a numerous army, and, having reduced Rennes, laid siege to Hennebon, which was defended by the countess in person. This heroine repulsed the assailants in all their attacks with the most undaunted courage; and, observing one day that their whole army had left the camp to join in a general storm, she rushed forth at a postern gate, with 300 horse, set fire to their tents and baggage, killed their sutlers and servants, and raised such a terror and consternation through all their quarters, that the enemy gave over their assault, and, getting betwixt her and the walls, endeavoured to cut off her retreat into the city. Thus intercepted, she put the spurs to her horse, and, without halting, galloped directly to Brest, which lay at the distance of two and twenty miles from the scene of action. There, being supplied with a body of 500 horse, she immediately returned, and, fighting her way through part of the French camp, was received into Hennebon, amidst the acclamations of the people. Soon after this the English succours appeared, and obliged the enemy to raise the siege.

JANEIRO, RIO DE, a jurisdiction of Brasil, in South America, seated between the Tropic of Capricorn and lat. 22° S. It is bounded on the north by Spirito Sancto, on the east and south by the Atlantic Ocean, and on the west by the Minas Geraes. It is extremely fertile for a mountainous country, particularly in sugar, which is one of its chief exports. Besides the river Janeiro, twenty-seven other streams of inferior magnitude water this region: and the plains are consequently clothed with the richest pastures. But indolence reigns triumphant: the population is very thin and badly clothed, badly fed, and sensible, as it would seem, of none of these advantages.

JANEIRO, RIO DE, a city of Brasil, and its capital, stands for the greater part on a plain on the west side of the bay close to the sea. An accumulation of hills of various elevations rise to the south. It extends about two miles from east to west, and its northern side is enclosed by five mountains, which merely leave a space for a single street between their base and the ocean. The houses are chiefly built of stone, and balconied, but consist only of one story. The ground-floors, which are not occupied as shops or stores, exhibit the gloomy aspect of closely-latticed windows and doors. In the upper part, also, wooden lattices are frequently introduced. The streets cross each other at right angles. The principal one runs north and south, and is the head of several more that stretch towards the west, and are crossed again by others parallel to the first. Most of the streets are narrow and badly paved. The open spaces denominated squares are very irregular, and meanly laid out. The palace square is the principal in point of buildings, and is about 150 yards long, and eighty wide. The royal residence occupies one side, while the convent of the Carmelites, and the senate-house, forms another. The square of Roceo is about 180 yards long, and 100 wide. The other principal public buildings are the mint, the armoury, the naval and military arsenals, and the custom-house. A neat theatre has also been built. The cathedral is a recent and tolerably respectable modern structure. Water is conveyed from the neighbouring hills by means of a noble aqueduct of a double tier of arches, from which it is conducted to various fountains.

Provisions are ill supplied to this capital. poultry, fish, and even beef are dear, and ill-attended to; and mutton is not often seen

Pork is the best meat, and the vegetables are fine; but living is said to be as dear as in London, without half its comforts.

The entrance to the port of Rio Janeiro is twenty-one leagues west of Cape Frio; it is known by some islands off it, viz. Redonda, two leagues and a half south by west of Santa Cruz fort. It is high, round, and rocky, with two rocky islets two leagues east of it, and four miles off shore is Razor Island, four leagues south of Santa Cruz fort. The entrance is also known by a remarkable break in the land, between two perpendicular and naked mountains of granite; that on the left is insulated, and has the exact form of a sugar loaf, the peak of which is 680 feet above the sea; that on the right is a mountain attached to the coast, which rises to the same height as the former, but with a gentle ascent to the summit. A small island lies in the entrance, and narrows the channel to three-quarters of a mile; when through this narrow entrance, a beautiful basin opens of at least 100 miles in circumference, being thirty miles long, and ten to fourteen wide, with several small, but exuberantly fertile islands, covered with the most beautiful trees and shrubs. The shores of the basin rise in general abruptly to hills of moderate height, behind which are other ridges, increasing in elevation till their summits are lost in the clouds. There is reason to suppose that this vast basin was once a lake, separated from the sea by a narrow bank, the less solid parts of which have been worn away, leaving only the rocky bar which now crosses the entrance from two miles without Santa Cruz fort to the sugar loaf, with seven to ten fathoms water on it towards the east, while at its west extremity the rocks are above water. Both within and without this bar the depth is eighteen fathoms. All parts of the port afford anchorage to the most numerous fleets, and with the greatest facility of access and egress, by means of the sea and land breezes, which are regular. The entrance is defended by the forts of Santa Cruz and St. Lucia.

This is of course the chief mart of the Brasils, particularly of the mining districts. Troops of mules are constantly seen traversing the roads between these districts and this place; each carrying a burden of about 3 cwt. to the distance, perhaps, of 1500 or 2000 miles. Their homeward freight consists generally of salt or iron. The prosperity of Rio de Janeiro is marked by the rapid increase of its inhabitants, particularly since the residence of the court here. Mr. Mawe states the population, including the negroes, which are the most numerous class, at 100,000; Mr. Henderson, at 150,000.

JANEWAY (James), a dissenting clergyman of the seventeenth century, was born in Hertfordshire about the year 1636. He obtained a studentship at Christ Church, Oxford, but resigned his situation and all hopes of future preferment in 1662, for his refusal to comply with the test act. He now came to London, and was for several years pastor of a congregation at Rotherhithe. His works are, Heaven on Earth, and the Saints' Encouragement to Diligence, &c., 8vo.; A Token for Children, which has gone through several editions; A Legacy to my Friends (printed after his decease); and several other devotional tracts, besides the life of his brother John Janeway. His death took place in 1674.

JAN'GLE, *v. n.* & *n. s.* } Fr. *jangler*. To
JAN'GLER, *n. s.* } altercate; to quarrel; to bicker in words; to make an inharmonious sound: jangler, a quarrelsome, noisy, chattering fellow.

Jangling, as whan man speketh to moche before folk, and clappeth as a mille, and taketh no kepe what he sayth. *Chaucer. The Persones Tale.*

Good wits will be *jangling*; but, gentles agree,
This civil war of wits were much better used
On Navarre and his book-men. *Shakspeare.*

Now see that noble and that sovereign reason,
Like sweet bells *jangled* out of tune and harsh.
Id. Hamlet.

There is no errour which hath not some appearance of probability resembling truth, which when men, who study to be singular, find out, straining reason, they then publish to the world matter of contention and *jangling*. *Raleigh.*

Ere Gothic forms were known in Greece,
And in our verse ere monkish rhimes
Had *jangled* their fantastic chimes. *Prior.*

JANICULARIS, or JANICULUM, a hill of ancient Rome, added by Ancus Martius; the burial-place of Numa, and of Statius Cæcilius the poet: having the Tiber on the east and south; the fields on the west; and a part of the Vatican on the north. It was so called, either from an ancient city, or because it was a janua, or gate, whence they issued out and made excursions on the Tuscans. Virg. Val. Flaccus. It is now called Montorius, a corruption of Mons Aureus, from its sparkling sands. From this hill, on account of its height, is the most extensive prospect of Rome.

JAN'IZARY, *n. s.* A Turkish word, compounded of *jengi*, young, and *cheri*, a soldier; a young or raw soldier. One of the guards of the Turkish king.

His grand vizir, presuming to invest
The chief imperial city of the West,
With the first charge compelled in haste to rise;
The standards lost, and *janizaries* slain,
Render the hopes he gave his master vain.
Waller.

JANISSARIES, or JANIZARIES, an order of infantry in the Turkish armies, formerly reputed the grand seignior's foot-guards, but lately dissolved. The word 'genizers,' in the Turkish language signifies novi homines, or new troops. D'Herbelot tells us, that jenitcheri signifies a new band; and that the name was first given by Amurath I., who, choosing out one-fifth of his Greek Christian prisoners, and instructing them in the discipline of war and the doctrines of their religion, sent them to Hagi Bektasche (a person whose pretended piety rendered him extremely revered among the Turks), that he might confer his blessing on them, and at the same time give them some mark to distinguish them from the rest of the troops. Bektasche, after blessing them, cut off one of the sleeves of his fur gown, and put it on the head of the leader of this new militia; from which time (viz. A. D. 1361) they retained the name jenitcheri, and the fur cap. As, in the Turkish

army, the European troops are distinguished from those of Asia; the janissaries were also distinguished into janissaries of Constantinople, and Damascus. Their dress consisted of a dolyman, or long gown, with short sleeves, which was given them annually by the grand seignior on the first day of Ramazan. They wore no turban, but a kind of cap which they called zarcola, and a long hood of the same stuff hanging on their shoulders. On solemn days they were adorned with feathers, which were stuck in a little case on the fore part of the bonnet. Their arms in Europe, in time of war, were a sabre, a carabine or musket, and a cartouch-box hanging on the left side. At Constantinople, in time of peace, they carried a long staff. In Asia, where powder and fire-arms are more uncommon, they carried a bow and arrows, with a poniard, which they called haniare. They were at first called jaja, that is, footmen, to distinguish them from the other Turks, the troops whereof consisted mostly of cavalry. The number of janissaries was generally above 40,000; divided into 162 companies or chambers called odas, where they lived together at Constantinople as in a convent. They were of a superior rank to all other soldiers, and were also more arrogant and factious; and it was by them that the public tranquillity was oftenest disturbed. The government might therefore be said to be in the hands of the janissaries. They were employed to escort travellers, and especially ambassadors and persons of high rank on the road; in which cases they behaved with the utmost zeal and fidelity.

JANIZARIES, at Rome, are officers of the pope, called also participantes, on account of certain duties which they enjoy in the annates, bulls, or expeditions, being officers of the third bench or college of the Roman chancery. The first bench consists of writers, the second of abbreviators, and the third of janizaries, who are a kind of correctors and revisors of the pope's bulls.

JANOWITZ, a town of Bohemia, in the circle of Kaushim, famous for a battle in 1645 between the Swedes and the Imperialists, when the latter were defeated. It is forty-eight miles south-east of Prague. Long. 15° 38′ E., lat. 49° 45′ N.

JANSEN, or JANSENIUS (Cornelius), D. D., bishop of Ypres, and professor of divinity, in the universities of Louvain and Douay, was one of the most learned divines of the seventeenth century, and founder of the sect of Jansenists. He was born in Holland of Catholic parents, and studied at Louvain. Being sent to transact some business of consequence relating to the university, into Spain, the Catholic king, viewing with a jealous eye the intriguing policy of France, engaged with him to write a book to expose the French as not good Catholics, as they formed alliances with Protestant states. Jansen performed this task in his Mars Gallicus; and was rewarded with the see of Ypres in 1635. He had, among other writings before this, maintained a controversy against the Protestants upon the subjects of grace and predestination; but his Augustinus was the principal labor of his life, on which he spent above twenty years. See JANSENISTS.

JANSENISTS, in church history, a sect of Roman Catholics in France, who followed the opinions of Jansenius, in relation to grace and predestination. In 1640 the universities of Louvain and Douay, and particularly F. Molina and F. Leonard Celsus, condemned the opinions of the Jesuits on grace and free-will. This having set the controversy on foot, Jansenius opposed to the doctrine of the Jesuits the sentiments of St. Augustine; and wrote a treatise on grace entitled Augustinus. This treatise was attacked by the Jesuits, who accused Jansenius of maintaining heretical opinions; and afterwards, in 1642, obtained of pope Urban VIII. a formal condemnation of Jansenius's treatise; when the partisans of Jansenius gave out that the bull was spurious, and composed by a person devoted to the Jesuits. After the death of Urban, Jansenism began to be more warmly controverted, and one published The Torch of St. Augustine; another found Snuffers for St. Augustine's torch, and father Veron found A gag for the Jansenists, &c. In 1650 sixty-eight bishops of France subscribed a letter to pope Innocent X. requesting an enquiry into and condemnation of the five following propositions, extracted from Jansenius's Augustinus:—1. Some of God's commandments are impossible to be observed by the righteous, even though they endeavour with all their power to accomplish them. 2. In the state of corrupted nature we are incapable of resisting inward grace. 3. Merit and demerit, in a state of corrupted nature, does not depend on a liberty which excludes necessity; but on a liberty which excludes constraint. 4. The Semipelagians admitted the necessity of an inward preventing grace for the performance of each particular act, even for the beginning of faith; but they were heretics in maintaining that this grace was of such a nature, that the will of man was able either to resist or obey it. 5. It is Semipelagianism to say, that Jesus Christ died, or shed his blood for all mankind in general. In 1652 the pope appointed a congregation for examining into the dispute. Jansenius was condemned; and the bull of condemnation, published in 1653, filled all the pulpits in Paris with violent outcries against the heresy of the Jansenists. In 1656 pope Alexander VII. issued out another bull, in which he condemned the five propositions of Jansenius. At last Clement XI. put an end to the dispute by his constitution of July 17th, 1705; in which, after having recited the constitution of his predecessors in this affair, he declares, 'that in order to pay a proper obedience to the papal constitutions concerning the present quetion, it is necessary to receive them with a respectful silence.' The clergy of Paris, the same year, approved and accepted this bull, and none dared to oppose it. This is the famous bull Unigenitus, so called from its beginning with the words Unigenitus Dei Filius, &c., which occasioned so much confusion in France.

JANSENIUS (Cornelius), bishop of Ghent, was born at Hulst, in Flanders, in 1510. He distinguished himself at the council of Trent by his learning and modesty. He wrote a Harmony of the Gospels, and other works; and died at Ghent in 1576.

JANSSEN (Cornelius), called also Johnson, an eminent portrait-painter, born at Amsterdam. He resided in England for several years; where he was engaged in the service of king James I. and painted several excellent portraits of that monarch, his children, and the principal nobility. He had not the freedom of hand nor the grace of Vandyck; but, in other respects, he was accounted his equal, and in finishing superior. His paintings are easily distinguished by their smooth, clear, and delicate tints, and by a strong character of truth and nature. He generally painted on board; and, for the most part, his draperies are black; probably because the opposition of that tint made his flesh colors appear more beautifully bright, especially in his female figures. It is said, that he used a quantity of ultra-marine in the black colors, as well as in his carnations; which may be one great cause of their preserving their original lustre even to this day. He often painted in a small size in oil, and often copied his own works in that manner. His fame began to be obscured on the arrival of Vandyck in England; and, the civil war breaking out some time after, he returned to his own country, where his paintings were in the highest esteem. He died in 1685.

JANSSENS (Abraham), an historical painter, was born at Antwerp in 1569. He was contemporary with Rubens, and, in many of the finest parts of the art, was accounted not inferior to him. He once challenged him to a competition, but Rubens modestly replied, that the world would certainly do them both justice. Sandrart assures us, that he not only gave a fine roundness and relief to his figures, but also such a warmth and clearness to the carnations, that they had all the look of real flesh; and his coloring was as durable as it was beautiful, retaining its original lustre for many years. His finest performance is a resurrection of Lazarus, in the cabinet of the elector Palatine, and is greatly admired.

JANSSENS (Victor Honorius), historical painter, was born at Brussels in 1664, and was a disciple of Volders, under whom he continued seven years. He afterwards went to Rome, where he studied the works of Raphael, designed after the antiques, and sketched the beautiful scenes around that city. His paintings rose in esteem, and the principal nobility of Rome employed him. He associated with Tempesta, the celebrated landscape painter, for several years, and painted the figures in the works of that great master as long as they resided together. He composed historical subjects, both in a small and a large size; but he found the demand for his small pictures so considerable, that he was induced to paint most frequently in that size. Returning to Brussels, his performances were as much admired there as they had been in Italy; and he adorned most of the churches and palaces of Brussels with his compositions. His invention was fruitful; he designed correctly, his coloring is natural, his pencil free, and his heads beautiful and elegant. His large and small paintings, in correctness and taste, had equal merit, but the coloring of the former appears more raw and cold than that of the latter. For small historical pictures, he was preferable to all the painters of his time.

JAN'TY, *adj.* Corrupted from Fr. *gentil.* Showy; fluttering.

> This sort of woman is a *janty* slattern: she hangs on her cloths, plays her head, and varies her posture. *Spectator.*

JANUARIUS (St.), the patron saint of Naples, where his head is occasionally carried in procession, in order to stop the eruptions of Vesuvius. The liquefaction of his blood is a famous miracle at Naples. The saint suffered martyrdom about the end of the third century. When he was beheaded, a pious lady of Naples caught about an ounce of his blood, which, tradition says, has been carefully preserved in a bottle ever since, without having lost a single grain of its weight. This of itself, were it demonstrable, might be considered as a greater miracle than the circumstance on which the Neapolitans lay so much stress, viz. that the blood, which has congealed and acquired a solid form by age, is no sooner brought near the head of the saint, than, as a mark of veneration, it immediately liquefies. This experiment is made thrice a-year, and is considered by the Neapolitans as a miracle of the first magnitude. The substance in the bottle, which is exhibited for the blood of the saint, is supposed to be something naturally solid, but which melts with a small degree of heat. When first brought out of the cold chapel, it is in its solid state; but when brought before the saint by the priest, and rubbed between his warm hands, it melts. The head and blood of the saint are kept in a kind of press, with folding doors of silver, in the chapel of St. Januarius belonging to the cathedral church. The real head is probably not so fresh and well preserved as the blood. On that account it is not exposed to the eyes of the public; but is enclosed in a large silver bust, gilt and enriched with jewels of high value. The blood is kept in a small repository by itself. The chemical process for imitating this pretended miracle is by a solution of gold by the muriatic acid. Though this acid has no action on gold in its metallic state, yet if the metal is previously attenuated, or reduced to a calx, either by precipitation from aqua regia, or by calcination in mixture with calcinable metals, this acid will perfectly dissolve it, and keep it in solution. This solution is of a yellow color, gives a purple stain to the skin, bones, and other solid parts of animals, and strikes a red color with tin. In distillation the nitrous acid arises, and the muriatic acid remains combined with the gold in a blood-red mass, soluble in spirit of wine. If, towards the end of the distillation, the fire is hastily raised, part of the gold distils in a high saffron-colored liquor, and part sublimes into the neck of the retort, in clusters of long slender crystals of a deep red color, fusible in a small heat, deliquating in the air, and easily soluble in water. This red sublimate of gold being easily fusible by the heat of one's hand, is exhibited by the Neapolitan priests for St. Januarius's blood.

JAN'UARY, *n. s.* Lat. *Januarius.* The first month of the year, from Janus, to whom it was among the Romans consecrated.

January **is clad in white, the colour of the earth at this time, blowing his nails. This month had the name from Janus, painted with two faces, signifying Providence.** ***Peacham.***

JANUARY may also be derived from janua, a gate, this month being, as it were, the gate of the year. January and February were introduced into the year by Numa Pompilius; Romulus's year beginning in March. The kalends, or 1st of this month, was under the protection of Juno, and consecrated to Janus by an offering of a cake made of new meal and new salt, with new frankincense and new wine. On this day the consuls elect took possession of their office, and, with the flamines, offered sacrifices and prayers for the prosperity of the empire: all animosities were suspended, and friends gave and received Strenæ, or new-year's gifts.

JANUS, in fabulous history and mythology, the first king of Italy, who received Saturn hospitably, when he was driven from Arcadia by Jupiter. He tempered the manners of his subjects, and taught them civility; and from him they learned to improve the vine, to sow corn, and to make bread. After his death he was adored as a god. He was thought to preside over all new undertakings. Hence, in all sacrifices, the first libations of wine and wheat were offered to Janus; all prayers were prefaced with a short address to him; and the first month of the year was dedicated to and named from him. See JANUARY. Janus was represented with two faces, either to denote his prudence, or that he views at once the past and approaching years; he had a sceptre in his right hand, and a key in his left, to signify his extensive authority, and his invention of locks.

JANUS was also the name of a street in Rome, chiefly inhabited by bankers and usurers. It was so called from two statues of Janus erected in it, one at the top, the other at the bottom. The top of the street was therefore called Janus summus, the bottom Janus imus, and the middle Janus medius. Hence Horace, lib. i. Epist. 1. v. 54.

Hæc Janus summus ab imo
Perdocet:

and Sat. 3. lib. ii.

Postquam omnis res mea Janum
Ad medium fracta est.

JANUS, TEMPLE OF, in ancient history, a square building at Rome, as some say, of entire brass, erected by Romulus, containing a statue of Janus five feet high, with brazen gates on each side, which were always kept open in war, and shut in time of peace. But the Romans were so much engaged in war, that this temple was shut only twice from the foundation of Rome till the reign of Augustus, and six times afterwards. It was shut, 1. During the long reign of Numa, who instituted this ceremony. 2. In A. U. C. 519, after the end of the first Punic war. 3. By Augustus after the battle of Actium, A. U. C. 725. 4. On Augustus's return from the war against the Cantabrians in Spain, A. U. C. 729. 5. Under the same emperor, in A. U. C. 744, and A. A. C. 5.; when there was a general peace throughout the whole Roman empire, which lasted twelve years. 6. Under Nero, A. U. C. 811. 7. Under Vespasian, in 824. 8. Under Constantius, when, upon Magnentius's death, he was left sole possessor of the empire, in 1105. Some dispute this, however, and say that the last time it was shut was under Gordian, about A. U. C. 994. Virgil gives us a noble description of this custom, Æn. lib. iii. ver. 607, &c.

JAPAN. The isles or empire of Japan consists of three considerable, and a great number of small islands, separated from the peninsula of Corea, and the coast of Chinese Tartary, by the strait of Corea and the sea of Japan, and extending between the latitudes of 30° and 41°. These islands were first made known to Europe by Marco Paulo, who collected some details respecting them from the Chinese, under the name of Zipangri. In 1535, or 1548, they were visited by the Portuguese.

The word Japan (Je-pen or Je-paun) is Chinese, and signifies the country of the rising sun. The three principal islands are Niphon, Kiusiu, and Sikokf. Their surface presents a variety of mountains, hills, and valleys. Many of the mountains contain volcanoes, but in general they are well clothed with evergreen trees, and give birth to numerous rivulets, which fertilise the valleys, but seldom arrive at the magnitude of rivers. The hills are cultivated to their summits, and present the smiling picture of human industry, in the midst of vestiges of physical convulsions. In the island of Niphon, in the centre of an extensive valley, is a lake, said to be in length equal to fifty hours of a horse's pace, and one-third of that in breadth. The east coasts are lined with rocks, against which the sea beats with incessant fury. The climate approaches to humid, the most abundant rains falling after Midsummer, and during this season it thunders almost every night. The maximum of the thermometer, at Nangasaki, in August, is 98°, and the minimum in January 35°. The summer heat is, however, moderated by frequent sea breezes; and the snow never lies on the ground more than a few days.

Rice is the principal grain cultivated, but wheat, barley, rye, and Indian corn, are also produced; the potatoes are indifferent, but peas, beans, cabbages, and turnips, are equal to those of Europe. The islands have no apple trees, but pears grow to a very large size; and oranges, figs, shaddocks, bananas, cocoa-nuts, jacks, and other fruits of the tropics, arrive at perfection; ginger, black pepper, sugar, cotton, and indigo, are cultivated in great quantity; the tea shrub grows wild in the hedges; and on the sides of the smaller mountains are found the Indian laurel and camphor. The islands also afford other medicinal plants, such as the muquet of Japan, the aromatic acore, squine root, cerete of Japan, moxa, snake-wood, murgo root, the opium poppy, jalap, &c. The cypress, larch, and weeping-willow, are common.

These islands have but a scanty proportion of quadrupeds, there being but few hogs, and neither goats nor sheep; the first two are considered as injurious to agriculture, and therefore are not allowed to propagate. The horses and black cattle are in small number, and the only

animals used in agriculture are buffaloes and very small cows. The wild animals are confined to wolves and bears, chiefly towards the north, and foxes. The flesh of the bear is eaten, but foxes are held in abhorrence, under the belief that they are evil spirits which have assumed this shape. Dogs, however, make up for the scarcity of other quadrupeds; for by a law of one of the emperors, particularly attached to the canine race, and which has become a sacred custom, they are protected and nourished at the expense of the towns. The only game are pheasants and partridges.

The Japanese Islands abound in the precious metals, and the sovereign claims two-thirds of the produce of the mines. They have also rich mines of copper, mixed with considerable quantities of gold, which afford the most lucrative object of foreign commerce. Iron is the scarcest metal, but it is still found in sufficient quantity for the necessary domestic utensils and arms. Sulphur and pummice stone are in abundance; and coal is said to be found to the north. The islands have also white marble, red agates, asbestos, potters' earth, and other minerals. A kind of red naphtha is burned in lamps. Hot mineral springs are frequent, and are had recourse to in various diseases.

The Japanese are of a middle size, well made and robust, their complexion either brown or pale white like the Chinese; but their distinctive feature is the eye, which is small, oblong, and sunk in the head. They have the head large, the neck short, the nose large, hair black, thick, and shining, from the oil they rub into it. These characteristics seem to denote their origin from the Chinese, with a mixture of Mongul or Manchou Tartars, but their language has no affinity to that of either of these people. According to their traditions, there formerly existed in the island of Niphon two other races, the Mosins, or Hairy Kuriliens on the north, and a nation of Negroes on the south.

The ancient *government* of Japan resembled that of Thibet, the Daïri, or sovereign pontiff, answering to the grand lama. In the year 1143 (according to the Japanese annals) this prince confided the military government of his dominions to a kubo, whose office became hereditary. His power at last predominated over that of the daïri; and, in 1585, the latter was deprived of even the shadow of political authority. Since that period the government of Japan may be considered as an hereditary absolute monarchy, controlled by a great number of hereditary absolute princes, of whom the mutual jealousies, and the hostages they are obliged to deliver, secure their submission to the supreme power. Each of these petty sovereigns keeps a standing army on foot. The laws of Japan have been greatly praised by some travellers, while by others they have been as greatly decried. The former tell us, that justice is expeditious, and executed with rigor, without respect to persons, except that the nobles may commute certain punishments by pecuniary fines. That the police is well organised and vigilant, and that, the inhabitants of every street being made responsible for the crimes committed by any individual of it, crimes are consequently rare. But on the other hand, we are informed that the punishments are barbarously cruel, that mincing a criminal to pieces, opening the belly with a knife, suspending him by iron hooks through the ribs, or boiling him in oil, are the most common. Though, in such a system of legislation, crimes must certainly be rare, it at the same time deprives innocence of its tranquillity, and society of its happiness; and surely it is better to run the risque of being once or twice robbed in the course of life, than to be every day in fear of being boiled in oil, to expiate a crime committed by another. The standing armies of the different princes of Japan are estimated at 468,000 infantry and 58,000 cavalry, which would suppose a population of 20,000,000 to 30,000,000; but most probably there is in these estimates a great deal of exaggeration.

The Japanese appear to be less advanced in navigation than the Chinese, the government strictly prohibiting the going out of sight of land; and, to insure the compliance with this restriction, the junks are built in a manner that unfits them for the open sea. Those seen by Broughton were from 30 to 300 tons, with but one mast and a single sail of cotton: they are unable to tack, but wear in a short compass; their anchors resemble graplings with a number of hooks. Other navigators describe them as so low abaft, as to be unable to go before the wind, when it blows fresh, without great danger. The Japanese use a compass nearly similar to that of the Chinese. It has four grand divisions, answering to the four cardinal points, and each of these is subdivided into three, making twelve subdivisions, to which are given the names of the signs of the Zodiac, viz.

North, Koutta.

1 Division, Ue, the rat.
2 Division, Oas, the ox.
3 Division, Tora, the tiger.

East, Fagasi.

1 Division, Oa, the hare.
2 Division, Tats, the dragon.
3 Division, Mi, the serpent.

South, Minou-ami.

1 Division, Oama, the horse.
2 Division, Foo tooei, the sheep.
3 Division, Saroo, the monkey.

West, Nis.

1 Division, Ton, the fowl.
2 Division, Mov, the dog.
3 Division, I, the wild hog.

The Japanese pretend to have anciently navigated to Formosa and Java, and on the north to the coast of America, but at present their voyages extend no farther north than Jesso. The roads throughout Japan are wide, with ditches to carry off the water, and kept in the highest order, which is not, however, difficult, there being no wheeled carriages, the common modes of travelling being either on horseback or in palanquins.

The Japanese are divided into two religious sects, called Sinto and Budso: the former believe in a Supreme Being, but who they conceive is too exalted to concern himself with their affairs,

but they invoke divinities of an inferior order as mediators;—they believe that the souls of the good inhabit luminous regions near the empire, while those of the wicked wander in the air, until they have expiated their faults. The Sintos abstain from animal food, not from a belief in the metempsychosis, but because they abhor the effusion of blood, and dare not touch a dead body.

The sect of Budso is the same as that of Budha, or Boudh of India, mixed with some foreign superstitions.

Between 1549 and 1638 the Jesuits were employed in introducing Christianity into Japan; but two persecutions annihilated the infant church. In the first, in 1590, 20,000 Christians were massacred, and in 1638 37,000, according to the account of the missionaries, shared the same fate. The political intrigues of the Jesuits, and their violent intolerance, is generally supposed to have been the chief cause that rendered the Christian doctrine odious to the sovereigns and people of Japan; and since the last epoch it has been held in abhorrence by the Japanese of all classes.

The civilisation of the Japanese appears to have been long stationary, like that of the Chinese; but several particulars, in which the two people differ, afford a much greater probability of improvement in the former than the latter. A more manly character and a greater degree of political liberty bring the Japanese nearer to the European. Their learned language is said to be that of the ancient Chinese, but their alphabet instead of whole words designs single letters only. A number of the Japanese read and speak Dutch, and the elements of natural history and medicine have began to be taught according to works in that language.

The Japanese are confined to one wife, but the concubines live in the house with her, and neither are shut up as in China. The dead bodies of people of distinction are burned, those of the common class buried.

The most considerable commerce of the Japanese is with China; whence they procure sugar, turpentine, drugs and raw silk, in exchange for copper, varnish, and gum lac. For further particulars of the separate islands, NIPHON, KIUSIU and SIKOKF, see those articles.

The smaller Japan islands are numerous but are little known. Ufu-Sima is the principal of a group of eight, between the Lieu-Kieu Islands and Kiusiu. Tanaa-sima is the largest of a group of seven, south-west of Kiusiu. Li-Keo is separated from the south end of this latter island by the strait of Van-Diemen. The inhabitants of Li-Keo are described as cultivating their fields to the music of lyres, and gathering two crops of rice a year. Cangox-Sima is worthy of notice as being the spot where the Portuguese first landed.

The Gotto Isles are a group off the west point of Kiusiu. Tsus-Sima, in the middle of the strait of Corea, is tributary to Japan; it is of moderate height, the valleys well cultivated, and the west coast lined with rocks. The Oki Isles are a group north of the south end of Nihon.

South-east of Niphon is a group of volcanic islands, of which Fatsisio is the largest, though only three or four miles long. Its shores rise perpendicularly to the height of eighty fathoms, and are only accessible by rope ladders; hence probably it is that this island is appropriated as a state prison. One of the islands throws out flames.

JAPAN', *n. s.* & *v. a.* } From Japan in Asia,
JAPAN'NER, *n. s.* } where figured work was originally done. Work varnished and raised in gold and colors. It is commonly used with another substantive, and therefore may be considered as an adjective. To varnish and embellish; to black and gloss shoes: japanner, one skilled in japanning work; a shoe-blacker, so called because he makes the shoes to shine.

> The god of fire
> Among these generous presents joins his part
> And aids with soot the new *japanning* art. *Gay.*
>
> The poor have the same itch;
> They change their weekly barber, weekly news,
> Prefer a new *japanner* to their shoes.
> *Pope's Homer.*

The poor girl had broken a large *japan* glass, of great value, with a stroke of her brush. *Swift.*

> For not the desk with silver nails,
> Nor bureau of expence,
> Nor standish well *japanned*, avails
> The writing of good sense. *Id.*

JAPANNING, as an art, was more encouraged in former times in this country, than it is at present. It consists in forming and varnishing figures on wood, in the manner practised by the natives of Japan. The substances which admit of being japanned are almost every kind that are dry and rigid, or not too flexible; as wood, metals, leather, and paper.

The varnish said to be used in China and Japan is composed of turpentine and a curious sort of oil, which they boil up to a proper consistence. Persons who work in this business are liable to swellings and inflammations in the hands and face, but these are produced from the lack and not from the varnish. The lack is the sap or juice of a tree, which flows on cutting the lower part of the trunk, and is received in vessels set under the incisions. This juice is of the color and consistence of cream, when it runs from the tree, but as it comes in contact with the air it becomes black. It is only used in this state: the method of preparing it is to set it out in the open air, in large flat bowls; and, that the whole may be of the same uniform color, it is kept continually stirring for many hours. By this method it becomes of a fine deep black; burnt wood is now mixed with it, and then, spreading it thin over any board or substance which they mean to japan, they dry it in the sun, and it is soon harder than the board on which it is laid. When this is quite dry it is polished with a smooth stone and water, till it is as even as glass, and then, wiping it dry, they lay on the varnish, made of oil and turpentine. If the work is to be of any other color than black, that color is to be mixed with the varnish, and then the whole spread on evenly and thin, because on this depends the principal art of varnishing. When there are to

be figures in gold and silver, these must be traced out with a pencil in the varnish, over the rest of the work; and, when this varnish is almost dry, the leaf-gold, or silver, is to be laid on, and polished afterwards with some smooth substance.

Wood and metals do not require any other preparation, but to have their surface perfectly even and clean: but leather should be strained either on frames or on boards; as its bending or forming folds would otherwise crack and force off the coats of varnish: and paper should be treated in the same manner, and have a previous strong coat of some kind of size; but it is rarely made the subject of japanning till it is converted into papier machè, or wrought by other means into such form that its original state, particularly with respect to flexibility, is lost.

One principal variation from the method formerly used in japanning is, the using or omitting any priming or undercoat on the work to be japanned. In the older practice, such priming was always used; and is at present retained in the French manner of japanning coaches and snuff-boxes of the papier maché; but, in the Birmingham manufacture, it has been always rejected. The advantage of using such priming or under-coat is, that it makes a saving in the quantity of varnish used: because the matter of which the priming is composed fills up the inequalities of the body to be varnished; and makes it easy, by means of rubbing and water-polishing, to gain an even surface for the varnish: this was, therefore, such a convenience in the case of wood, as the giving a hardness and firmness to the ground was also in the case of leather, that it became an established method. There is this inconvenience always attending the use of an under-coat of size, that the japan coats of varnish and color will be constantly liable to be cracked and peeled off by any violence, and will not endure so long as the bodies japanned in the same manner, but without any such priming; as may be easily observed in comparing the wear of the Paris and Birmingham snuff-boxes; the latter, when good of their kind, never peeling or cracking, unless by great violence, or such a continued rubbing as wastes away the substance of the varnish; while the japan coats of the Parisians crack and fly off in flakes, after any knock or fall, particularly near the edges.

The laying on the colors in gum-water, instead of varnish, is also another variation from the method of japanning formerly practised; but the much greater strength of the work, where they are laid on in varnish or oil, has occasioned this way to be exploded in most regular manufactories: however, they who practise japanning on cabinets, or other such pieces as are not exposed to much wear and violence, may not find it worth their while to encumber themselves with the preparations necessary for the other methods, and may paint with water-colors on an under-coat laid on the wood, or other substance, of which the piece to be japanned is formed; and then finish with the proper coats of varnish, according to the methods below taught: if the colors are tempered with the strongest isinglass, size, and honey, instead of gum-water, and laid on very flat and even, the work will not be much inferior in appearance to that done by the other method, and will last as long as the old japan.

Priming.—The priming is of the same nature with that called clear-coating, by house-painters; and consists only in laying on, and drying in the most even manner, a composition of size and whiting, or, sometimes, lime instead of the latter. The common size has been generally used for this purpose: but, where the work is of a nicer kind, it is better to employ the glovers', or the parchment size; and if a third of isinglass be added, it will be still better, and, if not laid on too thick, is much less liable to peel and crack. The work should be prepared by this priming, by being well smoothed with the fish-skin, or a glass-shaver; and, being made thoroughly clean, should be brushed over once or twice with hot size, and diluted with two-thirds of water, if it be of the common strength. The priming should then be laid on with a brush as evenly as possible; and should be formed of a size whose consistence is betwixt the common kind and glue, mixed with as much whiting as will give it a sufficient body of color to hide the surface of whatever it is laid upon, but not more.

If the surface be very clean on which the priming is used, two coats of it laid on in this manner will be sufficient; but if, on trial with a fine wet rag, it will not receive a proper water-polish on account of any inequalities not sufficiently filled up, one or more coats must be given it; and, whether a greater or less number be used, the work should be smoothed, after the last coat but one is dry, by rubbing it with Dutch rushes. When the last coat is dry, the water-polish should be given, by passing over every part of it with a fine rag gently moistened, till the whole appear perfectly plain and even. The priming will then be completed, and the work ready to receive the painting, or colored varnish: the rest of the proceedings being the same in this case as where no priming is used.

When wood or leather is to be japanned, and no priming is used, the best preparation is to lay two or three coats of coarse varnish, composed in the following manner:—Take of rectified spirits of wine one pint, and of coarse seed-lac and resin, each, two ounces. Dissolve the seed-lac and resin in the spirit; and then strain off the varnish. The varnish, as well as all others formed of spirits of wine, must be laid on in a warm place; and, if it can be conveniently managed, the piece of work to be varnished should be made warm likewise; and, for the same reason, all dampness should be avoided; for either cold or moisture chills this kind of varnish. and prevents its taking proper hold of the substance on which it is laid.

Japan-grounds.—When the work is so prepared, or by the priming with the composition of size and whiting above described, the proper japan-ground must be laid on; which is much the best formed of shell-lac varnish, and the color desired, if white be not in question, which demands a peculiar treatment, or great brightness be not re-

quired, when also other means must be pursued. The colors used with the shell-lac varnish may be any pigments whatever, which give the tint of the ground desired; and they may be mixed together to form browns or any compound colors.

As metals never require to be under-coated with whiting, they may be treated in the same manner as wood or leather, when the under coat is omitted, except in the instances referred to below.

White japan-grounds.—The forming a ground perfectly white, and of the first degree of hardness, remains hitherto a desideratum in the art of japanning, as there are no substances which form a very hard varnish but what have too much color not to injure the whiteness, when laid on of a due thickness over the work. The nearest approach, however, to a perfect white varnish, already known, is made by the following composition:—Take flake-white, or white-lead, washed over and ground up with a sixth of its weight of starch, and then dried; and temper it properly for spreading with the mastich-varnish. Lay these on the body to be japanned, prepared either with or without the under-coat of whiting, in the manner as above ordered; and then varnish it over with five or six coats of the following varnish:—Provide any quantity of the best seed-lac, and pick out of it all the clearest and whitest grains, reserving the more colored and fouler parts for the coarse varnishes, such as that used for priming or preparing wood or leather. Take of this picked seed-lac two ounces, and of gum-anime three ounces, and dissolve them (being previously reduced to a gross powder) in about a quart of spirit of wine, and strain off the clear varnish. The seed-lac will yet give a slight tinge to this composition, but cannot be omitted where the varnish is wanted to be hard; though, when a softer will answer the end, the proportion may be diminished, and a little crude turpentine added to the gum-anime to take off the brittleness.

A very good varnish, free entirely from all brittleness, may be formed by dissolving as much gum-anime as the oil will take in old nut or poppy oil, which must be made to boil gently when the gum is put into it. The ground of white color itself may be laid on in this varnish, and then a coat or two of it may be put over the ground; but it must be well diluted with oil of turpentine when it is used. This, though free from brittleness, is nevertheless liable to suffer by being indented or bruised by any slight strokes; and it will not well bear any polish, but may be brought to a very smooth surface without, if it be judiciously managed in the laying it on. It is likewise somewhat tedious in drying, and will require some time where several coats are laid on; as the last ought not to contain much oil of turpentine.

Blue japan grounds.—Grounds may be formed of bright Prussian blue, or verditer glazed over by Prussian blue, or of smalt. The color may be best mixed with shell-lac varnish, and brought to a polishing state by five or six coats of varnish of seed-lac: but the varnish, nevertheless, will somewhat injure the color by giving to a true blue a cast of green, and fouling, in some degree, a warm blue by the yellow it contains; where, therefore, a bright blue is required, and a less degree of hardness can be dispensed with, the method before directed in the case of white grounds must be pursued.

For a *scarlet* japan ground, vermilion may be used: but the vermilion has a glaring effect that renders it much less beautiful than the crimson produced by glazing it over with carmine or fine lake: or even with rose-pink, which has a very good effect used for this purpose. For a very bright crimson, nevertheless, instead of glazing with carmine the Indian lake should be used, dissolved in the spirit of which the varnish is compounded, which it readily admits of when good; and in this case, instead of glazing with the shell-lac varnish, the upper or polishing coats need only be used, as they will equally receive and convey the tinge of the Indian lake, which may be actually dissolved by spirit of wine; and this will be found a much cheaper method than the using carmine. If, nevertheless, the highest degree of brightness be required, the white varnishes must be used.

For bright *yellow* grounds, the king's yellow, or the turpeth mineral should be employed, either alone or mixed with fine Dutch pink; and the effect may be still more heightened by dissolving powdered turmeric root in the spirit of wine, of which the upper or polishing coat is made; which spirit of wine must be strained from off the dregs before the seed-lac be added to it to form the varnish.

Green grounds may be produced by mixing the king's yellow and bright Prussian blue, or rather the turpeth mineral and Prussian blue; and a cheap but less perfect kind by verdigris with a little of the above-mentioned yellows or Dutch pink. But where a very bright green is wanted, the crystals of verdigris, called distilled verdigris, should be employed; and, to heighten the effect, they should be laid on a ground of leaf-gold, which renders the color extremely brilliant and pleasing.

Orange-colored japan grounds may be formed by mixing vermilion or red lead with king's yellow or Dutch pink, or the orange-lac, which will make a brighter orange ground than can be produced by any mixture.

Purple japan grounds may be produced by the mixture of lake and Prussian blue; another kind may be made by vermilion and Prussian blue. They may be treated as the rest with respect to the varnish.

Black grounds may be formed by either ivory-black or lamp black: but the former is preferable where it is perfectly good. These may be always laid on with shell-lac varnish, and have their upper or polishing coats of common seed-lac varnish, as the tinge or fulness of the varnish can be here no injury. For forming the common black japan grounds, by means of heat on metal, the piece of work to be japanned must be painted over with drying oil: and, when it is of moderate dryness, must be put into a stove of such a degree of heat as will change the oil to black, without burning it so as to destroy or weaken its tenacity. The stove should not be too hot when

the work is put into it, nor the heat increased too fast, either of which errors would make it blister; but the slower the heat is augmented, and the longer it is continued provided it be restrained within the due degree, the harder will be the coat of japan. This kind of varnish requires no polish, having received, when properly managed, a sufficient one from the heat.

The best kind of *tortoise-shell* ground produced by heat is not less valuable for its great hardness, and enduring to be made hotter than boiling water without damage, than for its beautiful appearance. It is to be made by means of a varnish prepared in the following manner: take of good linseed-oil one gallon, and of umber half a pound; boil them together till the oil become very brown and thick; strain it then through a coarse cloth, and set it again to boil, in which state it must be continued till it acquire a pitchy consistence, when it will be fit for use. Having prepared thus the varnish, clean well the metal plate which is to be japanned; and then lay vermilion tempered with shell-lac varnish, or with drying oil diluted with oil of turpentine, very thinly, on the places intended to imitate the more transparent parts of the tortoise-shell. When the vermilion is dry, brush over the whole with the black varnish, tempered to a due consistence with oil of turpentine; and, when it is set and firm, put the work into a stove, where it may undergo a very strong heat, and be continued a considerable time; if even three weeks or a month, it will be the better. This was given amongst other receipts by Kunckel; but appears to have been neglected till it was revived with great success in the Birmingham manufactures, where it was not only the ground of snuff-boxes, dressing-boxes, and other such smaller pieces, but of those beautiful tea-waiters that have been so justly esteemed and admired in several parts of Europe to which they have been sent. This ground may be decorated with painting and gilding in the same manner as any other varnished surface, which had best be done after the ground has been duly hardened by the hot stove; but it is well to give a second annealing with a more gentle heat after it is finished.

Method of painting japan work.—Japan work ought properly to be painted with colors in varnish, though, for the greater despatch, and in some very nice and small works for the freer use of the pencil, the colors are frequently tempered in oil; which should previously have a fourth part of its weight of gum-anime dissolved in it; or, in default of that, of the gums sandarac or mastich. When the oil is thus used it should be well diluted with spirit of turpentine, that the colors may be laid more evenly and thin; by which means fewer of the polishing or upper coats of varnish become necessary.

In some instances water colors are laid on grounds of gold, in the manner of other paintings; and are best when so used in their proper appearance, without any varnish over them; they are also sometimes so managed as to have the effect of embossed work. The colors employed in this way for painting are both prepared by means of isinglass size, corrected with honey or sugar-candy. The body of which the embossed work is raised need not, however, be tinged with the exterior color, but is best formed of very strong gum-water, thickened to a proper consistence by bole-armenian and whiting in equal parts; which, being laid on the proper figure and repaired when dry, may be then painted with the proper colors tempered in the isinglass size, or in the general manner with shell-lac varnish.

Method of varnishing japan work.—The last and finishing part of japanning lies in the laying on and polishing the outer coats of varnish; which are necessary, as well in the pieces that have only one simple ground of color, as with those that are painted. This is in general best done with common seed-lac varnish, except in the instances and on those occasions where we have already shown other methods to be more expedient: and the same resaons which decide as to the fitness or impropriety of the varnishes, with respect to the colors of the ground, hold equally with regard to those of the painting: for where brightness is the most material point, and a tinge of yellow will injure it, seed-lac must give way to the whiter gums; but where hardness and a greater tenacity are most essential, it must be adhered to; and where both are so necessary, that it is proper one should give way to the other in a certain degree reciprocally, a mixed varnish must be adopted.

This mixed varnish, as we have already observed, should be made of the picked seed-lac. The common seed-lac varnish, which is the most useful preparation of the kind hitherto invented, may be thus made:—Take of seed-lac three ounces, and put it into water to free it from the sticks and filth that are frequently intermixed with it; and which must be done by stirring it about, and then pouring off the water and adding fresh quantities in order to repeat the operation till it be freed from all impurities, as it very effectually may be by this means. Dry it then and powder it grossly and put it with a pint of rectified spirit of wine into a bottle, of which it will not fill above two-thirds. Shake the mixture well together, and place the bottle in a gentle heat, till the seed appear to be dissolved, the shaking being in the mean time repeated as often as may be convenient; and then pour off all that can be obtained clear by this method, and strain the remainder through a coarse cloth. The varnish thus prepared must be kept for use in a bottle well stopped. When the spirit of wine is very strong it will dissolve a greater proportion of the seed-lac: but this will saturate the common, which is seldom of a strength sufficient for making varnishes in perfection. As the chilling, which is the most inconvenient accident attending those of this kind, is prevented or produced more frequently, according to the strength of the spirit; we shall therefore take this opportunity of showing a method by which weaker rectified spirits may with great ease at any time be freed from the phlegm, and rendered of the first degree of strength.

Take a pint of the common rectified spirit of wine, and put it into a bottle of which it will not fill above three-parts. Add to it half an ounce of pearl-ashes, salt of tartar, or any other

alkaline salt, heated red-hot and powdered as well as it can be without much loss of its heat; shake the mixture frequently for the space of half an hour, before which time a great part of the phlegm will be separated from the spirit, and will appear, together with the undissolved part of the salts, in the bottom of the bottle. Let the spirit then be poured off or freed from the phlegm and salts by means of a tritorium or separating funnel; and let half an ounce of the pearl ashes, heated and powdered as before, be added to it, and the same treatment repeated. This may be done a third time if the quantity of phlegm separated by the addition of the pearl-ashes appear considerable. An ounce of alum, reduced to powder and made hot, but not burnt, must then be put into the spirit, and suffered to remain some hours, the bottle being frequently shaken: after which the spirit, being poured off from it, will be fit for use.

The manner of using the seed-lac or white varnishes is the same, except with regard to the substance, used in polishing; which, where a pure white, or great clearness of other colors is in question, should be itself white: whereas the browner sorts of polishing dust, as being cheaper and doing their business with greater despatch, may be used in other cases. The pieces of work to be varnished should be placed near a fire, or in a room where there is a stove, and made perfectly dry; and then the varnish may be rubbed over them by the proper brushes made for that purpose, beginning in the middle and passing the brush to one end; and then with another stroke from the middle passing it to the other. But no part should be crossed or twice passed over in forming one coat, where it can possibly be avoided. When one coat is dry another must be laid over it, and this must be continued at least five or six times or more, if on trial there be not sufficient thickness of varnish to bear the polish without laying bare the painting or the ground-color underneath.

When a sufficient number of coats is thus laid on, the work is fit to be polished; which must be done, in common cases, by rubbing it with a rag dipped in Tripoli or pumice-stone, commonly called rotten stone, finely powdered; but towards the end of the rubbing a little oil of any kind should be used along with the powder; and, when the work appears sufficiently bright and glossy, it should be well rubbed with the oil alone, to clean it from the powder, and give it a still brighter lustre. In the case of white grounds, instead of the Tripoli or pumice-stone, fine putty or whiting must be used, both which should be washed over to prevent the danger of damaging the work from any sand or other gritty matter that may happen to be commixed with them.

It is a great improvement in all kinds of japan work to harden the varnish by means of heat, which in every degree that it can be applied short of what would burn or calcine the matter, tends to give it a more firm texture. Where metals form the body, therefore, a very hot stove may be used, and the pieces of work may be continued in it a considerable time; especially if the heat be gradually increased; but, where wood is in question, heat must be sparingly used, as it would otherwise warp or shrink the body so as to injure the general figure.

JAPETUS, in fabulous history, the son of Cœlus, or Titan, and Terra. He married Asia, or Clymene, by whom he had Prometheus, Epimetheus, Atlas, and Menœtius. The Greeks considered him as the father of all mankind.

JAPHETH, the son of Noah. His descendants possessed all Europe and the isles in the Mediterranean, including those which depend on Asia. They had all Asia Minor, and the northern parts of Asia above the sources of the Tigris and Euphrates. Noah, when he blessed Japheth, said, 'God shall enlarge Japheth, and he shall dwell in the tents of Shem, and Canaan shall be his servant.' This blessing or rather prophecy of Noah was accomplished when the Greeks, and after them the Romans, carried their conquests into Asia and Africa, where were the dominions of the posterity of Shem and Canaan. The sons of Japheth were Gomer, Magog, Madai, Javan, Tubal, Meshech, and Tiras. The Scripture says, 'that they peopled the isles of the Gentiles, and settled in different countries, each according to his language, family, and people.' It is supposed that Gomer was the father of the Cimbri, or Cimmerians; Magog of the Scythians; Madai of the Medes; Javan of the Ionians and Greeks; Tubal of the Tibareni; Meshech of the Muscovites or Russians, and Tiras of the Thracians. By the isles of the Gentiles, the Hebrews understand the isles of the Mediterranean, and all the countries separated by the sea from the continent of Palestine; whither also the Hebrews could go by sea only, as Spain, Gaul, Italy, Greece, and Asia Minor. The name of Japheth was very little altered by profane authors, who call him Japetus. The poets made him the father of heaven and earth. The Greeks believe that he was the father of their race, and acknowledge nothing more ancient than him. Besides the seven sons above-mentioned, the Septuagint, Eusebius, the Alexandrian Chronicle, and St. Austin, give him an eighth, called Eliza, who is not mentioned either in the Hebrew or Chaldee.

JAR, *v. n.* & *n. s.* Sax. ⲉⲟⲣⲣⲉ, anger, or Fr. *guerre*, war, or old Teut. *garren*, to clamor. To strike together with a kind of short rattle: to sound untuneably: figuratively, to clash; to interfere; to quarrel; to dispute: jar, a discordant sound; discord; debate; a state in which a door unfastened may strike the post; an earthen vessel, from Ital. *giano*.

Nath'less, my brother, since we passed are
Unto this point, we will appease our *jar*.
Hubberd.

When those renowned noble peers of Greece,
Through stubborn pride, among themselves did *jar*,
Forgetful of the famous golden fleece,
Then Orpheus with his harp their strife did bar.
Spenser.

He maketh war, he maketh peace again,
And yet his peace is but continual *jar*:
O miserable men, that to him subject are!
Id. Faerie Queene.

At last, though long, our *jarring* notes agree.
Shakspeare.

I perceive you delight not in musick.
—Not a whit, when it *jars* so. *Id.*
O, you kind gods!
Cure this great breach in his abused nature.
The' untuned and *jarring* senses, O, wind up,
Of this child-changed father! *Id. King Lear.*
For orders and degrees
Jar not with liberty, but well consist.
Milton. Paradise Lost.
On a sudden open fly,
With impetuous recoil and *jarring* sound,
The' infernal doors, and on their hinges grate
Harsh thunder, that the lowest bottom shook
Of Erebus. *Id.*
First was the world as one great cymbal made,
Where *jarring* winds to infant nature played.
Marvell.
A string may *jar* in the best master's hand,
And the most skilful archer miss his aim.
Roscommon.
About the upper part of the *jar* there appeared a good number of bubbles. *Boyle.*
In *r*, the tongue is held stiffly at its whole length, by the force of the muscles; so as when the impulse of breath strikes upon the end of the tongue, where it finds passage, it shakes and agitates the whole tongue, whereby the sound is affected with a trembling *jar*.
Holder's Elements of Speech.
The rings of iron, that on the doors were hung,
Sent out a *jarring* sound, and harshly rung.
Dryden.
He mead for cooling drink prepares,
Of virgin honey in the *jars*. *Id.*
They must be sometimes ignorant of the means conducing to those ends, in which alone they can *jar* and oppose each other. *Id.*
The state is out of tune; distracting fears
And jealous doubts *jar* in our public counsels.
Rowe's Jane Shore.
Warriors welter on the ground,
Whilst empty *jars* the dire defeat resound. *Garth.*
My knees tremble with the *jarring* blow. *Gay.*
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.*
He keeps his tempered mind serene and pure,
And every passion aptly harmonized
Amid a *jarring* world. *Thomson's Seasons.—Summer.*

JARCHI (Solomon), called also Raschi and Isaaki, a famous rabbi, born at Troyes, who flourished in the twelfth century. He was a perfect master of the Talmud and Gemara. A great part of his commentaries are printed in Hebrew, and some have been translated into Latin by the Christians. They are all greatly esteemed by the Jews, who have bestowed on the author the title of prince of commentators.

JA'RDES, *n. s.* Fr. Hard callous tumors in horses, a little below the bending of the ham on the outside. This distemper in time will make the horse halt, and grow so painful as to cause him to pine away, and become light-bellied. It is most common to maneged horses, that have been kept too much upon their haunches.—*Farrier's Dictionary.*

JARDINS (Mary Catharine Des), an ingenious, but profligate French writer, born at Alençon, in 1640. Being obliged to leave Alençonon account of an intrigue, she went to Paris, where she wrote plays and novels, which occupy 10 vols. 12mo. She died in 1683.

JARDYN (Karel, or Charles Du), a celebrated painter, born at Amsterdam in 1640. He was a disciple of Nicholas Berchem, and travelled in Italy when a young man; but, arriving at Rome, he gave himself up alternately to study and dissipation. Yet his paintings rose into high repute, and they were bought up at great prices. To revisit his native city he at last left Rome, but, passing through Lyons, he was prevailed upon to stay there for some time, and found as much employment in that city as he could execute. But the profits of his paintings were not adequate to his profusion; and, to extricate himself from the incumbrances in which his extravagance had involved him, he married his hostess, who was very old, but also very rich. Ashamed of this adventure, he returned to Amsterdam, accompanied by his wife, and there for some time followed his profession with as much success as he had met with in Italy or Lyons. He returned to Rome the second time; and, after a year or two spent there in his usual extravagant manner, he settled at Venice. In that city his merit was well known, which procured him a very honorable reception. He lived there highly caressed, and continually employed; but died at the age of thirty-eight. In his coloring and touch he resembled his master, but he added a force which distinguishes the great painters of Italy. Most of his pictures seem to express the warmth of the sun, and the light of mid-day. They are not much encumbered; a few figures, some animals, and a little landscape for the back grounds, generally comprise the whole of his composition. However, some of his subjects are more extensive, containing more objects, and a larger design. His works are much sought after, but not easily met with.

JARGEAU, an ancient town of France, in the department of Loiret, and late province of Orleanois, taken by the English in 1438, and retaken by Joan of Arc the next year. It is ten miles south-east of Orleans, and seventy south-west of Paris.

JAR'GON, *n. s.* Fr. *jargon*; Span. *gericonça*. Unintelligible talk; gabble; gibberish.

Nothing is clearer than mathematical demonstration; yet, let one, who is altogether ignorant in mathematicks, hear it, and he will hold it to be plain fustian or *jargon*. *Bramhall.*
From this last toil again what knowledge flows?
Just as much, perhaps, as shows
That all his predecessor's rules
Were empty cant, all *jargon* of the schools. *Prior.*
During the usurpation an infusion of enthusiastic *jargon* prevailed in every writing. *Swift.*
The merest word that ever fooled the ear,
From out the schoolman's *jargon* I should deem
The golden secret, the sought 'Kalon' found,
And sealed in my soul. *Byron.*

JARGON, in lithology, a kind of precious stone, of the nature of the diamond, but softer; found in Brazil, according to M. de Bomare; but in Ceylon, according to M. Romé de L'Isle. Its specific gravity is nearly equal to that of the ponderous spar, being 4416. Its crystals consist of two tetrahedral pyramids of equal sides, separated by a short prism; so that the jargon is properly of a dodecahedral form. According

to some lapidaries, the jargon comes nearest to the sapphire in hardness; and as it has, when cut and polished, a great resemblance to the diamond, jargons are called by some soft diamonds; and one may be easily imposed upon in purchasing these for the true kind, when they are made up in any sort of jewellery work. On exposing this stone to a violent fire, M. D'Arcet found the surface a little vitrified where it stuck to the porcelain test in which it was set; whence it appears, that the jargon has not the least resemblance to the diamond in its essence.

JARGONELLE', *n. s.* A species of pear. See PEAR.

JARGONIA, in mineralogy, a new kind of earth discovered by Klaproth in the jargon of Ceylon. It resembles argill more than any other earth, though it differs essentially from it in some respects. Its color is white, and its specific gravity probably exceeds 4000. It is incapable of uniting to fixed air; at least, when precipitated from acids by mild alkalies, it takes up none. It is soluble in dilute vitriolic acid (as also in the nitrous and muriatic); and with a slight excess of this acid it forms, in a moderate heat, by spontaneous evaporation, stelliform crystals of an astringent taste, easily soluble in water. Its solutions, like those of argill, are precipitable by volatile caustic, as well as by fixed alkali. It is also soluble in the concentrated acetous acid; this solution will not crystallise; but, if it be evaporated to dryness, the saline powder thus had will not attract the moisture of the air, as acetous alum does; neither does the acetous acid act so powerfully on argill as on this earth. It is insoluble in a boiling solution of caustic fixed alkali, in which argill is perfectly soluble. It is infusible, not only by fixed alkalies, but also by microcosmic salt, to which argill yields. Borax, however, melts it, but without any effervescence, in which respect also it differs from argill.

JARNAC, a town of France, in the department of the Charente, containing 1700 inhabitants. It is remarkable for a victory obtained by Henry III. (then duke of Anjou), over the Hugonots, in 1596, when their general Louis I. prince of Condé was killed. It is seated on the Charente, eighteen miles north-west of Angoulême.

JAROSLAV, a city and government of European Russia, bounded by Vologda, Kostroma, Vladimir, Tver, and Novogorod, and lying between 37° 45′ and 41° 15′ of E. long., and 56° 44′ and 58° 52′ of N. lat. The territorial extent of this government is above 14,000 square miles, and its population 800,000. The surface consists of large undulating plains, traversed by the Wolga, the Schekna, the Mologa, and numerous smaller rivers. The lakes are also numerous. The soil, where it is not marshy, is sand, clay, or black mould. The climate is not particularly severe; but agriculture is in a backward state, and large quantities of corn are imported for consumption. The inhabitants rear cattle, and trade in wood to great extent; flax and hemp are likewise cultivated, and a few manufactures appear. The government is divided into ten circles or districts; but the steppes of Jaroslav are distinct from them.

JAROSLAV, the capital of the foregoing government, and a bishop's see, is situated on the Wolga, 146 miles N. N. E. of Moscow, and 360 E. S. E. of St. Petersburg. It is built almost entirely of wood; but the manufactures of silk, linen, and Russia leather, are on a large scale, and it has a noted bell-foundry. Here is an academy endowed with valuable lands for the education of superior youth. The number of students hardly ever exceeds fifty; but there is also a high-school for the education of those of less elevated birth, and a theological seminary on a considerable scale. Peter the Great founded its manufactures; but they were still more indebted to the fostering care of John Ernest, duke of Courland, who resided here many years. Population 19,000.

JAROSLAW, a large town of Austrian Poland, in Galicia, on the river San. Its manufactures are of wax and cloth, but they are very indolently conducted; the chief trade is in linen and flax; a large fair is held on the 15th of August. It is forty-eight miles W. N. W. of Lemburg, and 110 east of Cracow.

JASHER, a book which Joshua mentions, and refers to in chapter x. 13. 'Is not this written in the book of Jasher?' It is difficult to determine what this book of Jasher, or the upright, is. St. Jerome and the Jews believed it to be Genesis, or some other book of the Pentateuch. Some think it was public annals, or records, which were styled justice or upright, because they contained a faithful account of the history of the Israelites. Grotius believes, that this book was a song, made to celebrate this miracle and this victory, because the words cited by Joshua as taken from this work, 'Sun, stand thou still upon Gibeon, and thou moon in the valley of Ajalon,' are such poetical expressions as do not suit with historical memoirs; and in the second book of Samuel (i. 18.) mention is made of a book under the same title, on account of a song made on the death of Saul and Jonathan. See AJALON.

JASIONE, in botany, a genus of the monogynia order, and syngenesia class of plants; natural order twenty-ninth, campanaceæ: CAL. ten-leaved: COR. five regular petals: CAPS. beneath, two-celled. Species one only—J. montana, a native of Europe.

JASION, or JASIUS, in fabulous history, the son of Jupiter and Electra, and king of Arcadia. Having improved agriculture, he was fabled to have married the goddess Ceres, by whom he had three sons, Plutus, the god of riches, Philomelus, and Corybas. All the gods were present at the wedding. He was killed by lightning, and worshipped by the Arcadians.

JASK, a town of Croatia.

JAS'MINE, *n. s.* Fr. *gelseminum, jasmin.* It is often pronounced jessamine. A creeping shrub with a fragrant flower.

Thou, like the harmless bee, mayst freely range;
From *jasmine* grove to grove may'st wander.
Thomson.

JASMINUM, jasmine or jessamine tree, in botany, a genus of the monogynia order, and diandria class of plants; natural order forty-fourth, sepiariæ: COR. quinquefid, the berry dicoccous,

the SEEDS arillated, and the anthers within the tube. The species are numerous, the principal are,

1. J. azoricum, the azorian white jessamine, has shrubby, long, slender stalks and branches, rising upon supports fifteen or twenty feet high, with pretty large flowers of a pure white color; coming out in loose bunches from the ends of the branches, and appearing most part of the summer and autumn.

2. J. fruticans, the shrubby yellow jasmine or jessamine, has shrubby, angular, trailing stalks and branches, rising upon supports eight or ten feet high; trifoliate and simple alternate leaves; with yellow flowers from the sides and ends of the branches, appearing in June; frequently producing berries of a black color. This species is remarkable for sending up many suckers from its roots; often so plentifully as to overspread the ground, if not taken up annually.

3. J. grandiflorum, the great-flowered Catalonian jessamine, has a shrubby, firm, upright stem, branching out into a spreading head from about three to six or eight feet high, with large flowers of a bluish-red color without, and white within, appearing from July to November. Of this there is a variety with semi-double flowers, having two series of petals.

4. J. humile, the dwarf yellow jessamine, has shrubby firm stalks, and angular branches, of low, somewhat robust and bushy growth; broad, trifoliate, and pinnated leaves; and large yellow flowers in July, sometimes succeeded by berries.

5. J. odoratissimum, the most sweet-scented yellow Indian jessamine, has a shrubby upright stalk, branching erect, without supports, six or eight feet high, with bright yellow flowers in bunches from the ends of the branches; flowering from July till October, and emitting a most fragrant odor. This species, as well as the first and third, may be increased by layers or seeds, or by grafting and budding them upon the common white and shrubby yellow jessamine. They are tender, and require shelter in a greenhouse in winter, and therefore must always be kept in pots to move them out and in occasionally. The pots must be filled with light, rich earth, frequently watered in summer, but moderately, about once a-week in winter. Prune off all the decayed wood when it appears, and retrench the rambling shoots, to preserve the heads somewhat regular; managing them in other respects as the common greenhouse plants.

6. J. officinale, the common white jessamine, has shrubby, long, slender, stalks and branches, rising upon supporters fifteen or twenty feet high, with numerous white flowers from the joints and ends, of a very fragrant odor. There is a variety with white-striped, and another with yellow-striped leaves. This species, with the fruticans and humile, are sufficiently hardy to thrive in this climate without shelter. They may be easily propagated by layers and cuttings; and the striped varieties by grafting or budding on stocks of the common kind.

JASON, the Greek hero who undertook the Argonautic expedition, was the son of Æson and Alcimede (See ÆSON), and was educated by Chiron the Centaur. His uncle Pelias having usurped his father's kingdom, Jason boldly demanded it of him, but was advised by him first to go to Colchis and recover the golden fleece previous to the restoration of it. Æetes, king of Colchis, subjected him to several arduous enterprises, all which Jason, by the aid of Juno and Medea, accomplished, and then set sail for Europe with Medea, to whom he proved faithful for ten years, but afterwards deserted her. See ARGONAUTS.

JAS'PER, *n. s.* Fr. *jaspe;* Lat. *iaspis.* A hard stone of a bright beautiful green color, sometimes clouded with white, found in masses of various sizes and shapes. It is capable of a very elegant polish, and is found in many parts of the East Indies, and in Egypt, Africa, Tartary, and China.—Hill.

> And upon pillers grete, of *jasper* long,
> I sawe a temple of brasse ifounded strong.
> *Chaucer. The Assemble of Foules.*
>
> And underneath a bright sea flowed
> Of *jasper*, or of liquid pearl, whereon
> Who after came from earth sailing arrived,
> Wafted by angels, or flew o'er the lake
> Rapt in a chariot drawn by fiery steeds.
> *Milton. Paradise Lost.*
>
> The most valuable pillars about Rome are four columns of oriental *jasper* in St. Paulina's chapel, and one of transparent oriental *jasper* in the vatican library. *Addison on Italy.*
>
> The basis of *jasper* is usually of a greenish hue, and spotted with red, yellow, and white. *Woodward.*
>
> What is her pyramid of precious stones?
> Of porphyry, *jasper*, agate and all hues
> Of gem and marble, to encrust the bones
> Of merchant dukes? *Byron. Childe Harold.*

JASPER, in mineralogy, a genus of silicious earths, or a sub-species of the rhomboidal quartz of Jameson. Kirwan distinguishes three families, viz. *common jasper*, *Ægyptian pebble*, and *striped jasper*. The colors of *common jasper* are milk-white, grayish-white, or yellowish-white, citron, ochre-yellow, brownish-yellow, blood-red, brownish dark red, brown, olive, or dark green; and variegated, spotted or veined with many of these.

It is met with either in large masses, or blunt detached fragments. Gerhard found some irregularly crystallised, in hexahedral prisms, among the fossils sent to him by Beyer from Schneeberg; and Baron Born mentions some found in the Palatinate. Its lustre is 2·1; its transparency 0, or nearly 1; its fracture conchoidal, sometimes imperfectly, sometimes flatly; its hardness, from 9 to 19; specific gravity from 2·58 to 2·7. The heavier sort seems evidently contaminated with metallic particles. Jasper, when heated, does not decrepitate or harden. Alkalies and microcosmic salt flux it with difficulty; borax better, and without effervescence. Even by oxygen jasper is scarcely, and but imperfectly melted, as appears by the experiments of Lavoisier. As Gerhard found it to yield in a chalk crucible, in the parts that touched the chalk, it is probable it contains a small portion of argill, with a much larger of silex. Unless very impure, it does not wither by exposure to the air. Its transitions are into hornstone, opal, argillite, and lithomarga; it is often intimately mixed with chalcedony. The mineral acids have no immediate effect upon it, but corrode it by some months immersion. On treating a small

piece of green jasper with vitriolic acid, some crystals of alum and green vitriol were obtained; which shows that iron and clay are ingredients in its composition. It occurs principally in veins as a constituent of agate. It is found in the Pentland Hills, and in trap and transition rocks in Ayrshire and Dumfriesshire. It receives a good polish.

The *Ægyptian jasper* often exhibits a variety of colors in the same specimen, either in regular, or irregular, concentric and alternating stripes, or layers, or in dots and dendritical figures. The most usual colors are the yellow, brown, gray, milk-white, leek-green, and black; this last only in dots. It is found in spheroidal, or flat rounded masses, which are enveloped in a coarse rough crust. The lustre is glimmering, the fracture conchoidal. It is feebly translucent at the edges, and as hard as horn-stone. Its specific gravity is 2·63. It occurs loose in the sands of Egypt.

Striped jasper is known by its bands of gray, green, yellow, and red; and is therefore termed *banded jasper* by Werner. It occurs massive in whole beds. The fracture is conchoidal and opaque; less hard than Egyptian jasper, and rather easily frangible. Specific gravity 2·5. It occurs in secondary clay-porphyry in the Pentland Hills, and near Friburg in Saxony. It receives a fine polish.

Jasper martialis, or *sinople*, is also a family of this genus. It is a dark red stone, containing eighteen or twenty per cent. of metal. Near Chemnitz, where it forms very considerable veins, as Brunnich informs us, it has frequently specks of marcasite, cubic lead ores, and blend. It has likewise much gold. There are several varieties differing in the coarseness and fineness of their texture, as well as the shade of their color; varying from a deep brown to a yellow. The last is attracted by the magnet after calcination.

JASSY, a considerable city of European Turkey, the capital of Moldavia, and residence of the hospodar, who is a vassal of the grand seignior. In 1753 the whole city, with the palace of the hospodar, some popish convents, and a new Lutheran church, were destroyed by fire; and in 1772 it was desolated by the plague: it is still in a ruinous state. It is seated on the Pruth, and is defended by a castle. However, it has been several times taken in the wars between the Turks and the Russians and Austrians; the last time by the latter in 1788, who restored it at the peace of Reichenbach in 1790. In 1792 a peace was concluded here. Long. 27° 35′ E., lat. 47° 8′ N.

JASZBERENY, a large and central town of Hungary, on the Sadwa, the residence of the military commandant of the provinces of Jazyga and Kumania. The environs are fertile in corn and pasturage; and a good trade in the former, and in horses and cattle, centres here. The town contains a Franciscan monastery, and is remarkable as having been the residence of the famous Attila, whose tomb is still exhibited to strangers. Population 12,000. Thirty-eight miles east of Pest.

IATROLEP'TIC, *adj.* Fr. *iatroleptique;* Gr. ἰατρὸς and ἀλείφω. That which cures by anointing.

JATROPHA, the cassada plant; a genus of the monadelphia order, and monœcia class of plants; natural order thirty-eighth, tricoccæ. Male CAL. none: COR. monopetalous and funnel-shaped; there are ten stamina, one alternately longer than the other. Female CAL. none: COR. pentapetalous and patent; there are three bifid styles: CAPS. trilocular, with one seed in each cell. There are seventeen species. The most remarkable are the following:—

1. J. curcas, the English physic nut, with leaves cordate and angular, is a knotty shrub, growing about ten or twelve feet high. The extremities of the branches are covered with leaves; and the flowers, which are of a green herbaceous kind, are set on in an umbel round the extremities of the branches, but especially round the main stalks. These are succeeded by as many nuts, whose outward tegument is green and husky, which being peeled off discovers the nut, whose shell is black and easily cracked: this contains an almond-like kernel, divided into two parts; between which separation lie two milk-white thin membranaceous leaves, easily separable from each other. These have not only a resemblance to perfect leaves, but have, in particular, every part,—the stalk, the middle rib, and transverse ones, as visible as in any leaf whatsoever. This species is a native of the West Indies, and is planted round negro gardens. A decoction of the leaves of it, and of the third species (which grows wild), Dr. Wright says, is often used with advantage in spasmodic gripings, attended with vomiting: it sits easier on the stomach than any thing else, and seldom fails to bring about a discharge by stool.

2. J. elastica, with ternate leaves, elliptic, very entire, hoary underneath, and longly petioled. This is the hevea Guianensis of Aublet, which yields the caoutchouc or Indian rubber; for a particular account of which, see CHEMISTRY and CAOUTCHOUC.

3. J. gossypifolia, cotton-leaved jatropha or belly-ache bush, the leaves of which are quinquepartite, with lobes ovate and entire, and glandular branchy bristles. The stem, which is covered with a light grayish bark, grows to about three or four feet high, soon dividing into several widely extended branches. These are neither decorated with leaves nor flowers till near the top, which is then surrounded by the former: their foot-stalks, as well as the young buds on the extremity of the branches, are guarded round with stiff hairy bristles, which are always tipt with glutinous liquid drops. From among these rise several small deep-red pentapetalous flowers, the pistil of each being thick set at the top with yellow farinaceous dust, which blows off when ripe; these are succeeded by hexagonal, husky, blackish berries, which when ripe open by the heat of the sun, emitting a great number of small dark-colored seeds, which serve as food for ground-doves.

4. J. manihot, the bitter cassada, has palmated leaves; the lobes lanceolate, very entire, and polished. It is a native of the West Indies, where it is used as food. The root of bitter cassada has no fibrous or woody filaments in the heart, and neither boils nor roasts soft. It may be de-

prived of the noxious qualities, which reside in the juice, by heat. Cassada bread, therefore, is thus made:—The roots are washed and scraped clean; then grated into a tub or trough: after this they are put into a hair bag, and strongly pressed, to squeeze out the juice, and the meal or farina is dried in a hot stone basin over the fire, and made into cakes. It also makes excellent puddings, equal to millet. The scrapings of fresh bitter cassada are successfully applied to ulcers. Cassada roots yield a great quantity of starch, which the Brasilians export in little lumps, under the name of tapioca. According to F. Labat, the small pieces of manioc which have escaped the grater, and the clods which have not passed the sieve, are not useless. They are dried in the stove after the flour is roasted, and then pounded in a mortar to a fine white powder, with which they make soup. It is likewise used for making a kind of thick coarse cassada, which is roasted till almost burnt; of this, fermented with molasses and West India poatoes, they prepare a drink called ouycou.

5. J. multifida, or French physic nut, with leaves many-parted and polished, and stipules bristly and multifid, grows to ten feet high. The main stalk divides into very few branches, and is covered with a grayish-white bark. The leaves stand upon six-inch foot-stalks, surrounding the main stalk, generally near the top, in an irregular order. The flowers grow in bunches, umbel-fashion, upon the extremities of each large stalk, very much resembling, at their first appearance, a bunch of red coral: these afterwards open into small five-leaved purple flowers, and are succeeded by nuts, which resemble those of the curcas. This species is a native of the West Indies, and is cultivated there as an ornamental shrub. The seeds of this, as well as of the curcas and gossypifolia, are drastic purgatives and emetics. They yield, by decoction, an oil of the same uses and virtues as the oleum ricini.

JAVA, an important island of the Eastern Seas, separated from Sumatra by the strait of Sunda, about five leagues wide where narrowest. The island is 250 leagues long and from thirty to fifty broad. Its name, according to some, signifies great, while others derive it from the Malay, *djav*, the name of a grain that grows on it. The Arabs and Persians call it Gezira al Maha Rajah, the island of the great king.

Java is traversed by a chain of high mountains from east to west, approaching nearest to the south coast, and giving rise to innumerable torrents, which, in the rainy season, inundate all the low lands: but their mouths are choked with sand, and admit only small vessels. The greatest elevation of the chain is towards the east, and the highest summits are on the narrowest part of the island behind Cheribon. Several of the mountains are volcanoes; that named Geté 8000 feet above the level of the sea.

The year is here divided into two seasons; one of which is called the east or dry monsoon, and the other the west monsoon, or rainy season. The east or good monsoon commences in the months of April and May, and finishes the end of September, or the beginning of October. The trade winds then blow from four or five leagues off shore, through the whole of the Indian Seas to the south of the line from the south-east and E. S. E. at times going as far south as S. S. E. with fine dry weather. The west or bad monsoon begins the latter end of November, or early in December. While it continues, the wind often blows with great violence, and is accompanied by heavy torrents of rain, which render the season generally unhealthy. The same winds are found to prevail every where to the south of the line, and last until the conclusion of February, or commencement of March, from which time they are very variable until April, when the easterly winds begin to blow. Hence these three months, as also October and part of November, are called the shifting months, and the breaking up of the monsoons are considered at Batavia as the most unhealthy season of the year. As far as nine or ten degrees south of the line, when the westerly winds prevail, the contrary takes place at the same time and distance to the north of it; and vice versâ, when to the north the westerly winds blow, the easterly prevail to the south of the line; which alteration greatly assists the navigation of Java.

Along the coast of Java the land and sea breezes blow every day, without exception, and moderate the intensity of the heat.

The northern coast of the island is, in general, low and considered unhealthy, from the marshes, stagnant waters, and thick vegetation. At the distance of some leagues from the sea the climate becomes salubrious, and the cold increases in ascending from the foot of the mountains, until at a country house of the governor of Batavia, only six leagues from the city, fires are agreeable morning and evening.

Java may be considered, on the whole, the most fertile and best cultivated of all the eastern islands. At the foot of the mountains is a rich alluvial soil of from ten to even fifty feet deep. Rice and maize are its staple agricultural products; but coffee, tobacco, and cotton, which have all been introduced by Europeans, are also grown in abundance. Agriculture has received that degree of attention here which the bounties of nature seem to demand; its implements are much superior to those found in Hindostan, and, though there are few of the extensive tanks here constructed in the latter country, the brooks and rivers are advantageously employed for irrigation. The rice of Java is exported to China, and sometimes even to Europe: it is considered inferior to that of Carolina and Bengal. The former will sell for 18*s.* a cwt., and the latter for 11*s.* &c. when that of Java fetches only 9*s.* 9*d.* This is attributed to the careless modes of husking and drying here used. The Java maize is not a superior grain. But coffee has been found to flourish very decidedly in this island; and particularly suits the land unfit for rice. It is said to be far superior to any we receive from the West Indies: and is exported to the amount of 26,000,000 lbs. In 1818 27,400,000 lbs. of clayed sugar were exported. The molasses, mixed with thirty-five parts of rice, and three of palm wine, (out of 100) yield the arrack for which Java is famous. Of tobacco, 5,000,000 lbs. are said

to be exported annually; and of the birds' nests which are reckoned a luxury in China, 27,000 lbs.

But the teak of this island is its most important production, and the Duch show their estimation of it by subjecting it to a rigid monopoly: its forests, it is said, would yield 50,000 beams for ship-building annually; and, under the more liberal system adopted by the British, their produce was enquired after throughout Bengal. Latterly the price of Java teak has risen, but the article has almost disappeared.

The quantity of pepper produced in Java was once considerable: in 1777 it was 6,000,000 lbs.; but the European consumption has decreased, and the supplies from other eastern countries have much diminished the return for this article here.

Java is abundant in fruit and fruit trees, among which may be enumerated the cocoa nut and many other palms, shaddocks, oranges, lemons, citrons, tamarinds, the jack tree, mangoes, mangosteens, pine-apples, bananas, the sweetsop, custard-apple, the rambutan, and guava; in addition to which are grapes, melons, pumpkins, pomegranates, and figs. The mangosteen, reckoned the most delicious fruit of the east, is of a singularly good flavor. The tree on which it grows is extremely beautiful, bearing, like the orange, its fine spherical fruit and flowers at the same time. 'The celebrated upas, or poison tree, of which the account by Foersch attracted little attention, until it was inserted as a note to Dr. Darwin's Poem of the Botanic Garden, is now established,' says Mr. Hamilton, 'to be entirely of fabulous existence.' The animal tribes are those of all the eastern islands. The buffalo supplies milk, butter, and beef, and is the animal principally employed in domestic labor. While working, it is extremely slow, but steady; its work, however, falls short of what might be expected, from its size and strength. They are not found in a wild state, being too much exposed to the attacks of the tiger, which is here of a large size. Horses are used in many parts, but the breed is small. Reptiles and inferior animals are very abundant. 'A glass of water, taken out of the canal at Batavia, becomes,' says Mr. Hamilton, 'in a few hours a collection of animated matter; the minute portions of which, multiplying by division and subdivision, move about with astonishing rapidity; and the bay, swarming with myriads of living creatures, exhibits in the night time a phosphorescent light.' The insect tribes are also extremely numerous and annoying. The last mentioned writer specifies snakes, scorpions, spiders, ants, musquitoes, fire-flies, and many other dangerous and disgusting vermin, as swarming in the roads, houses, and bed-chambers. 'A venomous spider is very common in the thickets of Java, the body of which is two inches in diameter, and the length of the fore legs or claws four inches, covered with hair, the color black, and the mouth red.'

Some compensation is found for these annoyances in the immense number and variety of birds in Java; from the cassowary to the humming bird, which is little larger than a common bee. This department of nature abounds in noble and beautiful species. Among them are lories and parroquets, argus pheasants, the golden thrush, and the kings-fisher.

The present native inhabitants are a brown colored, healthy race, professing Mahommedanism: but in the mountains there is still said to be found a tribe, who, adhering to the original religion, abstain from animal food, and believe in the metempsychosis. There are also found some descendants of an ancient Chinese colony, and many ancient Chinese temples are scattered over the island. The yellow color reserved for the habits of the emperor seems also to have been adopted from China.

Sir Stamford Raffles, the late intelligent British governor here, gives a far more favorable picture of the Javanese than the Dutch writers. 'They are,' he says, 'warm-hearted, generous, and very susceptible of grateful attachment. The English, who placed confidence in them, found them honest in the intercourse of common life; and they share only in a slight degree those habits of piracy for which the Malay tribes are so notorious. In society they are uncommonly good-humored, courteous, and polite, and are scarcely ever seen in a passion, unless on those occasions when they are hurried to the last extreme of violence. These unhappily, however, too often occur, under the impulse of that violent jealousy and revenge which form their ruling passions.'

Human life, indeed, seems held cheaper in this, than in any other part of the East: an assassin may be hired for the moderate sum of fifteen or twenty shillings; but, in general, the injured party conceives it more honorable to decline this cheap mode of redress, and to seek vengeance with his own hand. Some of the Malay tribes found here driven to desperation, run furiously into the streets, and kill indiscriminately all whom they meet, till they are themselves overpowered or cut down; an atrocity which, by a corruption of the native term, is called 'running a muck.'

The Javanese language is a copious dialect of the Sanscrit; and is very beautiful in the written character. In general terms, however, it is said to be deficient: such as those of space, nature, solidity, &c., being entirely wanting. Their literature is chiefly metrical, and may be divided into lyrical compositions or songs; romances founded on Hindoo legends, and on modern story; histories of modern transactions, and legal and ethical tracts. Of these the songs, in which feeling and passion are simply expressed, are the most pleasing. Its history, which only commences with the Mahommedan invasion, is chiefly a metrical legend, written under the eye of successive princes.

Their interior government is absolute: all rank emanates from the sovereign; and no bounds are set to the marks of respect shown by the inferior to the higher classes. No individual can stand in the presence of his superior, not even the heir apparent in that of the sovereign. Whenever a chief appears, in public, his inferiors must throw themselves into a posture, best described by the English term 'squatting;' in which they remain till he disappears. Sir S. Raffles was much annoyed, in one of his

progresses, by observing the whole population quitting their work, and remaining fixed in this uneasy posture so long as he remained in sight.

The lot of the *female* sex differs here considerably, however, from what is usual in Asiatic society. They are much more unconstrained; and suffered to mix with general society. British gentlemen have been admitted to visit the harams of the sultans and chiefs, where they were received by the ladies with a dignified propriety that appeared very striking. The commercial and pecuniary affairs of the family are almost wholly entrusted to women. The right of divorce, however, with which they are indulged equally with the other sex, is said to be carried by them beyond all bounds. It is very common for a woman, before the age of thirty, to have divorced three or four husbands; and Mr. Crawfurd had one pointed out to him who was living with her twelfth. Little difficulty occurs in regard to the disposal of the children, for, in Java, they are never viewed in the light of a burden. They are both few in number (a circumstance ascribed to the hard labor which the mothers undergo) and easily supported. Polygamy is permitted by law, but is chiefly confined to the great; with whom the first wife alone is of their own rank, and mistress of the family; the others occupy a decidedly inferior place.

The population is divisible into that portion subject to European power, and which amounts to about 3,000,000: and that portion still under the native government, which comprises about 1,500,000 souls. The European towns are Batavia (which see), Surabaga, and Samarang; the first containing perhaps 60,000 souls, and the last two half that number. The native capitals, Surakerta and Yas Yukerta, contain about 100,000 inhabitants each. The Chinese in the island here are estimated at nearly another 100,000: and the manufacture of sugar, salt, and arrack, is wholly engrossed by them. The slaves are about 30,000.

Java was long subject to the Dutch. But on the 4th of August, 1811, a British force was landed here, and, on the 10th, it took Batavia by storm; the Dutch general, Janssens, retreating to the eastern extremity of the island, and finally capitulating for the general surrender of it. In the following year the British government engaged in a war with the native sovereign, which ended in the cession of extensive and important districts. Under the excellent government of Sir Stamford Raffles it rapidly improved. But upon the downfal of the French Empire, and the restoration of independence to Holland, this possession was restored to that country. At the close of 1816 the Dutch re-took possession of Java.

JAUCOURT (Louis de), a French compiler who conducted the Bibliotheque Raisonée, from its commencement to 1740; and had a share in the French Encyclopedie and Musæum Sabæanum. He also compiled a Lexicon Medicum Universale, but the MS. was lost in the vessel taking it to Holland. He died in 1740.

JAVEL, *v. a.* & *n. s.* For jable. To bemire; to soil over with dirt through unnecessary traversing and travelling. This word is still retained in Scotland and the northern counties. Javel, a wandering dirty fellow.

> When as time, flying with wings swift,
> Expired had the term that those two *javels*
> Should tender up a reckoning of their travels.
> *Hubberd.*

> Sir Thomas More, preparing himself for execution, put on his best apparel, which the lieutenant compelled him to put off again, saying, That he who should have them was but a *javel*. What, says Sir Thomas, shall I account him a *javel*, who shall this day do me so great a benefit? *More.*

JAV'ELIN, *n. s.* Fr. *javeline*. A spear or half-pike, which anciently was used either by foot or horse. It had an iron head pointed.

> Others, from the wall, defend
> With dart and *javelin*, stones and sulphurous fire;
> On each hand slaughter and gigantick deeds.
> *Milton.*

> She shakes her myrtle *javelin*: and, behind,
> Her Lycian quiver dances in the wind. *Dryden.*

> Flies the *javelin* swifter to its mark,
> Launched from the vigour of a Roman arm?
> *Addison.*

The Javelin, in antiquity, was five feet and a half long; the shaft was of wood, and the point of steel. Every soldier in the Roman armies had seven of these, which were very light and slender.

JAUN'DICE, *n. s.* Fr. *jaunisse*, *jaune*, yellow. A distemper from obstructions of the glands of the liver. See Icterus. Jaundiced, infected with the jaundice.

> Why should a man, whose blood is warm within,
> Sit like his grandsire cut in alabaster?
> Sleep when he wakes, and creep into the *jaundice*
> By being peevish? *Shakspeare. Merchant of Venice.*

> Those were thy thoughts, and thou couldst judge aright,
> 'Till int'rest made a *jaundice* in thy sight. *Dryden.*

> All seems infected, that the' infected spy,
> As all looks yellow to the *jaundiced* eye. *Pope.*

> The eyes of a man in the *jaundice* make yellow observations on every thing; and the soul, tinctured with any passion, diffuses a false color over the appearances of things. *Watts.*

Jaundice. See Medicine.

JAUER, a principality of Prussia, in Lower Silesia, forming part of the government of Liegnitz, bounded on the south and west by Bohemia and Lusatia. It has only a superficial extent of 1300 square miles, but about 200,000 inhabitants. The surface is diversified with woody hills and fruitful plains. Here are also mines of pit-coal and iron. Corn is imported; but the manufactures are extensive; and it exports linen, gauze, iron, glass, and porcelain. The chief towns are Jauer, Hirschberg, Lowenberg, and Bunzlau, the capitals of small districts.

Jauer, Circle or District of, is a part of the above principality, comprising 147 square miles, with a population of 22,000 inhabitants.

Jauer, a fortified town of Silesia, and the capital of the principality and circle of that name, stands on the river Jauer, otherwise called the Wuttend Neisse (or raging Neisse), from its ravages when swelled by rains or ice. It contains five Catholic churches and monasteries, and a Lutheran church. Here is a woollen and cotton

manufacture, and a good trade in flax and yarn In 1776 most part of this place was burnt down; but it has been rebuilt with improvements. Sixteen miles north-west of Schweidnitz, and thirty-one west of Breslau.

JAUNT, *v. n.* & *n. s.* } Fr. *janter, gentil.*
JAUNTINESS, *n. s.* } To wander here and there; to ramble; to bustle about: jaunt, a flight, or excursion, commonly used ludicrously, but solemnly by Milton: jauntiness, airiness; flutter; gentility.

I was not made a horse,
And yet I bear a burthen like an ass;
Spur-galled and tired by *jaunting* Bolingbroke.
Shakspeare. Richard II.

Our Saviour meek, and with untroubled mind,
After his airy *jaunt*, though hurryed sore,
Hungry and cold betook him to his rest. *Milton.*

He sends me out on many a *jaunt*,
Old houses in the night to haunt. *Hudibras.*

If you are for a merry *jaunt*, I'll try for once who can foot it farthest. *Dryden's Spanish Fryar.*

They parted, and away posts the cavalier in quest of his new mistress: his first *jaunt* is to court.
L'Estrange.

A certain stiffness in my limbs entirely destroyed that *jauntiness* of air I was once master of. *Addison.*

Thus much of the scheme of my design in this part have I run over, and led my reader a long and tedious *jaunt* in tracing out those metallic and mineral bodies.
Woodward.

JAUTS, a people of Hindostan, first mentioned about the beginning of the eleventh century, on the invasion of India by Mahmoud the Gaznevide. He found them established on the eastern bank of the Indus, and preparing to oppose his passage by a large fleet of boats, to the number of several thousands. They were, however, completely defeated, and driven into the neighbouring mountainous districts. In the reign of Aurengzebe, Churamana, a Jaut of distinction, collected some troops, and gradually rose from a captain of banditti to be a powerful chieftain. He had once the audacity to attack and plunder the rear of that monarch's army: when pursued, he took refuge among the mountains of Narwar. The Jauts, on the decline of the power of Aurengzebe's successors, gradually rose into notice, particularly under their chief Sooraje Mull, who at last almost dictated in the counsels of the Mogul emperor. Ahmed Shaw, however, the Caubul sovereign, defeated this chieftain, and compelled him to seek the alliance of the Mahrattas. His son, Jowaliar Sing, was assassinated, and in the hand of his successor (at his father's death an infant), all the power of this tribe was diminished to the possession of the fortress of Bhurtpoor, and a small district around. Here, in 1805, the rajah Runjeet Sing received Holkar and his army, after their defeat by lord Lake, and the British in the siege of that place sacrificed a vast number of lives. Ultimately, however, it capitulated, and the Jaut rajah was compelled to pay twenty lacks of rupees.

JAW, *n. s.* Fr. *joue*, a cheek; whence jaw-bone, or cheekbone, then jaw. The bone of the mouth in which the teeth are fixed: the mouth.

My tongue cleaveth to my *jaws*, and thou hast brought me into the dust of death. *Psalm* xxii. 15.

A generation whose teeth are as swords, and their *jaw* teeth as knives, to devour the poor. *Prov.* xxx.

My bended hook shall pierce their slimy *jaws*.
Shakspeare.

I from the *jaws* of a gardener's bitch
Did snatch these bones and then leaped the ditch.
Ben Jonson.

O that fortune
Had brought me to the field where thou art famed
To have wrought such wonders with an ass's *jaw*.
Milton. Samson Agonistes.

The *jaw* bones, hearts, and galls of pikes are very medicinable. *Walton's Angler.*

More formidable hydra stands within,
Whose *jaws* with iron teeth severely grin. *Dryden.*

Piso, who probably speaks Aristotle's meaning, said that the crocodile doth not only move his upper *jaw*, but that his nether *jaw* is immoveable. *Grew.*

A smeary foam works o'er my grinding *jaws*,
And utmost anguish shakes my laboring frame.
Rowe.

(The creature was his father's dog, that died)
Now feeling all the vulture in his *jaws*,
With some remorse received (though first denied),
As a great favour one of the fore-paws.
Byron. Don Juan.

JAXT, a river of Germany, in Wirtemberg, which rising in Oettingen, flows through the principality of Ellwangen, and runs into the Neckar, opposite Wimpfen in Suabia. Its volume of water is large, and it serves for floating wood, but is not navigable.

JAXT, in Germany, a northern department of the kingdom of Wirtemberg, deriving its name from the above river, and having the Baden territory on the west, and Bavaria on the east. This name, formerly given to a province with an extent of 700 square miles and 130,000 inhabitants, is, since the year 1818, extended to a track of country of more than twice that size and population.

JAY, *n. s.* Named from his cry.—Skinner. A bird; pica glandaria.

The chattering pie;
The scorning *jaie*; the eles foe the heroune;
The false lapwing, all full of trecherie.
Chaucer. The Assemble of Foules.

Two sharp-winged sheers,
Decked with divers plumes, like painted *jays*,
Were fixed at his beck, to cut his airy ways.
Faerie Queene.

We'll use this unwholesome humidity, this gross watery pumpion—we'll teach him to know turtles from *jays*. *Shakspeare.*

What, is the *jay* more precious than the lark,
Because his feathers are more beautiful? *Id.*

I am highly delighted to see the *jay* or the thrush hopping about my walks. *Spectator.*

Admires the *jay* the insect's gilded wings,
Or hears the hawk when Philomela sings? *Pope.*

Ten thousand warblers cheer the day, and one
The live-long night; nor these alone, whose notes
Nice-fingered art must emulate in vain,
But cawing rooks, and kites that swarm sublime
In still-repeated circles, screaming loud;
The *jay*, the pie, and e'en the boding owl,
That hails the rising moon, have charms for me.
Cowper.

JAY, in ornithology. See CORVUS.

JAY (Guy Michael le), a French gentleman, who distinguished himself by causing a polyglot Bible to be printed at his own expense in 10

vols. folio. This undertaking however proved his ruin; for he printed it with his own name, and thus offended cardinal Richelieu, who, after the example of cardinal Ximenes, was ambitious of eternising his name, by affixing it to such a noble copy of the Holy Scriptures. He also made it too dear for the English market; on which Dr. Walton undertook his polyglot Bible, which, being more commodious, reduced the price of M. le Jay's. After the death of his wife, M. le Jay took orders, was made dean of Vezelay in the Nivernois, and Louis XIV. gave him the post of counsellor of state. He died in 1675.

JAZEL, *n. s.* A precious stone of an azure or blue color.

JAZER, or JASER, in ancient geography, a Levitical city in the territory of the Amorites, beyond Jordan, ten miles west, or rather south-west, of Philadelphia, and fifteen miles from Esebon; and therefore situated between Philadelphia and Heshbon, on the east border of the tribe of Gad, supposed to be the Jazorem of Josephus.

IBABA, one of the largest towns in Abyssinia, and the capital of the province of Maitsha. It is little inferior to Gondar in extent, and the country around is remarkably fertile.

IBARRA, a fertile province of South America, in Quito, bounded east by the province of Sucumbios, and by the woods of the Indians; north by the province of Pastos; west by that of Esmeraldas; and south by that of Otavalo. It is twenty leagues in length from north-west to south-east, and, for the most part, of a hot climate. It abounds in excellent corn, and sugar-canes. Great quantities of cotton and fruit are also grown. Its principal commerce consists in fine cotton stuffs. It is fertilised by many rivers. Those of chief importance are the Pisco, the Taguando, and the Blanco, which, being united, form the Mira.

IBARRA, the capital of the foregoing province, is situated on an extensive and delightful plain, watered on the east by the river Taguando, and west by Ajavi. The streets are wide and convenient, and the buildings of good construction. It has several convents and a monastery; and the suburbs are inhabited by Indians. Population 12,000. Forty-two miles north-east from Quito.

IBBERVILLE, a river, or rather a natural canal, of West Florida, which in May, June, and July, when the Mississipi overflows and runs into it, forms a communication for vessels drawing three or four feet, from the Mississipi to the Gulf of Mexico east, through lakes Mauripas and Pontchartrain; but is dry all the rest of the year.

IBERIA, the ancient name of Spain, so called from the river Iberus, now Ebro.

IBERIA was also the name of an inland country of Asia, having Colchis and a part of Pontus on the west, Mount Caucasus on the north, Albania on the east, and Armenia Major on the south. It is now the western part of Georgia.

The IBERIAN MOUNTAINS are the most extensive mountain range in Spain, and commence at the north of that country, west of the Ebro. They separate the two Castiles from Arragon, and extending on the shores of the Mediterranean, traverse, under different names, Valencia, Granada, and Murcia; terminating on the Mediterranean, in the promontories of Oropesa, Martino, Palos, and Gata. The Sierra de Oca, in the province of Burgos, forms part of this range. The highest point is the Cabeço de Maria, in the Sierra de Alcarraz, having an elevation of 7300 feet. Among other ascertained elevations are the peak of the Sierra Espadan, 4160; the Casueleda, in the Sierra of that name, 3300; and the peak of Penaglosa 2770 feet in height.

IBERIS, sciatica cresses, or candy-tuft, a genus of the siliquosa order, and tetradynamia class of plants: COR. irregular; the two exterior petals larger than the interior ones; the silicula polyspermous, emarginated. There are eighteen species:—

1. I. amara, the bitter candy-tuft, has branching stalks like the umbellata, which rise from eight to twelve inches high; small, spear-shaped, and slightly-indented leaves; and all the branches terminated by racemose bunches of white flowers in June and July.

2. I. semperflorens, the ever-flowering shrubby iberis, has low undershrubby stalks, very branchy, growing to the height of eighteen inches, with white flowers in umbels at the ends of the branches, appearing at all times of the year.

3. I. sempervirens, the tree candy-tuft, has low undershrubby stalks, very branchy and bushy, rising to the height of ten or twelve inches, with white flowers in umbels at the ends of the branches, appearing great part of the summer. This and the last species are tender, and must be put in pots, to be sheltered from the winter frosts. They are easily propagated by slips or cuttings.

4. I. umbellata, the common candy-tuft, has herbaceous, short, round, and very branchy stalks of tufty growth, from about six to ten inches high; small spear-shaped leaves, the lower ones serrated, the upper entire; and all the stalks and branches terminated by umbellate clusters of flowers of different colors in the varieties. This species and the amara, No. 1, being hardy annuals, may be sowed in any common soil in March, till Midsummer, and will thus afford a succession of flowers from June to September.

IBIS. See TANTALUS.

IBN DOREID, or DOREIDI, a famous Arabic poet of the ninth century, was a native of Bassora, but, in consequence of a foreign invasion, resided twelve years with a relative at Oman, after which he returned to his native place. Some years after this he went to Fars, and was employed in the administration of the finances there. He is said to have been reduced to great indigence by his generosity, and retiring to Bagdad, when his patron was displaced, attracted the notice of the caliph Moctadez, who gave him a pension. He died at Bagdad A. D. 933. His works are numerous, comprising every species of poetical composition. An ode, entitled Alcassydeh Almacsoureh, has been commented on by a multitude of critics: and it has engaged the attention of modern orientalists. It was pub-

lished by Scheldius at Harderwick, in 1768; and by Haitsma, at Franeker, in 1773, 4to. with a Latin translation.

Ibn El Alam (Ali Ben al Hassan), a celebrated Arabian astronomer, the author of an astronomical table, containing the result of numerous observations made at Bagdad in the reign of Adadodawla: but this work is lost. After the death of Adadodawla he left his country on a pilgrimage, and died on his return, at Osaila, in 985.

Ibn Khilcan (Schems-eddin Abou'l Abbas Ahmed), an Arabian historian, descended from the family of the Barmecides, was born at Arbel in 1211: he went early in life into Syria, and thence to Egypt: in 1261, after having filled the office of cadi at Cairo, he was promoted to the station of cadi of Damascus. He continued there till 1270, when we find him professor in one of the colleges at Cairo. In 1277 he was re-installed in his post at Damascus, soon after which he joined in the revolt of the governor of that city against the sultan. The attempt was unsuccessful, and Ibn Khilcan was condemned to death, but afterwards pardoned, and again restored to his office. He died at Damascus in 1282. His principal work is a biographical dictionary, entitled The Decease of eminent Personages, and the Lives of Contemporaries. An outline of it was published by M. B. Fred. Tydeman, at Leyden, in 1809, under the title of Specimen Philologicum Exhibens Conspectum operis Ibn Chalicani de vitis Illustrium Virorum, 4to.

Ibn Younis (Ali Ben Abdalrahman), an illustrious Arabian astronomer, born of a noble family, A. D. 979. The caliph Azyz facilitated his studies in that science, and Ibn Younis soon justified the generosity of his patron. He carried on his researches in an observatory near Cairo; and embodied the result of his observations in a work called Zydj Ibn Younis, in which he corrected many of the errors of preceding astronomers. He was also skilled in music. His death took place A. D. 1008.

IBRAHIM, sultan of the Turks, succeeded his brother Amurath, or Morad IV., in 1640, being then in his twenty-third year. He had been long kept a prisoner by Morad, who would have put him to death, had he not been prevented by his mother; and such was the state of his mind, that he refused admission to the great officers of the government when they came to announce his brother's death, and his own accession to the throne, nor could he be prevailed on to open the doors of his dungeon till the dead body of Morad was laid in his view. Ibrahim was ill fitted for the cares of a crown, and resigned the duties of his station to his ministers, contenting himself with trifling amusements and gross voluptuousness. One of the first events of his reign was the capture of Azof, the principal post of the Cossack pirates, who infested the Black Sea; by which measure their depredations were repressed, and the navigation rendered clear to Constantinople. An attempt was made upon the island of Candia, but it was not successful. The voluptuousness of Ibrahim was the cause of his death; he had violated the chastity of the beautiful daughter of the mufti, who resolved upon revenge, and took such means as to effect the end. He ordered the sultan to appear before him, which he refused; he then declared him an infidel, and incapable of exercising the authority of government. The janissaries took the part of the head of the church, and he was almost immediately strangled. This was in the year 1649. He left several sons, of whom three successively filled the throne.

Ibrahim Effendi, a distinguished Turk in the seventeenth century, who was a member of the body of Ulema, or lawyers, and, being skilled in the Persian and Arabic languages, occupied several posts of importance at Constantinople. The gospel history, on examination, produced a conviction on his mind of the truth of Christianity, and he was baptised at Pera in 1671. Thence he retired to Venice, and was confirmed in the church of St. John the Baptist. Two years after he assumed the habit of St. Dominic, and the name of Paul Anthony Effendi. He left to the library of St. John and St. Paul the Four Evangelists, translated into Arabic, with the Psalms, Canticles, and other books of the Old Testament; and died in 1697, at the age of fifty-six.

IBYCUS, a Greek lyric poet, of whose works there are only a few fragments remaining, flourished A. A. C. 550. It is said that he was assassinated by robbers; and that, dying, he called upon some cranes he saw flying to bear witness. Some time after one of the murderers, seeing some cranes, said to his companions, 'There are the witnesses of Ibycus's death:' which being reported to the magistrates, the assassins were put to the torture, and, having confessed the fact, were hanged. Thence arose the proverb Ibyci Grues.

ICA, a province of Peru, bounded east by Castro Vireyna and Lucanas, south-east and south by Cumana, and west by the Pacific Ocean. It is fifty leagues in length from north to south, and in extreme breadth twenty-four from east to west. It is of a hot temperature, especially towards the coast, where various desert tracks are found. But, in general, the province may be said to be fertile in fruits, grain, and pulse, particularly grapes, the vines yielding in many parts solely from the moisture they derive from the earth. The wines and brandies manufactured are carried to Lima, Panama, and Guayaquil, and the mountainous provinces of the Sierra. Olive plantations are also numerous. The produce is conveyed by means of asses, which abound here. The country is watered by several rivers.

Ica, the capital of the above province, situated in a valley twenty-five miles south of Pisco, has several convents and a college, which formerly belonged to the Jesuits. A glass foundry is also established here. It carries on a brisk traffic in wine and brandy. It is 140 miles E.S.E. from Lima.

ICE, *n. s.* & *v. a.*
Ice-house, *n. s.*
Ice'lander, *n. s.*
I'cicle, *n. s.*
I'ciness, *n. s.*
I'cy, *adj.*

Saxon, ıf; Swed. *is*; Gothic, *ise*; Belgic, *eyse*. Water, or other liquor, made solid by cold; concreted sugar: to break the ice, is to make the first

opening to any attempt: ice, to cover with ice; to turn to ice; to cover with concreted sugar: ice-house, a place in which ice is deposited against the warm months: Icelander, an inhabitant of Iceland: icicle, a shoot of ice hanging from a pedicle: iciness, the state of generating ice; sensation of severe cold: icy, in a figurative sense, cold-hearted; free from passion; impenetrable.

Nowe hote for colde, now colde for hete again;
Now cold as *yse*; and now, as coles red,
For hete I brenne.
Chaucer. Complaint of the Blacke Knight.

You naked trees, whose shady leaves are lost,
Wherein the birds were wont to build their bowre,
And now are clothed with mosse and hoarie frost,
Insteede of blosomes, wherewith your buds did flowre;
I see your teares, that from your boughes do raine,
Whose drops in drerie *ysicles* remaine.
Spenser. Shepheardes Calender.

If you *break the ice*, and do this feat,
Atchieve the elder, set the younger free
For our access, whose hap shall be to have her,
Will not so graceless be to be ingrate. *Shakspeare.*

Thou art all *ice*, thy kindness freezes. *Id.*

You are no surer, no,
Than is the coal of fire upon the *ice*,
Or hailstone in the sun. *Id. Coriolanus.*

If thou do'st find him tractable to us,
Encourage him, and tell him all our reasons;
If he be leaden, *icy*, cold, unwilling,
Be thou so too. *Id. Richard III.*

Thou wouldest have never learned
The *icy* precepts of respect. *Id. Timon.*

Thus have I *broken the ice* to invention, for the lively representation of floods and rivers necessary for our painters and poets. *Peacham on Drawing.*

After he'd a while looked wise,
At last *broke* silence and the *ice*. *Hudibras.*

If distilled vinegar or aqua-fortis be poured into the powder of loadstone, the subsiding powder, dried, retains some magnetical virtue; but if the menstruum be evaporated to a consistence, and afterwards doth shoot into *icicles*, or crystals, the loadstone hath no power upon them. *Browne's Vulgar Errours.*

He relates the excessive coldness of the water they met with in summer, in that *icy* region where they were forced to winter. *Boyle.*

From locks uncombed, and from the frozen beard,
Long *icicles* depend, and cracking sounds are heard.
Dryden.

In thy fair brow there's such a legend writ
Of chastity, as blinds the adult'rous eye:
Not the mountain *ice*,
Congealed to chrystal, is so frosty chaste
As thy victorious soul which conquers man
And man's proud tyrant passion. *Id.*

If I should ask whether *ice* and water were two distinct species of things, I doubt not but I should be answered in the affirmative. *Locke.*

The common dropstone consists principally of spar, and is frequently found in form of an *icicle*, hanging down from the tops and sides of grottos.
Woodward's Natural History.

Bear Britain's thunder and her cross display
To the bright regions of the rising day;
Tempt *icy* seas, where scarce the waters roll,
Where clearer flames glow round the frozen pole.
Pope.

'Tis here all meet!
The shivering *Icelander*, and sun-burnt Moor.
Blair's Grave.

Ice, in physiology, a solid, transparent, and brittle body, formed of some fluid, particularly water, by means of cold. See articles Chemistry, Cold, Freezing, Frost, and Heat.

Galileo was the first that observed ice to be lighter than the water which composed it; and hence it happens, that ice floats upon water, its specific gravity being to that of water as 8 to 9. This rarefaction of ice seems to be owing to the air-bubbles produced in water by freezing; and which, being considerably large in proportion to the water frozen, render the body so much specifically lighter: these air-bubbles, during their production, acquire a great expansive power, so as to burst the containing vessels, though ever so strong. M. Merian, in a dissertation on ice, attributes the increase of its bulk chiefly to a different arrangement of the parts of the water from which it is formed; the icy skin on the water being composed of filaments, which are constantly and regularly joined at an angle of 60°; and which, by this angular disposition, occupy a greater volume than if they were parallel. He found the augmentation of the volume of water by freezing, in different trials, a 14th, an 18th, a 19th, and when the water was previously purged of air, only a 22d part: that ice, even after its formation, continues to expand by cold, for, after water had been frozen to some thickness, the fluid part being let out by a hole in the bottom of the vessel, a continuance of the cold made the ice convex; and a piece of ice, which was at first only a 14th part specifically lighter than water, on being exposed some days to the frost, became a 12th part lighter. To this cause he attributes the bursting of ice on ponds. On Lake Champlain, and other American lakes, and even on narrow rivers, fissures and rents of enormous magnitude are often made in the ice, and are always accompanied with loud reports, like those of cannon. The unwary traveller, who, with his sleighs and horses, adventures by night, and sometimes even by day, across the great northern lakes, is frequently swallowed up in the openings, which are thus unexpectedly made in the ice. When the weather grows warm again, before the ice melts, the fissures close, and sometimes the edges of them even overlap. Wax, resins, and animal fats, made fluid by fire, instead of expanding like watery liquors, shrink in their return to solidity: for solid pieces of the same bodies sink to the bottom of the respective fluids; a proof that these bodies are more dense in their solid than in their fluid state. The oils which congeal by cold, as olive oil, and the essential oil of aniseeds, appear also to shrink in their congelation. Hence, the different dispositions of different kinds of trees to be burst by, or to resist, strong frosts, are by some attributed to the juices with which the tree abounds; being in the one case watery, and in the other resinous or oily.

Though it has been generally supposed that the natural crystals of ice are stars of six rays, forming angles of 60° with each other, yet this crystallisation of water, as it may properly be called, seems to be as much affected by circumstances as that of salts. Hence we find a considerable difference in the accounts of those who

nave undertaken to describe these crystals. M. Merian informs us, that they are stars with six radii; and his opinion is confirmed by observing the figure of frost on glass. M. Romé de L'Isle determines the form of the solid crystal to be an equilateral octahedron. M. Hassenfratz found it to be a prismatic hexahedron.

On the 3d of January 1821 the late Dr. Clarke observed at Cambridge regular crystals of ice, many of which were more than an inch long. He exhibited them to several members of the University, and frequently in their presence measured the angles of the rhombic crystals, with the goniometer of Carangeau, which he found to be 120° and 60°. After a thaw took place, the crystals preserved in melting the same inclination of their planes. The above very interesting results confirm the anticipation of Dr. Brewster, who, from the optical structure of ice, referred it to the rhomboidal or pyramidal systems of professor Mohs.

Ice forms generally on the surface of water; but this, too, like the crystallisation, may be varied by an alteration in the circumstances. In Germany, particularly in the northern parts, there are three kinds of ice. 1. That which forms on the surface. 2. That formed in the middle of the water, resembling nuclei or small hail. 3. The ground ice which is produced at the bottom, especially where there is any fibrous substance to which it may adhere. This is full of cells like a wasp's nest, but less regular, and frequently raises very heavy bodies from the bottom by means of its inferiority in specific gravity to the water in which it is formed. This ice differs from that continuous kind which is formed along the edge of rivers, and particularly in places where the water is quiet; it never forms in lakes, pools, or other stagnant water, and motion appears to be a condition essential to its existence. At first sight it might be taken for an aggregation of snow penetrated by water, swimming at the surface, rather than for ice; but a closer examination will not fail to discover its true characters. In fact it is formed of an assemblage of a multitude of small, thin, and rounded plates of ice, having a diameter of a few lines. They are individually transparent, but their aggregation presents at a distance the appearance of a semi-transparent mass like wet snow. It is known that, before rivers begin to carry the ground-ice, the temperature of the air must have been for several days previous some degrees below zero; and it is observed, in general, that a cold wind, blowing in a direction contrary to the current of the river, is singularly favorable to the formation of this sort of ice.

Plot, in his History of Oxfordshire, observes, that all the watermen, with whom he has had an opportunity of speaking on the subject, agree in thinking, that the rivers of the country always begin to freeze at the bottom. He describes the manner in which the small pieces of ice, called ice-meers, rise from the bottom to the surface, and mentions their frequently containing gravel or stones, which they have carried along with them. Hales confirms these observations; and says, that the watermen of the Thames assert, that, some days before that river is frozen at the surface, they feel the ice at the bottom with their poles, and that they see it rising to the surface. Mr. Streake relates, that, in February 1806, at Pillau, chains of iron, six feet in length, which had remained a long time lost at the bottom of the water, a cable thirty fathoms long, and stones weighing from three to six pounds, were raised to the surface, enclosed in a thick envelope of ice; and that an anchor, after having remained an hour in the water, was taken out covered with a layer of ice.

The following explanation of this phenomenon is what M. Merian considers the most natural. If it be true, that, in winter, running water is first cooled at the surface, it is also true, that its constant agitation, especially when aided by a wind blowing in a direction contrary to that of the current, continually mixes the water of the surface and that of the bottom, notwithstanding the inconsiderable difference of their specific gravities. The temperature of the bottom and that of the surface, even in pretty deep rivers, does not present any remarkable difference, while the prominent bodies fixed at the bottom present points of attachment to the forming ice, much more advantageous than a constantly agitated surface; and it is well known what influence these points or nuclei have in general upon crystallisation. The water sufficiently cooled begins therefore to be converted into ice at the bottom, particularly in places where shelter is afforded by prominences from the impetuosity of the current.

In many countries the warmth of the climate renders ice not only a desirable, but even a necessary article; so that it becomes an object of some consequence to discover a ready and cheap method of procuring it.

ICEBERGS, large bodies of ice filling the valleys between the high mountains in northern latitudes. Among the most remarkable are those of the east coast of Spitzbergen; see GREENLAND, and SPITZBERGEN. They are seven in number, but at considerable distances from each other: each fills the valleys for tracts unknown, in a region totally inaccessible in the internal parts. The glaciers of Switzerland seem contemptible to these; but present often a similar front into some lower valley. The last exhibits over the sea a front 500 feet high, emulating the emerald in color; cataracts of melted snow precipitate down various parts, and black spiring mountains, streaked with white, bound the sides, and rise, crag above crag, as far as eye can reach in the back ground. At times immense fragments break off, and tumble into the water, with a most dreadful noise. Masses have been seen resembling a Gothic church, with arched windows and doors, and all the rich drapery of that style, composed of crystals of the richest sapphirine blue; tables with one or more feet; and often immense flat roofed temples, like those of Luxor on the Nile, supported by round transparent columns of cœrulean hue, float by the astonished spectator. These icebergs are the creation of ages, and receive annually additional height by the falling of snows and rain, which often instantly freezes, and repairs the loss occasioned by the influence of the melting sun.

The following account of an excursion to the Seven Icebergs, in July 1818, is given by captain Scoresby. A strong north-westerly swell having for some hours been beating on the shore, had loosened a number of fragments attached to the iceberg, and various heaps of broken ice denoted recent shoots of the sea-ward edge. 'As we rowed,' says he, 'towards it, with a view of proceeding close to its base, I observed a few little pieces fall from the top; and, while my eye was fixed upon the place, an immense column, probably fifty feet square, and 159 feet high, began to leave the parent ice at the top, and, leaning majestically forward, with an accelerated velocity fell with an awful crash into the sea. The water into which it plunged was converted into an appearance of vapor or smoke, like that from a furious cannonading. The noise was equal to that of thunder, which it nearly resembled. The column which fell was nearly square, and in magnitude resembled a church. It broke into thousands of pieces. This iceberg was full of rents, as high as any of our people ascended upon it, extending in a direction perpendicularly downward, and dividing it into innumerable columns. The surface was very uneven, being furrowed and cracked all over. This roughness appeared to be occasioned by the melting of the snow, some streams of water being seen running over the surface; and others could still be heard pursuing their course through sub-glacial channels to the front of the iceberg, where, in transparent streams, or in small cascades, they fell into the sea. In some places chasms of several yards in width were seen, in others they were only a few inches or feet across. One of the sailors, who attempted to walk across the iceberg, imprudently stept into a narrow chasm filled up with snow to the general level. He instantly plunged up to his shoulders, and might, but for the sudden extension of his arms, have been buried in the gulf.'

In the first ages of the Spitzbergen fishery, when the ships sometimes moored close to the shore, many serious disasters were occasioned by the fall of pieces of icebergs. One of the Russia Company's ships, which was on the whale-fishery in the year 1619, was driven on shore in Bell Sound, by ice setting in from the sea. The captain, with most of his crew and boats, was absent at the time of the accident; but, on the first intelligence, caused his boats to be hauled up on the ice, and proceeded on board to endeavour to get the ship off. After they had been using every endeavour for this purpose, during about an hour, a main piece of an adjoining ice-cliff came down, and almost overwhelmed the vessel and her crew in its ruins. The shock must have been tremendous. The ice which fell struck the ship so high and so forcibly, that it carried away the foremast, broke the main-mast, sprung the bowsprit, and flung the ship over with such violence, that a piece of ordnance was thrown overboard from under the half deck; and the captain and some of the crew were projected in the same way. The captain, notwithstanding his imminent danger, with fragments of ice flying in all directions, and the masts of the ship falling around him, escaped unhurt; but the mate, and two more of the crew, were killed, and many others were wounded.

ICE-CREAM, cream cooled by ice. Take a sufficient quantity of cream, and when it is to be mixed with raspberry, or currant, or pine, a quarter part as much of the juice or jam as of the cream; after beating, and straining the mixture through a cloth, put it with a little juice of lemon into the mould, which is a pewter vessel, and varying in size and shape at pleasure; cover the mould, and place it in a pail about two-thirds full of ice, into which two handfuls of salt have been thrown; turn the mould by the hand-hold with a quick motion to and fro, in the manner used for milling chocolate, for eight or ten minutes; then let it rest as long, and turn it again for the same time; and, having left it to stand half an hour, it is fit to be turned out of the mould, and to be sent to table. Lemon-juice and sugar, and the juices of various kinds of fruits, are frozen without cream; and when cream is used, it should be well mixed.

ICE-HILL, a sort of structure common upon the Neva at Petersburgh, which affords a perpetual fund of amusement to the populace. It is constructed in the following manner:—A scaffolding is raised upon the river about thirty feet in height, with a landing place on the top, the ascent to which is by a ladder. From this summit a sloping plain of boards, about four yards broad and thirty long, descends to the superficies of the river; it is supported by strong poles gradually decreasing in height, and its sides are defended by a parapet of planks. Upon these boards are laid square masses of ice about four inches thick, which, being first smoothed with the axe and laid close to each other, are then sprinkled with water; by these means they coalesce, and, adhering to the boards, immediately form an inclined plain of pure ice. From the bottom of this plain the snow is cleared away for the length of 200 yards, and the breadth of four, upon the level bed of the river; and the sides of this course, as well as the sides and top of the scaffolding, are ornamented with firs and pines. Each person, being provided with a sledge, mounts the ladder; and, having attained the summit, he sets himself upon his sledge at the upper extremity of the inclined plain, down which he suffers it to glide with considerable rapidity, poising it as he goes down; when the velocity acquired by the descent carries it above 100 yards upon the level ice of the river. At the end of this course there is usually a similar ice-hill, nearly parallel to the former, which begins where the other ends; so that he immediately mounts again, and in the same manner glides down the other inclined plane of ice. This diversion he repeats as often as he pleases. These ice-hills exhibit a pleasing appearance upon the river, from the trees with which they are ornamented, as well as from the moving objects which at particular times of the day are descending without intermission.

ICEHOUSE, a house in which ice is reposited against the warm months. The aspect of ice-houses should be towards the east or south-east, for the advantage of the morning sun to expel the damp air, as that is more pernicious than

warmth; for which reason, trees in the vicinity of an ice-house tend to its disadvantage. The best soil for an ice-house to be made in is chalk, as it conveys away the waste water without any artificial drain; next to that loose stony earth or gravelly soil. Its situation should be on the side of a hill, for the advantage of entering the cell upon a level.

To construct an ice house, first choose a proper place at a convenient distance from the house or houses it is to serve: dig a cavity of the figure of an inverted cone, sinking the bottom in a concave form, to make a reservoir for the waste water till it can drain off; if the soil require it, cut a drain to a considerable distance, or so far as will come out at the side of the hill, or into a well, to make it communicate with the springs; and in that drain form an air-trap by sinking the drain so much lower in that place as it is high, and bring a partition from the top an inch or more into the water, which will consequently be in the trap, and will keep the well air-tight. Work up a sufficient number of brick piers to receive a cart-wheel, to be laid with its convex side upwards to receive the ice; lay hurdles and straw upon the wheel, which will let the melted ice drain through, and serve as a floor. The sides and dome of the cone are to be nine inches thick, and the sides to be done in steened brick-work, i. e. without mortar, and wrought at right angles to the face of the work: the filling in behind should be with gravel, loose stones, or brick-bats, that the water which drains through the sides may the more easily escape into the well. The doors of the ice-house should be made as close as possible, and bundles of straw placed always before the inner door to keep out the air. The ice when to be put in should be collected during the frost, broken into several pieces, and rammed down in strata of not above a foot, to make it one complete body; the care in putting it in, and well ramming it, tends much to its preservation. In a season when ice is not to be had in sufficient quantities, snow may be substituted. Ice may be preserved in a dry place under ground, by covering it well with chaff, straw, or reeds. Chaff is much used for this purpose in Italy.

Ice Island, a name given by sailors to a great quantity of ice collected into one huge solid mass, and floating about upon the seas near or within the polar circles. In the midst of those tremendous masses navigators have been arrested and frozen to death. In this manner the brave Sir Hugh Willoughby perished with all his crew in 1553; and in the year 1773 lord Mulgrave was caught in the ice, and was near experiencing the same unhappy fate. The forms assumed by the ice in this chilling climate are very pleasing. The surface of that which is congealed from the sea water is flat and even, hard, and opaque, resembling white sugar. The greater pieces, or fields, are many leagues in length: the smaller are the meadows of the seals, on which those animals at times frolic by hundreds. The motion of the smaller pieces is as rapid as the currents: the greater, which are sometimes 200 leagues long, and sixty or eighty broad, move slow and majestically, often fix for a time, immoveable by the power of the ocean, and then produce near the horizon that bright white appearance called the blink. The approximation of two great fields produces a most singular phenomenon: the larger forces the less out of the water, and adds it to its surface: a second and often a third succeeds; so that the whole forms an aggregate of a tremendous height. These float in the sea like so many rugged mountains, and are sometimes 500 or 600 yards thick; but the far greater part is concealed beneath the water. These are continually increased in height by the freezing of the spray of the sea, or of the melting of the snow, which falls on them. Those which remain in this frozen climate receive continual increase; others are gradually wafted by the northern winds into southern latitudes, and melt by degrees by the heat of the sun, till they waste away in the boundless element. The collision of the great fields of ice, in high latitudes, is often attended with a noise that for a time takes away the sense of hearing any thing else; and the less with a grinding of unspeakable horror. The water which dashes against the mountainous ice freezes into an infinite variety of forms; and gives the voyager ideal towns, streets, churches, steeples, and every shape which imagination can frame.

ICELAND, an island of the North Atlantic Ocean, belonging to Denmark, extends according to Henderson from lat. 63° 20′ to 67° 20′, and between 15° 30′ and 22° 30′ W: long. It is of an irregular oval figure, about 380 miles in length, and about 230 in its greatest breadth, containing upwards of 60,000 square miles: Dr. Henderson says 67,000; but the estimates of its size vary considerably. The coast is indented all round with numerous deep gulfs, bays, and creeks; several of which form excellent harbours.

When this island was discovered by the Norwegians, in 860, it was uninhabited: that nation first colonised it in 878; since which its history has been very accurately kept. The whole country is composed of stony and barren mountains, whose summits, though the highest does not reach 5000 feet, are covered with glaciers (Snaefell Jokul, the highest point, is 4558 feet). These mountains present two distinct characters; first, those formed by thirty to forty regular horizontal strata of rock; while the second are composed of various substances mingled and confused, such as great masses of rock, agglomerations of pumice stone, &c., cemented by gravel and clay. These are evidently of volcanic origin, and indeed the whole island may be considered as a vast cauldron filled with combustible matters, whose ignition produces frequent and sometimes most dreadful earthquakes and eruptions; amongst which those of 1783 were the most tremendous of any recorded in history. 'In that year,' says the abbé Ordinaire, 'it was feared, that this island would fall to pieces, so dreadful and multiplied were the convulsions produced by its volcanoes and internal fires. A thick sulphureous smoke rendered the island absolutely invisible to mariners at sea, while the people on shore were in danger of being suffocated by it. The fog, which about this time spread over all

Europe, was considered as an effect of these exhalations. Frightful hollow roarings proceeded from the bottom of the sea. From Mount Shapton-gluber (Skaptar Jokul) there poured a terrific torrent of liquid fire for six weeks, which ran ninety miles to the sea and was fifty miles in breadth, and the perpendicular height of its sides from eighty to 100 feet; it dried up twelve rivers and filled extensive valleys, so that the whole surface of the country was in a state of igneous fluidity, and resembled an immense lake of melted metal.

Not equal to the above in its terrific consequences, but still worth recording, was the eruption of the old volcano of Eyafjeld Jokul in December 1821.

Europe had this month experienced a remarkable fall of the barometer, accompanied with an agitation of the magnetic needle, which indicated, in the opinion of many persons, some extraordinary convulsion of nature. It was afterwards found that this old Icelandic volcano, which had been quiet since 1612, was suddenly on the 16th in a state of great activity.

This mountain, otherwise called Cape Hecla, is about 5666 feet in height. It is nearly equidistant from Kolla and Hecla, and is the southernmost of the chain where the dreadful eruption broke out about the middle of the last century.

On the 19th of December, 1821, the eruption began. The crater was formed at the distance of five miles, from the minister's house at Holt, and discharged itself through the thick mass of ice that enveloped it, and which is seldom melted. The ice was dispersed in every direction, and a mass, eighteen feet high and sixty feet in circumference, fell towards the north. A number of stones, of different sizes, rolled down the mountain, accompanied with a noise like thunder; and this was immediately followed by a discharge of an enormous and lofty column of flame, which illuminated the whole country, and allowed the people at Holt to read as perfectly within their houses at night as if it had been day. Ashes, stones, gravel, and heavy melted masses of rock, some of which weighed about fifty pounds, were thrown up, and one of these last was found at the distance of five miles from the crater. On the day immediately following the eruption, a great quantity of the fine grayish-white powder of pumice was discharged, and carried about by the wind so as to fall like snow, and cover the adjacent country. It penetrated into the houses through every opening. It exhaled a disagreeable smell of sulphur, brought on affections of the eyes, and occasioned diseases among the sheep in Vester Eyafjeld and Oster Landoe. On the 25th a violent storm raged from the south, and, by the united action of the wind and the rain, the fields were cleared of the sulphureous dust which had covered them. On the 26th and 27th of December there was a heavy storm from the north-east, and the barometer, which had been gradually falling since the 18th of December, when it was 29° 16′, had reached on the 26th of December its lowest point at 28° 49′. On the 18th of February the barometer, which had been at 29° 42′, on the 11th fell to 27° 72′. So late as the 23rd of February the Eyafjeld Jokul emitted smoke greatly resembling the steam of boiling water; and some persons were of opinion that the mountain had decreased, and was lower near the crater, as it evidently appeared to be when viewed from north to south. It is stated that the water, in the rivers that flow from the Jokul and the surrounding mountains, had been considerably enlarged during the first day's eruption. A constant rumbling noise was heard in the vicinity of the volcano, attended occasionally by a dreadful crash as if the immense masses of stones and ice were on the eve of being precipitated down the mountain.

The total number of previous eruptions of volcanoes in Iceland appears to be the following:—

From Hecla, since the year	1004 inclusive	22
From Kattlagiau Jokul	900	7
From Krabla	1724	4
In different parts of the Guldbringe Syssel	1000	3
At sea	1583	2
From the lake Grimsvatn, in	1716	1
From Eyafialla Jokul in	1717	1
From Eyrefa Jokul, in	1720	1
Prom Skaptar Jokul, in	1783	1
		42

In chronological order, the different eruptions mentioned by Icelandic authors stand thus: In the years 900, 1000, 1104, 1137, 1222, 1300, 1340, 1341, 1362, 1389, 1422, 1538 (Vesuvius erupted the same year), 1554 (Ætna), 1538, 1619, 1636 (Ætna), 1693 (Vesuvius, 1692; Ætna 1694), 1716, 1717 (Vesuvius), 1720, 1724, 1728, 1730 (Vesuvius), 1754 (Vesuvius), 1755 (Ætna), 1756, 1766 (Ætna and Vesuvius), 1771, and 1772, flames seen on Hecla; 1783. Thus it appears, that many of the eruptions that are known to have taken place, since Iceland was inhabited, have not been particularly noticed; and it is very probable that numerous eruptions of less note have been passed over. We may reckon active all those mountains which have burned within the last century. Of these there are six;—Hecla, Krabla, Cattlagiau, Eyafialla, Eyrefa, and Skaptar Jokul.

These internal fires have produced a great number of yawning fissures and caverns, and give rise to innumerable *boiling springs*, which the natives use both medicinally and to cook their victuals without fire. The most celebrated is that of Geyser, near Skalholt, the approach to which is announced by a noise resembling the fall of a great cataract. At intervals, several times a day, it throws up a column of boiling water many feet in thickness, to the height of nearly 100 feet. Mineral springs are also common, and basaltic columns are scattered over the island, sometimes covering spaces of two or three miles in length without interruption: they have generally from three to seven sides, are from five to seven feet in thickness, and from twelve to sixteen yards in length.

Specimens of silver, copper, and iron ores have been found in Iceland, and induce the supposition that it has mines of these metals: in

ther mineral substances it is extremely rich, aving sulphur, onyx, zeolite, chalcedony, porhyry, pumice-stone, rock-crystal, jasper, gate, carneoles, the celebrated calcareous spath r Iceland spar, that gives a double refraction, everal varieties of argillaceous earth, clay for orcelain, limestone, &c.

The gulfs of the shores are filled with islands, nd abound in fish, amphibious animals of the enus of phoca, and sea birds. The rivers, or ather torrents, are numerous, and, as well as the akes, some of which are of considerable size, re well stocked with salmon and trout.

The climate of Iceland is not extremely old, but the seasons are variable. The sea, at a mall distance from the shores, is seldom frozen; nd very little ice is ever seen near the west oast, notwithstanding its proximity to Greenand. On the east coast, the floating ice does ot drift farther south than Berufiord in 64½°. he prevailing winds are from the north, and he extremes of the temperature are between 5° below the freezing point to 70°. In some ears the month of January is accompanied by iolent storms from the north-west that drive ast mountains of ice into the bays of the north oast, which chill the atmosphere and prolong the inter. On this ice arrive herds of white bears, hich commit great ravages among the sheep, ut are soon destroyed, government paying ten ollars a head for their destruction, besides purhasing their skins. Thunder is very rarely eard, and never but in winter and in the vicity of the volcanoes.

The most attractive curiosity of an Iceland inter is the aurora borealis; which is no where ore beautiful or more constantly exhibited. Dr. Henderson says, 'I had the opportunity of ontemplating the northern lights almost every lear night the whole winter, sometimes shootng across the hemisphere in a straight line, and resenting to the view, for a whole evening, one ast steady stream of light, but more commonly ey kept dancing and running about with amazg velocity, and a tremulous motion, exhibitg as they advanced some of the most beautiful rvated appearances. On gaining one point f the hemisphere, they generally collected, as to muster their forces, and then began to anch out in numerous ranks, which steered off the greatest distances from each other as they assed the zenith, yet so as always to preserve e whole of the phenomena in an oval shape, hen they contracted nearly in the same way they had expanded, and, after uniting in a ommon point, they either returned in a few inutes, or were lost in a stream of light, which ew fainter and fainter, the nearer it approached e opposite side of the heavens. They were ostly of a dunnish yellow, yet often assumed ixtures of red and green. They almost always ok their rise from the summit of Mount Erian, hich is about due north-east from Reykeavik, nd proceeded in a south-west direction. When isible the whole length of the hemisphere, they ere uniformly strongest towards the north and orth-east, and were always sure to be seen in at quarter when they appeared no where else. Once or twice I observed them in the south, but they were faint and stationary.'

Though the island at present produces no trees of importance, there can be no doubt but that it was formerly well wooded, the roots and trunks of trees, chiefly birch, being found in the morasses; and a species of fossil or imperfectly petrified wood, apparently oak, called surtur brand, is met with in large quantities, principally in the mountains, and partly supplies the inhabitants with fuel, the deficiency of which necessary is made up towards the south by turf and cow-dung. On the north coast drift wood is generally abundant.

According to the Icelandic annals, wheat was formerly sown here with success, but this grain will not now come to maturity; and the ripening of rye, oats, and barley, is so very precarious, that agriculture is almost entirely confined to the manuring some meadows for pasture and hay. In the island are reckoned 300 gardens, producing potatoes, cabbages, carrots, and turnips, but no fruit trees of any kind. The most useful indigenous plants are some cochlearia, and the Iceland moss used in dyeing. It seems probable, that the destruction of the woods, and the feebleness of vegetation in general, is owing to the increased severity of the cold, caused by the accumulation of ice between this island and Greenland, which now forms a solid mass precluding all approach to the latter, though, according to the annals, the communication was formerly open.

The wild animals of Iceland are the arctic or white, and the brown or blue fox, wild cats, rats and mice. The domestic are rein-deer, horses, black cattle, sheep, goats, dogs, and cats. The rein-deer introduced from Norway have rapidly multiplied. The horses are of a small but large-boned breed, and capable of great fatigue; they are the only land conveyances, the want of roads precluding the use of wheel carriages. The black cattle are small and without horns, while the sheep are all furnished with them. In 1810, the island had, horses, 27,000; black cattle, 20,000; sheep, 225,000. Goats are chiefly found in the north, and there are no hogs. The dogs are of three varieties, the sheep or Icelandic dog of Buffon, and two other varieties of the Danish dog. The only poultry reared, from the dearness of corn, are a few common cocks and hens. The wild birds, which the Icelanders take either for their feathers or as food, are the swan, wild geese, ducks, puffins, and other aquatic birds, the woodcock, heathcock, &c. The eider duck builds its nest in the rocks of the coast, and its down is carefully collected, but there is a heavy fine for killing the bird. It disappears in autumn, but where it retires to is unknown. The Iceland falcons are considered the best of Europe for sport, and considerable numbers were formerly sent to Copenhagen for the royal amusement, but this tribute is no longer demanded.

Besides the destructive effects of earthquakes and volcanoes, the Icelanders have to fear almost equally the disruptions of the secondary or agglomerated mountains, and the avalanches. The

former usually happen in summer, after heavy rains, which washing away the clay that supported the masses of rock, they roll into the valleys, and carry destruction with them. The principal diseases to which the Icelanders are subject are catarrhal fevers, pleurisy, diarrhœa, leprosy, and hypochondria. Their general food consists of dried or fresh fish, milk, cheese, curds, and bread. As luxuries, meat stewed in milk, smoked meat, porridge of wheat or barley flour and milk, sour and salted butter. The Icelanders observe Lent so strictly, that they not only do not touch meat, but even abstain from mentioning it during this season. Their chief beverage is tolerable beer, of their own brewing, and a fermented liquor produced from milk. The higher classes have, of late years, become habituated to the use of tea, sugar, and coffee, wines, brandy, &c.

The Icelanders fabricate almost all their domestic utensils, and manufacture the whole of their wool into a coarse cloth called wadmar, or into stockings, gloves, jackets, carpets, &c. The men as well as women are employed during winter in their domestic manufactures. As soon as the ice is melted cutting turf begins, and, when the thawed waters have run off from the meadows, they are cleared of the straw and other rubbish collected on them during winter, and which, by preventing the sun's rays from penetrating the ground would hinder the grass from shooting. When this operation is completed, a thin layer of manure is spread on them, which finishes the field labor until the time of mowing, which usually commences in the middle of July, and lasts till September.

The fishery principally occupies the inhabitants of the south and west coasts. Its chief objects are cod and herrings: the former, as abundant as in Newfoundland, are cured in the same manner as in Norway. The herrings arrive in shoals in June and July. About 2000 boats are usually employed in the fisheries. The Icelanders also take for their oil the arctic shark, small whales, and seals, which arrive at the same time as the white bears on the ice. A part of the fish is, after being dried, reduced to powder, and serves to feed the cattle in winter. The extent of the fisheries, considered as a branch of commercial industry, is, however, very confined, both from the imperfection of the boats and nets and from the want of capital.

Iceland is politically divided into four quarters, or amts, named after the cardinal points, which are subdivided into eighteen syssels, or districts, and these again into less jurisdictions, called hreppar. The island is governed by a grand bailiff, who is also bailiff of the southern quarter: the other three quarters are under the immediate superintendance of two subordinate bailiffs. The written laws are according to the Norwegian code, and there is an appeal to the supreme tribunal at Copenhagen. The island has no regular troops.

The population of Iceland in former times is said to have exceeded 100,000. In 1810 it was estimated at 47,000, or about thirty-three persons to a square mile for the whole island, or 102 to 104, considering only the habitable parts. Dr. Henderson takes it at 50,000. In 1824, according to Gieman's dsecription of Iceland, it was 50,092; the whole being extended over a considerable space, and having but one physician, four surgeons, and 154 Christian pastors. Volcanic convulsions, and other accidents, epidemical diseases, and more particularly the system of commercial monopoly, which by keeping the people poor discourages marriage, are given as the causes of this decreased population.

The revenue raised in the island is about 30,000 rixdollars, the whole of which is supposed to be absorbed in the expense of its government and various establishments; so that the nett revenue to the king of Denmark is confined to the produce of the customs, which is reckoned at little more than 6000 rixdollars. The official communication between Denmark and Iceland is by packet.

Iceland has scarcely any collection of houses that deserves the name of a town. In the ancient system of commercial monopoly twenty-five ports were allowed the privilege of importation, and at each of these the company had an establishment of three or four houses. In 1787 six of these ports were granted considerable privileges, and as they become inhabited are to enjoy the rank of cities: they are Reikiavik, Westmanna, Grennefiord, Isafiord, Eyafiord, and Eskefiord. Reikiavik is now considered the capital, containing 500 inhabitants, whose houses are of wood coated with tar and red clay; the church and prison alone being of stone. The harbour is sheltered by several small islands, which render it safe. Skalholt, often called the capital in books of geography, probably because it is the residence of one of the two bishops, consists of only the bishop's house, the church, and a few wooden cottages. In all the other parts of the island the habitations, even of the better sort of Icelanders, are miserable hovels of turf, without windows, and the huts of the common class are such wretched dens, that it is wonderful how any thing in the human form can breathe in them.

Dr. Henderson speaks highly of the personal dispositions of the Icelanders; and all travellers notice their general intelligence and abilities. 'I have been surprised,' says Dr. H., 'at the degree of cheerfulness and vivacity which I found to prevail among them, and that not unfrequently under extreme depression and want. Their predominant character is that of unsuspecting frankness, pious contentment, and a steady liveliness of temperament, combined with a strength of intellect and acuteness of mind seldom to be met with in any other part of the world. They have also been noted for the unconquerable attachment which they feel for their native island. With all their privations, and exposed, as they are, to numerous dangers from the operation of physical causes, they live under the practical influence of one of their common proverbs: Island er hinn besta land sem solinn kinnar upp. Iceland is the best land on which the sun shines.'

On the subject of their literary attainments another recent traveller observes, 'I have frequently been astonished at the familiarity with

which many of these self-taught peasants have discoursed on subjects which, in other countries, we should expect to hear started by those only who fill the professor's chair, or who have otherwise devoted their lives to the study of science.' The same traveller remarks, in another place, 'it is no uncommon thing to hear youths repeat passages from Greek and Latin authors, who have never been farther than a few miles from the place where they were born. Nor do I scarcely ever recollect entering a hut where I did not find some individual capable of entering into conversation with me on topics which would be reckoned altogether above the understanding of people of the same rank of society in other countries of Europe. On many occasions, indeed, the common Icelanders discover an acquaintance with the history and literature of other nations which is perfectly astonishing.'

ICELANDIC CRYSTAL, in mineralogy, a pure calcareous spar, in oblique rhomboidal prisms, principally known for its double refraction. With respect to the figure of Iceland crystals, they are not all of the regular form of an oblique parallelopiped, though the generality of them are such. For this crystal spar, like many others, shoots out from a large base on the rock, into many irregular, uneven-sided scalenous pyramids, small and large; which, when broken by gentle strokes with a hammer, readily split into many pieces, parallel-wise to the base; and those on the outside are of irregular forms, with opposite sides and angles unequal. Some are like a wedge or isosceles prisms, some quadrangular pyramids. Again, some of these spars are very hard, and will take a fine polish; others are softer. Some of these pieces are colorless and transparent as glass itself, though few of these are to be met with, the greatest part being foul with mundic, and other opacous matter. Some pieces are of a yellowish hue, and others of a darker complexion; but all agree in having a double refraction and a double focus, when ground into lenses; but they differ in other respects, according to their different species. Iceland crystal will bear a red heat without losing its transparency; and, in a very intense heat, calcines without fusion; steeped a day or two in water it loses its natural polish. It is easily scratched with the point of a pin; it will not give fire on being struck against steel; and ferments and is dissolved in aqua fortis. It is found in Iceland, whence it has its name; and in France, Germany, and many other places. The phenomena of this stone are very remarkable, were first suggested by Bartholine, and have been examined with great accuracy by M. Huygens and Sir Isaac Newton. In other pellucid bodies it is well known that there is only one refraction, in this there are two; so that objects viewed through it appear double. In other transparent bodies a ray falling perpendicularly on the surface passes straight through, without suffering any refraction; and an oblique ray is always divided; but, in Iceland crystal, every ray, whether perpendicular or oblique, becomes divided into two, by means of the double refraction. Mr. B. Martin prepared several prisms of Iceland crystal which exhibited not only a double but a multiple refraction. A single prism produced a six-fold refraction, and a prism which afforded two images applied to one of six produced twelve images. He farther observes, with respect to Iceland crystal, that, though the sides of its plane of perpendicular refraction be parallel to one another, a beam of light transmitted through them will not be colorless; in which property it differs from all other known substances. See OPTICS.

ICENI, an ancient nation of South Britain, who inhabited the counties now called Suffolk, Norfolk, Cambridgeshire, Huntingdonshire, and the Isle of Ely.

ICE-PLANT. See MESEMBRYANTHEMUM.

ICHE, a town of France in the department of Vosges, four miles S. S. E. of Marche, and four and a quarter N. N. E. of Chatillon sur Saone.

ICHNEU'MON, *n. s.* Gr. *ἰχνέυμων*. A small animal that breaks the eggs of the crocodile.

ICHNEUMON, in zoology. See VIVERRA.

ICHNEUMONFLY, *n. s.* A sort of fly.

The generation of the *ichneumonfly* is in the bodies of caterpillars, and other nymphæ of insects.
Derham's Physico-Theology.

ICHNEUMON, the ichneumon fly, in entomology, a genus of flies of the hymenoptera order. The mouth is armed with jaws, without any tongue; the antennæ have above thirty joints; the abdomen is generally petiolated, joined to the body by a pedicle or stalk; the tail is armed with a sting, enclosed in a double-valved cylindrical sheath; the wings are lanceolated and plain. This genus is very numerous. In Gmelin's edition of the Systema Naturæ 415 species are enumerated. They are divided into families, from the color of their scutellum and antennæ, as follow: 1. Those with a whitish scutcheon, and antennæ annulated with a whitish band. 2. Those which have a white escutcheon and antennæ entirely black. 3. With a scutcheon of the same color as the thorax; the antennæ encompassed with a fillet. 4. With a scutcheon of the same color as the thorax; the antennæ black and setaceous. 5. With setaceous clay-colored antennæ. 6. With small filiform antennæ, and the abdomen oval and slender. One striking character of these species of flies is the almost continual agitation of their antennæ. The name ichneumon has been applied to them from the service they do by destroying caterpillars, plant-lice, and other insects; as the ichneumon or mangouse is said to destroy the crocodiles. The variety to be found in the species of ichneumons is prodigious; among the smaller species there are males who perform their amorous preludes in the most passionate and gallant manner. The posterior part of the females is armed with a wimble, visible in some species, no ways discoverable in others; and that instrument, though so fine, is able to penetrate through mortar and plaster; the structure of it is more easily seen in the long-wimbled fly. The food of the family to be produced by this family is the larva of wasps or mason bees; for it no sooner espies one of those nests, but it fixes on it with its wimble, and bores through the mortar of

which it is built. The wimble itself consists of three pieces: two collateral ones, hollowed out into a gutter, serve as a sheath, and contain a compact, solid, dentated stem, along which runs a groove that conveys the egg from the animal, who supports the wimble with its hinder legs, lest it should break; and, by a variety of movements, which it dexterously performs, it bores through the building, and deposits one or more eggs, according to the size of the ichneumon, though the largest drop but one or two. Some agglutinate their eggs upon caterpillars; others penetrate through the caterpillar's eggs, though very hard, and deposit their own in the inside. When the larva is hatched, its head is so situated, that it pierces the caterpillar, and penetrates to its very entrails. These larvæ suck out the nutritious juices of the caterpillar, without attacking the vitals of the creature, who appears healthy, and even sometimes transforms itself to a chrysalis. It is not uncommon to see those caterpillars fixed upon trees, as if they were sitting upon their eggs; and it is afterwards discovered that the larvæ, which were within their bodies, have spun their threads, with which, as with cords, the caterpillars are fastened down, and so perish miserably. Plant-lice, the larvæ of the curculiones, and spider's eggs, are also sometimes the cradle of the ichneumon fly. Carcases of plant-lice, void of motion, are often found on rose-tree leaves; they are the habitation of a small larva, which, after having eaten up the entrails, destroys the springs and inward economy of the plant-louse, performs its metamorphosis under shelter of the pellicle which enfolds it, contrives itself a small circular outlet, and sallies forth into open air. There are ichneumons in the woods, who dare attack spiders, run them through with their sting, tear them to pieces, and thus avenge the whole nation of flies of so formidable a foe: others, destitute of wings, and those are females, deposit their eggs in spiders' nests. The ichneumon of the bedeguar, or sweet-briar sponge, and that of the rose-tree, perhaps only deposit their eggs in those places, because they find other insects on which they feed.

ICHNOG'RAPHY, *n. s.* Gr. *ἰχνος* and *γράφω*. The ground plot.

It will be more intelligible to have a draught of each front in a paper by itself, and also to have a draught of the ground-plot or *ichnography* of every story in a paper by itself. *Moxon.*

Ichnography, in perspective, from *ἰχνος*, footstep, and *γραφω*, to write, is the view of any thing cut off by a plane parallel to the horizon, just at the base of it.

Ichnography, among painters, signifies a description of images or of ancient statues of marble and copper, of busts and semi-busts, of paintings in fresco, mosaic works, and ancient pieces of miniature.

I'CHOR, *n. s.* } Gr. *ἰχωρ*. A thin sanious
I'CHOROUS, *adj.* } watery fluid like serum: ichorous, a serous, sanious, undigested state of a wound or ulcer.

The lung-growth is imputed to a superficial sanious or *ichorous* exulceration. *Harvey on Consumption.*

The pus from an ulcer of the liver, growing thin and *ichorous*, corrodes the vessels. *Arbuthnot on Diet.*

Milk, drawn from some animals that feed only upon flesh, will be more apt to turn rancid and putrify, acquiring first a saline taste, which is a sign of putrefaction, and then it will turn into an *ichor*. *Arbuthnot on Aliments.*

Ichor, in surgery, is sometimes used for a thicker kind of humor flowing from ulcers, called also sanies.

ICHTHYOCOLLA, isinglass, or fish-glue, from *ἰχθυς*, fish, and *κολλα*, glue, a preparation from the fish named huso. See Accipenser and Chemistry. The best description of isinglass, and of the method of making it, is that given by Humphrey Jackson, esq., in the sixty-third volume of the Philosophical Transactions. 'All authors (he says) who have hitherto delivered processes for making ichthyocolla, fish-glue, or isinglass, have greatly mistaken both its constituent matter and preparation.' No artificial heat is necessary to the production of isinglass, neither is the matter dissolved for this purpose; for, as the continuity of its fibres would be destroyed by solution, the mass would become brittle in drying, and snap short asunder, which is always the case with glue, but never with isinglass. The latter, indeed, may be resolved into glue with boiling water; but its fibrous recomposition would be found impracticable afterwards, and a fibrous texture is one of the most distinguishing characteristics of genuine isinglass. A due consideration that an imperfect solution of isinglass, called fining by the brewers, possessed a peculiar property of clarifying malt liquors, induced me to attempt its analysis in cold subacid menstruums. One ounce and a half of good isinglass, steeped a few days in a gallon of stale beer, was converted into good fining, of a remarkably thick consistence; the same quantity of glue, under similar treatment, yielded only a mucilaginous liquor resembling diluted gum-water, which, instead of clarifying beer, increased both its tenacity and turbidness, and communicated other properties in no respect corresponding with those of genuine fining. If what is commercially termed long or short stapled isinglass be steeped a few hours in fair cold water, the entwisted membranes will expand, and re-assume their original beautiful hue, and, by a dexterous address, may be perfectly unfolded.' The sounds, or air-bladders, of fresh-water fish in general, are preferred for this purpose, as being the most transparent, flexible, delicate substances. These constitute the finest sorts of isinglass; those called book and ordinary staple are made of the intestines, and probably of the peritonæum of the fish. The beluga yields the greatest quantity, as being the largest and most plentiful fish in the Muscovy rivers; but the sounds of all fresh-water fish yield more or less fine isinglass, particularly the smaller sorts, found in prodigious quantities in the Caspian Sea, and several hundred miles beyond Astrakhan, in the Wolga, Yaik, Don, and even as far as Siberia, where it is called kle or kla by the natives, which implies a glutinous matter; it is the basis of the Russian glue, which is preferred to all other kinds for its strength. The

sounds, which yield the finer isinglass, consist of parallel lines, and are easily rent longitudinally; but the ordinary sorts are found composed of double membranes, whose fibres cross each other obliquely, resembling the coats of a bladder; hence the former are more readily pervaded and divided with subacid liquors; but the latter, through a peculiar kind of interwoven texture, are with great difficulty torn asunder, and long resist the power of the same menstruum; yet, when duly resolved, are found to act with equal energy in clarifying liquors. Isinglass receives its different shapes in the following manner: the parts of which it is composed, particularly the sounds, are taken from the fish while sweet and fresh, slit open, washed from their slimy sordes, divested of every thin membrane which enveopes the sound, and then exposed to stiffen a little in the air. In this state they are formed into rolls about the thickness of a finger, and in length according to the intended size of the staple; a thin membrane is generally selected for the centre of the roll, round which the rest are folded alternately, and about half an inch of each extremity of the roll is turned inwards. The due dimensions being thus obtained, the two ends of what is called short staple are pinned together with a small wooden peg; the middle of the roll is then pressed a little downwards, which gives it the resemblance of a heart shape; and thus it is laid on boards, or hung up to dry. The sounds which compose the long staple are longer than the former; but the operator lengthens this sort at pleasure by interfolding the ends of one or more pieces of the sound with each other. The extremities are fastened with a peg like the former; but the middle part of the roll is bent more considerably downwards; and, to preserve the shape of the three obtuse angles thus formed, a piece of round stick, about a quarter of an inch diameter, is fastened in each angle with small wooden pegs, in the same manner as the ends. In this state it is permitted to dry long enough to retain its form, when the pegs and sticks are taken out, and the drying completed; lastly, the pieces of isinglass are colligated in rows, by running packthread through the peg-holes, for convenience of package and exportation. The membranes of the book art, being thick and refractory, will not admit a similar formation with the preceding; the pieces, therefore, after their sides are folded inwardly, are bent in the centre, in such a manner that the opposite sides resemble the cover of a book, whence the name; a peg, being thus run across the middle, fastens the sides together, and thus it is dried like the former. This sort is interleaved, and the pegs run across the ends, the better to prevent its unfolding. Cake isinglass is formed of the fragments of the staple sorts, put into a flat metalline pan, with a very little water, and heated just enough to make the parts shere like a pancake when it is dried; but frequently it is overheated, and such pieces are useless in fining. Experience has taught the consumers to reject them. Isinglass is best made in summer, as frost gives it a disagreeable color, deprives it of weight, and impairs its gelatinous principles; its fashionable forms are unnecessary, and frequently injurious to its native qualities. Isinglass is sometimes used in medicine; and may be given in a thin acrimonious state of the juices, in the same manner as the vegetable gums and mucilages, regard being had to their different disposition to putrescence. Women subject to the fluor albus take it dissolved in milk. See CHEMISTRY.

ICHTHYOL'OGY, *n. s.* Fr. *ichthyologie*; Gr. *ἰχθυολογία*, from *ἰχθὺς* and *λέγω*. The doctrine of the nature of fish.

> Some there are, as camels and sheep, which carry no name in *ichthyology*. *Browne's Vulgar Errours.*

ICHTHYOLOGY. See PISCES.

ICHTHYOPH'AGY, *n. s.* Gr. *ἰχθὺς* and *φάγω*. Diet of fish; the practice of eating fish.

ICHTHYOPHAGI (from *ἰχθὺς*, fish and *φαγεῖν* to eat), nations who according to the fabulous accounts of Herodotus lived only upon fish. They had cattle, but made no use of them, excepting to feed their fish withal: they made their houses of large fish-bones, the ribs of whales serving them for their beams. The jaws of these animals served them for doors; and the mortars wherein they pounded their fish, and baked it in the sun, were nothing else but their vertebræ.

ICHTHYPERIA, in natural history, a name given by Hill to the bony palates and mouths of fishes, usually met with fossile, either in single pieces or fragments. They are of the same substance with the bufonitæ; and are of very various figures, some broad and short, others longer and slender; some very gibbose, and others plainly arched. They are likewise of various sizes, from the tenth of an inch to two inches long, and an inch in breadth.

ICKENILD STREET, an old Roman highway, so called from the Iceni, which extended from Yarmouth in Norfolk, the east part of the kingdom of the Iceni, to Barley in Hertfordshire, giving name in the way to several villages, as Ickworth, Icklingham, and Ickleton. From Barley to Royston it divides the counties of Cambridge and Hertford. From Ickleford it goes by Tring, crosses Bucks and Oxfordshire, passes the Thames at Goring, and extends to the west of England.

ICOLMKILL, or ICOLUMBKILL, a celebrated island of Scotland, and one of the Hebrides; called also I, Hy, Hii, and anciently Iona: famous for the monastery founded in it by St. Columba. These ruins are much dilapidated, but they are now preserved by a strong wall erected round the chief parts, at the expense of the Argyle family. The cathedral is thirty-eight yards long, and eight broad; the east window of which is a beautiful specimen of Gothic workmanship. In the middle stood a tower, three stories high, supported by four arches. Near the altar-place is a beautiful tomb of black marble, with the figure of the abbot Macfingone. On the north of the cathedral are some remains of the bishop's house, and on the south is a small neat chapel, in which are many curious tombs to the memory of the lords of the isles. Here is also an enclosed burying-ground, containing the tombs of forty-eight Scottish kings, four kings of Ireland, eight of Norway, and one of France, all buried

here from the supposed peculiar sanctity of the ground. Bede calls it Hi; but the proper name is I, which in the Gaelic signifies an island. The name Iona is now quite lost, and it is always called I, except when the speaker would wish to lay an emphasis upon the word; it is then called Icolumkill. 'It lies in the Atlantic, and is separated from the west point of Ross by a narrow channel, called the Sound of I. It is about three miles long, and from half a mile to a mile in breadth. It is flat, consisting of heath, green pasture, rocks, and arable ground, very fertile.'

I'CON, *n. s.* } Greek, εικονοκλαστης,
Icon'oclast, *n. s.* } εικων and κλάζω. Icon, a
Iconol'ogy, *n. s.* } picture, or representation:
iconoclast, a breaker of images: iconology, the doctrine of representation by a picture.

Some of our own nation, and many Netherlanders, whose names and *icons* are published, have deserved good commendation. *Hakewill on Providence.*

Boysardus, in his tract of divination, hath set forth the *icons* of these ten, yet added two others. *Browne's Vulgar Errors.*

ICONIUM, in ancient geography, the capital city of Lycaonia in Asia Minor, now called Cogni. St. Paul coming to Iconium (Acts xiii. 51; xiv. 1, &c.), in A. D. 45, converted many Jews and Gentiles there. But some incredulous Jews excited the Gentiles to rise against Paul and Barnabas, which obliged them to fly to the neighbouring cities. St. Paul undertook a second journey to Iconium, A. D. 51.

ICONOCLASTÆ, Iconoclastes, Iconoclasts, are titles which the church of Rome gives to all who reject the use of images. Not only the reformed, but some of the eastern churches, are called Iconoclastæ, and esteemed by them heretics, as opposing the worship of the images of God and the sainsts, and breaking their representations in churches. The opposition to images began in Greece under the emperor Bardanes, soon after the commencement of the eighth century, when the worship of them became common. But the tumults occasioned by it were quelled by a revolution, which, in 713, deprived Bardanes of the imperial throne. The dispute, however, broke out with redoubled fury under Leo the Isaurian, who issued out an edict, in 726, abrogating the worship of images. This edict occasioned a civil war, which broke out in the islands of the Archipelago, and ravaged a part of Asia, and afterwards reached Italy. The civil commotions in Italy were chiefly promoted by the Roman pontiffs, Gregory I. and II. Leo was excommunicated, and his subjects in the Italian provinces, rising in arms, either massacred or banished all the emperor's officers. Leo however assembled a council at Constantinople in 730, which degraded Germanus, the bishop of that city, who was a patron of images; and ordered all the images to be publicly burnt. But the zeal of Gregory II. in favor of image-worship was surpassed by his successor Gregory III.; in consequence of which the Italian provinces were torn from the Grecian empire. Constantine Copronymus, in 754, convened a council at Constantinople, regarded by the Greeks as the seventh œcumenical council, which solemnly condemned the worship and use of images; and his successor Leo IV. pursued the same measures, and enacted penal statutes to extirpate idolatry. Irene, who poisoned her husband Leo in 780, and usurped the throne during the minority of her son Constantine, summoned a council at Nice in Bithynia, in 786, called the second Nicene council, which restored the worship of images, and denounced severe punishments against those who maintained, that God was the only object of religious adoration. Charlemagne distinguished himself as a mediator in this controversy: he ordered four books to be composed, refuting the arguments urged by the Nicene bishops to justify the worship of images; which he sent to pope Adrian in 700, to engage him to withdraw his approbation of the decrees of the last council of Nice. Adrian wrote an answer; and in 794 a council of 300 bishops, assembled by Charlemagne at Frankfort on the Maine, confirmed the opinion contained in the four books, and solemnly condemned the worship of images. In the Greek church, after the banishment of Irene, the controversy concerning images broke out anew, and was carried on by the contending parties, during half the ninth century, with various success. The emperor Nicephorus appears to have been an enemy to this worship; but his successor, Michael Curopalates, patronised and encouraged it. But the scene changed on the accession of Leo the Armenian, who assembled a council at Constantinople in 814, that abolished the decrees of the Nicene council. His successor, Michael Balbus, disapproved the worship of images, and his son Theophilus treated the idolaters with great severity. However, the empress Theodora, after his death, and during the minority of her son, assembled a council at Constantinople in 842, which approved the decrees of the second Nicene council, and restored image-worship. The council held under Photius in 879, reckoned by the Greeks the eighth general council, also confirmed the Nicene decrees; upon which a festival was instituted by the Greeks, called the feast of orthodoxy. The council of Paris, assembled in 824 by Louis the Meek, allowed the use of images in churches, but prohibited rendering them religious worship. But, towards the conclusion of this century, the Gallican clergy began to pay a kind of religious homage to the images of saints, and their example was followed by the Germans and other nations. However, the Iconoclastæ still had their adherents among the Latins; the most eminent of whom was Claudius, bishop of Turin, who, in 823, ordered all images, and even the cross, to be cast out of the churches, and burnt; and he wrote a treatise against the use and worship of them. The controversy was again revived by Leo bishop of Chalcedon, in the eleventh century, on the emperor Alexius's converting the silver images that adorned the churches into money, to supply the exigencies of the state. The bishop maintained that he had been guilty of sacrilege, and published a treatise to show that in these images there resided an inherent sanctity, and that the adoration of Christians ought to be extended to them. Alexius assembled a council at Constantinople, which determined, that the images of

Christ and the saints were to be honored only with a relative worship; and that invocation and worship were to be addressed to the saints only as the servants of Christ. In the western church the worship of images was opposed by several considerable parties, as the Petrobrussians, Albigenses, Waldenses, &c., till at length this idolatrous practice was entirely abolished in many parts of the Christian world by the Reformation.

ICONOGRAPHIA, or ICONOGRAPHY, from εικον, and γραφω, I describe. The description of images or ancient statues of marble and copper; also of busts and semi-busts, penates, paintings in fresco, mosaic works, and ancient pieces of miniature.

ICONOLATRÆ, or ICONOLATRES, from εικον, and λατρευω, I worship, or Iconoduli, those who worship images: a name which the Iconoclastæ give to those of the Romish communion on account of their adoring images. See ICONOCLASTÆ.

ICOSAHEDRON, in geometry, a regular solid, consisting of twenty triangular pyramids, whose vertexes meet in the centre of a sphere supposed to circumscribe it; and therefore have their height and bases equal: wherefore the solidity of one of these pyramids multiplied by twenty, the number of bases, gives the solid contents of the icosahedron.

ICOSANDRIA, from εικοσι, twenty, and ανηρ, a husband, the name of the twelfth class in Linnæus's sexual method, consisting of plants with hermaphrodite flowers, which are furnished with twenty or more stamina, inserted into the inner side of the calyx or petals. See BOTANY.

ICTER'ICAL, *n. s.* Fr. *icterique*; Lat. *icterus*. Afflicted with the jaundice: a term applied to remedies for the cure of jaundice.

In the jaundice the choler is wanting, and the *icterical* have a great sourness, and gripes with windiness. *Floyer.*

ICTERUS, the jaundice. See MEDICINE.

ICY CAPE, the most north-western head-land of North America, opposite to Cape North in Asia. The opening into Bhering's Straits runs between them.

IDA, in ancient geography, a mountain in the heart of Crete, the highest in the island; sixty stadia in compass; the nursing place of Jupiter. Also the name of the mountain of Mysia, or rather a chain of mountains, extending from Zeleia, on the south of the territory of Cyzicus, to Lectum, the utmost promontory of Troas, &c. It was covered with green wood, and the elevation of its top opened a fine extensive view of the Hellespont and the adjacent countries; for which reason it was frequented by the gods during the Trojan war, according to Homer. The top was called Gangara, and celebrated by the poets for the judgment of Paris. See PARIS.

IDALIUM, in ancient geography, a promontory on the east side of Cyprus, now called Capo di Griego; with a high rugged eminence rising over it, in the form of a table; sacred to Venus. The eminence was covered with a grove.

IDE'A, *n. s.* } Fr. *idée*; Gr. ιδεα. Mental
IDE'AL, *adj.* } image: ideal, pertaining to
IDE'ALLY, *adv.* } mind; mental; intellectual; fanciful; not perceived by the senses.

Our Saviour himself, being to set down the perfect *idea* of that which we are to pray and wish for on earth, did not teach to pray or wish for more than only that here it might be with us, as with them it is in heaven. *Hooker.*

I did infer your lineaments,
Being the right *idea* of your father;
Both in your form and nobleness of mind.
Shakspeare.

Her sweet *idea* wandered through his thoughts.
Fairfax.

How good, how fair,
Answering his great *idea*! *Milton's Paradise Lost.*

A transmission is made materially from some parts, and *ideally* from every one. *Browne's Vulgar Errours.*

Happy you that may to the saint, your only *idea*
Although simply attired, your manly affection utter.
Sidney.

If Chaucer by the best *idea* wrought,
The fairest nymph before his eyes he set. *Dryden.*

Whatsoever the mind perceives in itself, or is the immediate object of perception, thought, or understanding, that I call *idea*. *Locke.*

There is a two-fold knowledge of material things; one real, when the thing, and real impression of things on our senses, is perceived; the other *ideal*, when the image or *idea* of a thing, absent in itself, is represented to and considered on the imagination. *Cheyne's Philosophical Principles.*

The form under which these things appear to the mind, or the result of our apprehension, is called an *idea*. *Watts.*

Delightful task! to rear the tender thought,
To teach the young *idea* how to shoot,
To pour the fresh instruction o'er the mind,
To breathe the enlivening spirit, and to fix
The generous purpose, in the glowing breast.
Thomson.

IDEN'TITY, *n. s.* } Fr. *identité*; Lat. *idem*.
IDEN'TICAL, *adj.* } Sameness, as opposed to
IDEN'TIC, *adj.* } diversity, whether applied to persons or things; comprising the same idea.

Their majus is *identical* with magis. *Hale.*

The beard's the *identick* beard you knew,
The same numerically true. *Hudibras.*

There is fallacy of equivocation from a society in name, inferring an *identity* in nature: by this fallacy was he deceived that drank aqua-fortis for strong water. *Browne's Vulgar Errours.*

Those ridiculous *identical* propositions, that faith is faith, and rule is a rule, are first principles in this controversy of the rule of faith, without which nothing can be solidly concluded either about rule or faith. *Tillotson's Sermons.*

Considering any thing as existing, at any determined time and place, we compare it with self existing at another time, and thereon form the ideas of *identity* and diversity. *Locke.*

Certainly those actions must needs be regular, where there is an *identity* between the rule and the faculty. *South's Sermons.*

By cutting off the sense at the end of every first line which must always rhime to the next following, is produced too frequent an *identity* in sound, and brings every couplet to the point of an epigram. *Prior.*

If this pre-existent eternity is not compatible with a successive duration, as we clearly and distinctly perceive that it is not, then it remains, that some being, though infinitely above our finite comprehensions, must have had an *identical*, invariable continuance from all eternity, which being is no other than God. *Bentley's Sermons.*

IDES, *n s.* Fr. *ides*; Lat. *idus*. A term anciently used among the Romans, and still re-

tained in the Romish kalendar. It is the 13th day of each month, except in the months of March, May, July and October, in which it is the 15th day, because in these four months it was six days before the nones, and in the others four days.

A soothsayer bids you beware of the *ides* of March. *Shakspeare.*

Ides, in the ancient Roman kalendar, the name given to the thirteenth day of the month, except in March, May, July, and October, in which it fell on the fifteenth. The origin of the word is contested. Some will have it formed from ιδειν, to see; because the full moon was commonly seen on the days of the ides: others from ειδος, figure, from the image of the full moon then visible: others from the Hetrurian word iduo, i. e. I divide, because the ides divided the moon into two nearly equal parts. The ides came between the kalends and the nones; and, like them, were reckoned backwards. Thus they called the fourteenth day of March, May, July, and October, and the twelfth of the other months, pridie idus, or the day before the ides; the next preceding day they called the tertia idus; the next quarta, and so on, reckoning always backwards till they came to the nones. This method of reckoning time is still retained in the chancery of Rome, and in the kalendar of the breviary. The ides of May were consecrated to Mercury: the ides of March were esteemed unhappy, after the murder of Cæsar on that day; the ides of August were consecrated to Diana, and were observed as a feast-day by the slaves. On the ides of September, auguries were taken for appointing the magistrates, who formerly entered into their offices on the ides of May, afterwards on those of March.

Ides (Evert Ysbrant), a Russian traveller employed by Peter the Great, was a native of Gluckstadt in Holstein, and, entering into the service of the czar, was in 1692 sent on an embassy to China. After his return to Europe he published the Travels of Ysbrant Ides from Moscow to China, which were translated into English, and printed in 1 vol. 4to. in 1706.

IDIOC'RACY, *n. s.* / IDIOCRAT'ICAL, *adj.* / IDIOSYN'CRASY, *n. s.* } Fr. *idiocrase;* Greek ιδιος, κρασις and συν. Peculiarity of constitution; peculiar temperament or disposition of body.

Whether quails, from any *idiosyncrasy* or peculiarity of constitution, do innocuously feed upon hellebore, or rather sometimes but medicinally use the same. *Browne's Vulgar Errours.*

The understanding also hath its *idiosyncrasies*, as well as other faculties. *Glanville's Scepsis.*

ID'IOCY, *n. s.* / ID'IOT, *n. s.* / ID'IOTISM, *n. s.* / IDIOT'IC, *adj.* } Fr. *idiot;* Latin *idiota;* Gr. ιδιωτια, ιδιωτης, ιδιωτισμος. Idiot is a fool; a natural: an imbecile person without the powers of reason: idiocy want of understanding: idiotism, folly; mental imbecility; also peculiarity of expression; more properly called idiom: idiotic, foolish; weak; senseless; like an idiotic. This word is often used in a meaning inferior to its full import.

By idle boys and *ideots* vilified,
Who me and my calamities deride. *Sandys.*

Life is a tale,
Told by an *ideot*, full of sound and fury,
Signifying nothing. *Shakspeare. Macbeth.*

What else doth he herein, than by a kind of circumlocution tell his humble suppliants that he holds them *ideots*, or base wretches, not able to get relief? *Raleigh's Essays.*

I stand not upon their *idiocy* in thinking that horses did eat their bits. *Bacon.*

Embryos and *idiots*, eremites and friars,
White, black and grey, with all their trumpery. *Milton.*

Scholars sometimes in common speech, or writing, in their native language, give terminations and *idiotisms* suitable to their native language unto words newly invented. *Hale.*

Many *idiots* will believe that they see what they only hear. *Dennis.*

Idiocy, and Lunacy, in law, excuse from the guilt of crimes. See Crime. 'For the rule of law,' says Blackstone, 'as to lunatics, which also may be easily adapted to idiots, is, that furiosus furore solum punitur. In criminal cases, therefore, idiots and lunatics are not chargeable for their own acts, if committed when under these incapacities; no, not even for treason itself.'

ID'IOM, *n. s.* / IDIOMAT'ICAL, *adj.* / IDIOMAT'IC, *adj.* } Fr. *idiome;* Gr. ιδιωμα. A mode of speaking peculiar to a language or dialect; the particular cast of a tongue; a phrase; phraseology.

He did Romanize our tongue, leaving the words translated as much Latin as he found them; wherein he followed their language, but did not comply with the *idiom* of ours. *Dryden.*

Some that with care true eloquence shall teach,
And to just *idioms* fix our doubtful speech. *Prior.*

Since phrases used in conversation contract meanness by passing through the mouths of the vulgar, a poet should guard himself against *idiomatick* ways of speaking. *Spectator.*

IDIOP'ATHY, *n. s.* Fr. *idiopathie;* Gr. ιδιος and παθος. A primary disease that neither depends on nor proceeds from another.

Idiopathy, in medicine, is opposed to sympathy. Thus, an epilepsy is idiopathic when it happens merely through some injury in the brain; and sympathetic when it is the consequence of some other disorder.

Idiot, or Ideot, in law, denotes a fool from his birth. See Idiocy and Lunacy. A person who has understanding enough to measure a yard of cloth, number twenty rightly, and tell the days of the week, &c., is not an idiot in the eye of the law. But a man who is born deaf, dumb, and blind, is considered by the law in the same state as an idiot. Indeed it is doubted, if ever such an unfortunate human being has existed. See Anatomy.

I'DLE, *adj.* & *v. n.* / I'DLE-HEADED, *adj.* / I'DLENESS, *n. s.* / I'DLER, *n. s.* / I'DLY, *adv.* } Sax. ydel; Goth. *odell.* Lazy; averse from labor; disengaged; useless; vain; unfruitful; barren; trifling; unimportant: idle, to lose time in laziness or inactivity: idleheaded, foolish; unreasonable; delirious; infatuated: idleness, laziness; want of employment; omission of business; unimportance; inefficacy; uselessness; foolishness; mad-

ness: idly, lazily; foolishly; carelessly: idler, a sluggard; a lazy person.

A few sheep, spinning on the feld she kept;
She woulde not ben *idel* til she slept.
Chaucer. The Clerkes Talo.

And as for hire that crouned is in grene,
It is Flora, of these floures goddesse.
And all that hire, on hire awaiting, bene,—
It are such folke that loved *idelnesse*,
And not delite in no kind besinesse.
Id. The Flowre and the Leafe.

Suffice it then, thou money god, quoth he,
That all thine *idle* offers I refuse;
All that I need I have: what needeth me
To covet more than I have cause to use?
Faerie Queene.

Let this and other allegations, suitable unto it, cease to bark any longer *idly* against the truth, the course and passage whereof it is not in them to hinder.
Hooker.

For often have you writ to her; and she in modesty,
Or else for want of *idle* time, could not again reply.
Shakspeare.

Of antres vast, and desarts *idle*,
It was my hent to speak. *Id. Othello.*

He was met even now,
Crowned with rank fumiter and furrow weeds,
Darnel, and all the *idle* weeds that grow
In our sustaining corn. *Id. King Lear.*

I will slay myself,
For living *idly* here in pomp and ease.
Shakspeare.

Ten thousand harms, more than the ills I know,
My *idleness* doth hatch. *Id. Antony and Cleopatra.*

Nature being liberal to all without labour, necessity imposing no industry or travel, *idleness* bringeth forth no other fruits than vain thoughts and licentious pleasures. *Raleigh.*

Many of these poor fishermen and *idlers*, that are commonly presented to his majesty's ships, are so ignorant in sea-service, as that they know not the name of a rope. *Id.*

There is no heat of affection, but is joined with some *idleness* of brain. *Bacon's War with Spain.*

These *idleheaded* seekers resort thither. *Carew.*

They astonished, all resistance lost,
All courage; down their *idle* weapons dropped.
Milton.

Thenceforth I set myse f to play
My solitary time away;
With this, and very well content,
Could so mine *idle* life have spent.
Marvell.

All which yet could not make us accuse her, though it made us pine away for spite, to lose any of our time in so troublesome an *idleness*. *Sidney.*

And threatening France, placed like a painted Jove,
Held *idle* thunder in his lifted hand. *Dryden.*

These are the effects of doting age, vain doubts, and *idle* cares, and over caution. *Id.*

He, fearing *idleness*, the nurse of ill,
In sculpture exercised his happy skill. *Id.*

Upon this loss she fell *idleheaded*, and to this very day stands near the place still. *L'Estrange.*

Children generally hate to be *idle*; all the care then is, that their busy humour should be constantly employed in something of use to them. *Locke.*

Supposing, among a multitude embarked in the same vessel, there are several that in a tempest will rather perish than work; would it not be madness in the rest to stand *idle*, and rather chuse to sink than do more than comes to their share? *Addison.*

Nor is excess the only thing by which sin breaks men in their health, and the comfortable enjoyment of themselves; but many are also brought to a very ill and languishing habit of body by mere *idleness*, and *idleness* is both itself a great sin, and the cause of many more. *South's Sermons.*

And modern Asgil, whose capricious thought
Is yet with stores of wilder notions fraught,
Too soon convinced shall yield that fleeting breath,
Which played so *idly* with the darts of death.
Prior.

Yet free from this poetic madness,
Next page he says, in sober sadness,
That she, and all her fellow-gods,
Sit *idling* in their high abodes. *Id.*

But shall we take the muse abroad,
To drop her *idly* on the road?
And leave our subject in the middle,
As Butler did his bear and fiddle? *Id.*

He wishes to recal the precious hours he has spent in trifles, and loitered away in *idle* and unprofitable diversions. *Rogers.*

An *idle* reason lessens the weight of the good ones you gave before. *Swift.*

Now every splendid object of ambition
Which lately with their various glosses played
Upon my brain, and fooled my *idle* heart,
Are taken from me by a little mist
And all the world is vanished. *Young's Busiris.*

How various his employments, whom the world
Calls *idle*, and who justly in return
Esteems that busy world an *idler* too! *Cowper.*

For health and *idleness* to passion's flame are oil and gunpowder. *Byron. Don Juan.*

Idleness. In China it is a maxim, that if there be a man who does not work, or a woman that is idle, in the empire, somebody must suffer cold or hunger: the produce of the lands not being more than sufficient, with culture, to maintain the inhabitants: and therefore, though the idle person may shift off the want from himself, yet it must fall somewhere. The court of Areopagus at Athens punished idleness, and examined every citizen how he spent his time. The intention was that the Athenians, knowing they were to give an account of their occupations, should follow only such as were laudable, and that there might be no room left for such as lived by unlawful arts. The civil law expelled all vagrants from the city: and, in the English law, all idle persons or vagabonds, whom our ancient statutes describe to be 'such as wake on the night, and sleep on the day, and haunt customable taverns and ale-houses, and routs about; and no man wot from whence they come, ne whither they go;' or such as are more particularly described by stat. 17 Geo. II. c. 5, and divided into three classes, idle and disorderly persons, rogues and vagabonds, and incorrigible rogues: all these are offenders against the good order, and blemishes in the government, of any kingdom. They are therefore all to be punished by the statute last mentioned. Persons harboring vagrants are liable to a fine of forty shillings and to pay all expenses brought upon the parish thereby: in the same manner as, by the ancient laws, whoever harboured any stranger for more than two nights, was answerable to the public for any offence that such his inmate might commit.

I'DOL, *n. s.*
IDOL'ATER, *n. s.*
IDOL'ATRIZE, *v. a.*
IDOL'ATROUS, *adj.*
IDOL'ATROUSLY, *adv.*
IDOL'ATRY, *n. s.*
I'DOLIST, *n. s.*
I'DOLIZE, *v. a.*

Gr. εἶδος, εἰδωλον; Lat. *idolum*; Fr. *idole*. The primary meaning here is similitude: an idol is an image; a counterfeit; a representation; an image worshipped as the representative of Deity; one loved to adoration: idolater, one who pays divine honors to idols; one who worships for God that which is not God; this conduct is called idolatry, from Gr. εἶδος and λατρεια, cultus: idolist is a poetic word signifying a worshipper of images: to idolize is to love supremely, tenderly, or to adoration; to reverence.

Woe to the *idol* shepherd that leaveth his flock.
Zech. ii. 17.

They did sacrifice upon the *idol* altar, which was upon the altar of God. 1 *Mac.* i. 59.

Tho (then), shewed him Cecile, all open and plain,
That all *idoles* nis but a thing in vain,
For they ben dombe, and therto they ben deve;
And charged him his *idoles* for to leve.
Chaucer. The Nonnes Second Tale.

He was a lechour and an *idolastre*,
And in his elde he veray God forsoke.
Id. The Merchantes Tale.

Men beholding so great excellence,
And rare perfection in mortality,
Do her adore with sacred reverence,
As the *idol* of her maker's great magnificence.
Faerie Queene.

The state of *idolaters* is two ways miserable: first, in that which they worship they find no succour; and secondly, at his hands, whom they ought to serve, there is no other thing to be looked for but the effects of most just displeasure, the withdrawing of grace, dereliction in this world, and in the world to come confusion. *Hooker.*

Not therefore whatsoever idolaters have either thought or done; but let whatsoever they have either thought or done *idolatrously*, be so far forth abhorred. *Id.*

Thou shalt be worshipped, kissed, loved, and adored;
And, were there sense in his *idolatry*,
My substance should be statued in thy stead.
Shakspeare.

He's honoured and loved by all;
The soldier's god, and people's *idol*.
Denham's Sophy.

Those who are generous, humble, just, and wise,
Who not their gold, nor themselves *idolize*.
Denham.

A nation from one faithful man to spring,
Him on this side Euphrates yet residing,
Bred up in *idol* worship. *Milton's Paradise Lost.*

I to God have brought
Dishonour, obloquy, and oped the mouths
Of *idolists* and atheists. *Id. Agonistes.*

One who would change the worship of all climates,
And make a new religion whereso'er she comes,
Unite the differing faiths of all the world
To *idolize* her face. *Dryden's Love, Triumphant.*

Never did art so well with nature strive,
Nor ever *idol* seemed so much alive;
So like the man, so golden to the sight;
So base within, so counterfeit and light.
Dryden.

Idolatry is not only an accounting or worshipping that for God which is not God, but it is also a worshipping the true God in a way unsuitable to his nature; and particularly by the mediation of images and corporeal resemblances. *South.*

So gracious is their *idol*, dear variety,
That for another's love they would forego
An angel's form, to mingle with a devil's.
Rowe's Ambitious Stepmother.

The kings were distinguished by judgments or blessings, according as they promoted *idolatry*, or the worship of the true God. *Addison's Spectator.*

The apostle is there arguing against the gnosticks, who joined in the *idol* feasts, and whom he therefore accuses of participating of the *idol* god. *Atterbury.*

An astrologer may be no Christian; he may be an *idolater* or a pagan; but I would hardly think astrology to be compatible with rank atheism.
Bentley's Sermons.

See there he comes, the exalted *idol* comes.
Somerville.

Like a coy maiden, ease, when courted most,
Farthest retires—an *idol* at whose shrine
Who oft'nest sacrifice are favored least. *Cowper.*

Parties, with the greatest violation of Christian unity, denominate themselves, not from the grand author and finisher of our faith, but from the first broacher of their *idolized* opinions. *Decay of Piety.*

For man, to man so oft unjust,
Is always so to women, one sole bond
Awaits them, treachery is all their trust,
Taught to conceal, their bursting hearts despond
Over their *idol*. *Byron. Don Juan.*

IDOLATRY may be distinguished into two kinds. By the first, men adore the works of God, the sun, the moon, the stars, angels, demons, men, and animals; by the second, men worship the work of their own hands, as statues, pictures, and the like. The celestial bodies were the first objects of idolatrous worship. Afterwards, as men became more corrupt, they began to form images, and to entertain the opinion, that by virtue of consecration, the gods were called down to inhabit their statues; though it is certain, that the wiser heathens considered them only as figures designed to recal to their minds the memory of their gods. But the people in general believed the statues themselves to be gods, and paid divine worship to stocks and stones. Soon after the flood, idolatry seems to have prevailed: for, so early as the time of Abraham, we scarcely find any other worship. And it appears, from Scripture, that Abraham's forefathers, and even Abraham himself, were for a time idolaters. The Hebrews were expressly forbidden to make any representation of God; they were not so much as to look upon an idol: and, from the time of the Maccabees to the destruction of Jerusalem, the Jews extended this precept to the making the figure of any man: by the law of Moses they were commanded to destroy all the images they found, and were forbidden to apply any of the gold or silver to their own use, that no one might receive the least profit from any thing belonging to an idol. The Jewish rabbies even asserted that it was unlawful to use any vessel that had been employed in sacrificing to a false god, to warm themselves with the wood of a grove after it was cut down, or to shelter themselves under its shade. But the Christian religion, wherever it prevailed, entirely rooted out the Pagan idolatry; as did also the Mahommedan, which is

built upon the worship of one God. Protestant Christians, however, still charge those of the church of Rome with paying an idolatrous worship to the pictures or images of saints and martyrs; before which they burn lamps, wax-candles, and incense; and, kneeling, offer up their vows and petitions: they, like the Pagans, are said to believe that the saint to whom the image is dedicated presides in a particular manner about its shrine, and works miracles by the intervention of its image; and that, if the image were destroyed or taken away, the saint would no longer perform any miracle in that place. See MYTHOLOGY.

IDOMENEUS, one of the heroes at the Trojan war, succeeded his father Deucalion on the throne of Crete. He accompanied the Greeks to Troy with a fleet of ninety ships, and behaved with great valor. At his return he made a vow to Neptune in a dangerous tempest, that, if he escaped from the fury of the seas and storms, he would offer to the god whatever living creature first presented itself to his eye on the Cretan shore. Unfortunately his son came to congratulate him upon his safe return. Idomeneus performed his vow, but the inhumanity of this sacrifice rendered him so odious in the eyes of his subjects, that he left Crete, and migrated in quest of a settlement. He came to Italy, and founded a city on the coast of Calabria, which he called Salentum. He died in an extreme old age, after he had had the satisfaction of seeing his new kingdom flourish, and his subjects happy. According to the Greek scholiast on Lycophron, Idomeneus, during his absence in the Trojan war, entrusted the management of his kingdom to Leucos, to whom he promised his daughter Clisithere in marriage at his return. Leucos at first governed with moderation, but he was persuaded by Nauplius, king of Eubœa, to put to death Mada, the wife of his master, with her daughter Clisithere, and to seize the kingdom. After these violent measures he strengthened himself on the throne of Crete, and Idomeneus at his return found it impossible to expel the usurper.

IDOMENEUS, a Greek historian, a native of Lampsacus, who flourished in the age of Epicurus. He wrote a history of Samothracia.

IDO'NEOUS, *adj.* Lat. *idoneus*. Proper; convenient; adequate.

You entangle, and so fix their saline part, by making them corrode some *idoneous* body. *Boyle.*

An ecclesiastical benefice is sometime void de jure et facto, and then it ought to be conferred on an *idoneous* person. *Ayliffe.*

I'DYL, *n. s.* Lat. *idyllium*; Gr. ειδυλλιον. A small short poem.

I. E. for id est, or that is.

That which raises the natural interest of money is the same that raises the rent of land, *i. e.* its aptness to bring in yearly, to him that manages it, a greater overplus of income above his rent, as a reward to his labour. *Locke.*

IDYLLION, in ancient poetry, a diminutive of the word eidos, properly signifying any poem of moderate extent. But, as the collection of Theocritus's poems were called idyllia, and the pastoral pieces were by far the best in that collection, the term idyllion is appropriated to pastoral pieces.

JEAL'OUS, *adj.* } Fr. *jaloux*; Lat. *zelosus*; Gr. ζηλος. Suspicious in love; emulous; cautious against dishonor; vigilant; careful; fearful; always, however, connected with suspicion.
JEAL'OUSY, *n. s.*
JEAL'OUSLY, *adv.*
JEAL'OUSNESS, *n. s.*

I have been very *jealous* for the Lord God of hosts. 1 *Kings.*

I am *jealous* over you with godly *jealousy*. 2 *Cor.* ii. 2.

And night and day did ever his diligence
Hire for to please and don hire reverence:
Save ouly, if that I the soth shall sain
Jelous he was. *Chaucer. The Manciples Tale.*

And *jealousie*,
That wered of yelive goldes a gerlond,
And hadde a cuckow sitting on hire hond.
Id. The Knightes Tale.

But gnawing *jealousy* out of their sight
Sitting alone, his bitter lips did bite.
Faerie Queene.

How all the other passions fleet to air,
As doubtful thoughts, and rash embraced despair;
And shuddering fear, and green-eyed *jealousy!*
O love, be moderate; allay thine extasy.
Shakspeare.

Why did you suffer Jachimo,
Slight thing of Italy,
To taint his noble heart and brain
With needless *jealousy?* *Id. Cymbeline.*

To both these sisters have I sworn my love:
Each *jealous* of the other, as the stung
Are of the adder. *Id. King Lear.*

Wear your eye thus; not *jealous*, nor secure:
I would not have your free and noble nature,
Out of self-bounty, be abused: look to't.
Shakspeare.

Mistress Ford, the honest woman, the virtuous creature, that hath the *jealous* fool to her husband! *Id.*

Although he were a prince in military virtue approved, and *jealous* of the honour of the English nation; yet his cruelties and parricides weighed down his virtues. *Bacon's Henry VIII.*

We cannot be too *jealous*, we cannot suspect ourselves too much to labor under the disease of pride which cleaves the closer to us by our belief or confidence that we are quite without it. *Lord Clarendon.*

The obstinacy in Essex, in refusing to treat with the king, proceeded only from his *jealousy*, that when the king had got him into his hands he would take revenge upon him. *Id.*

They, *jealous* of their secrets, fiercely opposed
My journey strange, with clamorous uproar
Protesting fate supreme. *Milton.*

'Tis doing wrong creates such doubts as these;
Renders us *jealous*, and destroys our peace.
Waller.

Small *jealousies*, 'tis true, inflame desire;
Too great, not fan, but quite blow out the fire.
Dryden.

A *jealous* empress lies within your arms,
Too haughty to endure neglected charms. *Id.*

I could not, without extreme reluctance, resign the theme of your beauty to another hand: give me leave to acquaint the world that I am *jealous* of this subject. *Id.*

Oh *jealousy!* thou bane of pleasing friendship,
Thou worst invader of our tender bosoms.
Rowe's Jane Shore.

In Procris' bosom when she saw the dart,
She justly blames her own suspicious heart,
Imputes her discontent to *jealous* fear,
And knows her Strephon's constancy sincere. *Gay.*

While the people are so *jealous* of the clergy's ambition, I do not see any other method left for them to reform the world, than by using all honest arts to make themselves acceptable to the laity. *Swift.*

Thy numbers, *jealousy*, to nought were fixed,
Sad proof of thy distressful state?
Of differing themes the veering song was mixed.
And now it courted love, now raving called on hate.
Collins's Odes.

How nicely *jealous* is every one of us of his own repute, and yet how maliciously prodigal of other men's! *Decay of Piety.*

That's noble, and bespeaks a nation proud
And *jealous* of the blessing. *Cowper's Task.*

I was not treacherous then—nor thou too dear—
But he has said it—and the *jealous* well,
Those tyrants, teasing tempting to rebel,
Deserve the fate their fretting lips foretell. *Byron.*

JEALOUSY, WATERS OF, under the Mosaic law, were a species of ordeal, which seem to have given rise to numerous similar appeals to a divine decision of doubtful cases. The rabbies comment on the text, Num. v., in the following manner:—When any man, prompted by the spirit of jealousy, suspected his wife to have committed adultery, he brought her first before the judges, and accused her of the crime; but as she asserted her innocency, and refused to acknowledge herself guilty, and as he had no witnesses to produce, he required that she should be sentenced to drink the waters of bitterness, which the law had appointed; that God, by this means, might discover what she wished to conceal. After the judges had heard the accusation and the denial, the man and his wife were both sent to Jerusalem, to appear before the sanhedrim, who were the sole judges in such matters. The rabbies say, that the judges of the sanhedrim, at first, endeavoured, with threatenings, to confound the woman, and cause her to confess her crime—when she still persisted in her innocence, she was led to the eastern gate of the court of Israel, where she was stripped of the clothes she wore, and dressed in black, before a number of persons of her own sex. The priest then told her, that, if she knew herself to be innocent, she had no evil to apprehend; but, if she were guilty, she might expect to suffer all that the law threatened; to which she answered, Amen, Amen.

The priest then wrote the words of the law upon a piece of vellum, with ink that had no vitriol in it, that it might be the more easily blotted out. The words written on the vellum were, according to the rabbies, the following:—

'If a strange man have not come near thee, and thou art not polluted by forsaking the bed of thy husband, these bitter waters which I have cursed will not hurt thee: but, if thou have gone astray from thy husband, and have polluted thyself by coming near to another man, may thou be accursed of the Lord, and become an example for all his people; may thy thigh rot, and thy belly swell till it burst! may these cursed waters enter into thy belly, and, being swelled therewith, may thy thigh putrefy!'

After this the priest took a new pitcher, filled it with water out of the brazen basin that was near the altar of burnt offerings, cast some dust into it taken from the pavement of the temple, mingled something bitter, as wormwood, with it, and having read the curses above-mentioned to the woman, and received her answer of Amen, he scraped off the curses from the vellum into the pitcher of water. During this time another priest tore her clothes as low as her bosom, made her head bare, untied the tresses of her hair, fastened her torn clothes with a girdle below her breast, and presented her with the tenth part of an ephah, or about three pints of barley meal, which was in a frying pan, without oil or incense.

The other priest, who had prepared the waters of jealousy, then gave them to be drank by the accused person, and, as soon as she had swallowed them, he put the pan with the meal in it into hand. This was waved before the Lord, and a part of it thrown into the fire of the altar. If the woman were innocent she returned with her husband; and the waters, instead of incommoding her, made her more healthy and fruitful than ever; if, on the contrary, she were guilty, she was seen immediately to grow pale, her eyes started out of her head, and, lest the temple should be defiled with her death, she was carried out, and died instantly with all the ignominious circumstances related in the curses, which the rabbies say had the same effect on him with whom she had been criminal, though he were absent, and at a distance. They add, however, that if the husband himself had been guilty with another woman, then the waters had no bad effect even on his criminal wife; as in that case the transgression on the one part was, in a certain sense, balanced by the transgression on the other.

There is no instance in the Scriptures of this kind of ordeal having ever been resorted to; and probably it never was during the purer times of the Hebrew republic.

JEAN BON ST. ANDRE, baron, originally a French Protestant minister, and then a revolutionary statesman, was born at Montauban in 1749. At the commencement of the revolution in September, 1792, he was nominated deputy to the National Convention, from the department of Lot, and joined the party of the Mountain; voting for the death of the king, and contributing to the destruction of the Girondists. He was a member of the committee of public safety during the tyranny of Robespierre, and on board the French fleet in the battle with lord Howe, on the 1st of June, 1794, as a commissary of the convention. He subsequently became more moderate in his political conduct, and amnesty of October, 1795, having restored him to liberty, he was sent as consul to Algiers. After this he became prefect of Mayence, in which station he is said to have distinguished himself by his integrity and intelligence. Having held the post thirteen years, he died, much regretted, in December, 1815.

JEANNIN (Peter), in biography, was born in 1540, and brought up to the law. Becoming, at an early age, advocate in the parliament of Burgundy, and distinguished by his eloquence,

he was appointed agent for the affairs of the province. In this capacity, though a zealous Catholic, he resisted the order for perpetrating the massacre of the Protestants on St. Bartholomew's day, at Dijon; but joined the leaguers in support of the established religion. Being deputed by the duke of Mayenne to negociate with Philip of Spain, the protector of the league, he soon discovered the real design of that prince was to gain possession of some of the best provinces of France: and, on his return, exerted himself to detach the duke from the Spaniards. Henry IV. made him a member of his council, and nothing was for a time undertaken without his advice. He died at the age of eighty-two, in the year 1622, having witnessed the succession of seven kings to the throne of France. His Memoirs and Negociations, published in 1659 at Paris in folio, have since been printed in 4 vols. 12mo.

JEARS, or GEERS, in the sea-language, an assemblage of tackles, by which the lower yards of a ship are hoisted along the mast to their usual station, or lowered thence as occasion requires; the former of which operations is called swaying, and the latter striking.

JEBB (Samuel), M. D., a learned physician, born at Nottingham, and educated at Cambridge. He settled at Stratford-le-Bow, where he practised with great credit till his death. He published, 1. S. Justini Martyris cum Tryphone Dialogus; 1729, 8vo. 2. Bibliotheca Literaria, a learned compilation, of which only ten numbers were published, 1722. 3. De Vita et Rebus gestis Mariæ Scotorum reginæ; 8vo. 4. An edition of Aristides with notes; 2 vols. 4to. 1728. 5. An elegant edition of Caii de Canibus Britannicis, &c.; 8vo. 1729. 6. Another of Baconi Opus Majus; folio, 1733. 7. Another of Hodii de Græcis illustribus Linguæ Græcæ instauratoribus; 8vo. 1742. He died March the 9th, 1772.

JEBB (Sir Richard), Baronet, M. D., born at Stratford, in Essex, was educated at Oxford; but, being by principle a non-juror, he could not be matriculated, nor take any degree at that university. He afterwards studied medicine at London and Leyden; and obtained, from the latter university, the degree of doctor of medicine. Upon settling in London he became licentiate of the college of physicians; and, in the year 1768, was elected a fellow of that body. He was now for some time physician to St. George's Hospital, and to the Westminster infirmary. About 1777 he was made physician-extraordinary to the king; and in 1780 physician in ordinary to the prince of Wales. On the death of Sir Edward Wilmot, in 1768, he was appointed one of the physicians in ordinary to his majesty; but this office he did not enjoy many months; for, being in attendance on two of the princesses, who were affected with the measles, he was suddenly attacked with fever in their apartments at Windsor, and died, after a few days' illness, on the 4th day of July, 1787, in the fifty-eighth year of his age.

JEBB (John), M. D., a modern divine, who seceded from the establishment, was born in London in 1736, and received his early education in Ireland; whence he removed to Peter House, Cambridge, and took the degree of B. A. there in 1757. In 1761 he proceeded M. A., and obtained a fellowship, which he relinquished on being presented in 1764 to the rectory of Ovington, Norfolk. He published in 1765, in conjunction with the Rev. Messrs. Thorpe and Wollaston, Excerpta quædam e Newtoni Principiis Philosophiæ Naturalis, cum Notis Variorum, 4to. In 1766 he returned to Cambridge, and resumed the office of tutor; delivering in 1768 a course of lectures on the Greek Testament. Next year he obtained three livings in the county of Suffolk, and was appointed chaplain to the earl of Harborough, having married into that nobleman's family. About 1772 he warmly espoused the scheme of archdeacon Blackburne, to procure the abolition of clerical subscription, and, the freedom of his opinions having rendered his situation in the university and church unpleasant, he determined to relinquish both his clerical and university appointments. This he did in September, 1775, and immediately published a statement of his motives. He now took up his residence in the metropolis, and adopted the profession of physic. Having procured a diploma from the university of St. Andrew's, and being admitted a licentiate of the college of physicians, as well as a fellow of the Royal Society, he commenced practice in 1778. His practice was very successful. In the latter part of his life he actively engaged in the discussions relating to the American war, and was a frequent speaker in the popular assemblies of the metropolis. His death took place March 2d, 1786. The year following a collection of his works, theological, political, and medical, was published, with memoirs of his life, by Dr. Disney, 3 vols. 8vo.

JEBUSÆI, JEBUSITES, one of the seven ancient nations of Canaan, descendants of Jebusi, a son of Canaan; so warlike and brave, as to have maintained their ground, especially in Jebus, afterwards called Jerusalem, to the time of David.

JECHONIAH, or JECHONIAS, king of Judah, succeeded his father Jehoiakim, A. A. C. 599, when he was only eight years old; and had reigned only three months and ten days when he was carried to Babylon by Nebuchadnezzar. He was afterwards promoted by Evil-Merodach, about A. A. C. 562.

JEDBURGH, a town of Scotland, capital of Roxburghshire, situated nearly in the middle of the county, on the banks of the river Jed, whence its name. It is well built and populous, and has a good market for corn and cattle. On the west side of the river, near its junction with the Teviot, stand the beautiful ruins of an abbey founded by David I., a part of which ancient pile still serves for a parish-church. Jedburgh is the seat of the sheriff's court and presbytery; and is a barony in the family of Lothian. The original name Gadborough is said to be derived from the Gadeni, a tribe who anciently inhabited the whole tract of country between Northumberland and the Teviot. In a charter granted by king William the Lion in 1165, to the abbot and monks of Jedburgh, the name is often spelt Jedwarth.

JEDDO, or YEDDO. See YEDDO.

JEER, *v. a.* & *n. s.* } Gothic *gar*; Belgic,
JEER'ER, *n. s.* } *scheer*; Italian *xinocare*.
JEER'INGLY, *adv.* } To scoff; flout; ridicule or mock: jeerer; a scorner; a mocker.

The merry world did on a day
With his trainbands and mates agree,
To meet together where I lay,
And all in sport to *jeer* at me. *Herbert.*

My children abroad are driven to disavow me, for fear of being *jeered*. *Howel's England's Tears.*

Abstain from dissolute laughter, petu ant uncomely jests, loud talking and *jeering*, which are called indecencies, and incivilities. *Taylor.*

He *jceringly* demandeth, whether the sonorous rays are refracted. *Derham.*

Midas, exposed to all the *jeers*,
Had lost his art, and kept his ears. *Swift.*

They tipt the forehead in a *jeer*,
As who should say—she wants it here;
She may be handsome, yonng, and rich;
But none will burn her for a witch. *Id.*

JEFFERSON (Thomas, esq.) late president of the United States. He was born April 2d, 1743, according to some accounts, in the county of Albemarle, Virginia, at Shadwell, a country seat which now belongs to his grandson, within a short distance of Monticello, and about half a mile distant from his Ravannah mills; but, according to others, in Chesterfield county. His family were amongst the earliest emigrants to Virginia; of which colony his grandfather, Thomas Jefferson was a native. His father Peter Jefferson, and colonel Fry, were commissioned to determine the boundary line between Virginia and North Carolina in the year 1747. Mr. Jefferson was educated in America: he received the highest honors at the college of William and Mary; and studied law under the celebrated George Wythe, late chancellor of Virginia. He applied himself closely to the study of geometry, geography, natural history, and astronomy; and he was devotedly attached to literature and the fine arts. When he came of age, in 1764, he was put into the nomination of justices of the county in which he lived; at the first election following he became one of its representatives in the legislature, and, before he had attained his twenty-fifth year, he was a distinguished member of the Virginia assembly, taking an active part in all the measures adopted in opposition to the English government. In 1775 he is said to have been the author of the Protest against the Propositions of lord North. From the assembly of Virginia he was sent to the old congress, which brought about the revolution, and was there distinguished by the warmth of his sentiments and the energy of his compositions. He was afterwards employed from 1777 to 1779 with Mr. Pendleton and Mr. Wythe in the revisal and reduction to a single code of the whole body of the English statutes, the acts of the Virginia assembly, and certain parts of the common law. In 1780 (succeeding Patrick Henry, the successor of lord Dunmore), he was elected governor of Virginia, an office which he held during the whole of the revolutionary war. Much difference of opinion occurred respecting his conduct as governor, at the time of the invasion of Virginia by Cornwallis and Arnold; but, as he received the thanks of his fellow-citizens, it must be presumed that by them, at least, it was deemed satisfactory. In 1783 he was employed in drawing up a constitution for Virginia. He was nominated ambassador to Spain, but his destination was subsequently changed to France. There, obtaining the confidence of Vergennes and Calonne, he obtained many concessions in favor of American commerce. From France he came over to England, went back to Versailles, and returned to America in 1789, rendering to Mr. Jay, the minister to foreign affairs, a satisfactory account of his negociations. Shortly after his return he was appointed secretary of state to the new government. Soon after the house of representatives directed him to form a plan for reducing the currency, weights, and measures, to one standard; and subsequently he was also employed to draw up a report respecting the fisheries. Early in 1794 he resigned his office as secretary of state, and retired to his seat at Monticello. From that period he was regarded as the chief of the opposition. After remaining some time in retirement he was, in 1797, called on to fill the vice-president's chair, under Mr. Adams, and, on the expiration of that gentleman's term, in 1801, elected his successor. In 1805 he was re-elected; and, in his first message to the senate and house of representatives, he developed his project of improvement in the public administration. In 1807, in consequence of the differences which arose between the governments of Great Britain and the United States, he called a meeting extraordinary of the congress, and submitted to them his plan for defending the country. To preserve the shipping and commerce of America from the cruisers of France and England, he laid an embargo on all the ports of the United States, until the danger was over When his second term of presidentship had nearly expired he was solicited by the assembly of Pennsylvania to accept the office a third time. This, however, he resolutely refused, was succeeded by Mr. Maddison, and, like his friend Washington, retired to private life, in which he died 4th July, 1826. Mr. Jefferson in 1774 published A summary View of the Rights of British America. In 1781 appeared his Notes on Virginia. He has also written Memoirs on the Fossil Bones found in America. As an agriculturist he was active, and fond of experiment. He invented a new plough, or rather effected an improvement in the old one. At an early age Mr. Jefferson married the daughter of Mr. Wright, a barrister in Virginia. By her, who has been some years dead, he had four daughters, only one of whom, we believe, survives.

JEFFERSON, a county of Indiana, United States, bounded on the east by Switzerland county, on the south by the river Ohio, on the west by the county of Clark, and on the north by Indian lands. It contains excellent land, and is watered by several streams running into the Ohio.

JEFFERSON, another county of the United States, in Kentucky, bounded north and west by the Ohio River, south by Nelson county, and south-east and east by Shelby. Louisville, at the rapids of the Ohio, is the chief town.

JEFFERSON, a county of the United States, in Ohio, bounded on the north by Columbiana county, on the west by Harrison county, on the south by Belmont county, and on the east by the Ohio. The chief town is Steubenville.

JEFFERSON, a county of the United States, in East Tennessee. Dandridge, the chief town.

JEFFERSON, a county of Georgia, erected in 1796 from the counties of Burke and Warren.

JEFFERSON'S RIVER, one of the three branches into which the Missouri is divided, near its source, and so called in honor of the late president Jefferson, by captains Lewis and Clarke, in 1806. It abounds with beavers, by whose operations the channel is almost dammed up, and falls into the Missouri, 2848 miles from its mouth, in lat. 45° 22′ 34″ N.

JEFFERSONIA, a genus of plants so named in honor of the late president of the United States. Class and order pentandria monogynia: CAL. below, composed of five short oval imbricated leaves; COR. monophyllous, funnel-shaped on the receptacle, sub-pentangular, bearing the filaments near the base, its margin hypocrateriform, divided into five round ducts nearly equal; style petiform, shorter than the petal, but longer than the stamens; stigma quadrifid; antheræ erect, linear, sagittated; fruit two univalved, carinated, polyspermous capsules, united at the base, opening on their tops and contiguous sides, having flat seeds, with a marginal wing. Only one species is as yet discovered, viz :—

J. sempervirens. It is a shrub with round polished twining stems, which climb up on bushes and small trees; the petioles short, opposite; leaves oblong, narrow, entire, evergreen, acute; flowers axillary, yellow, having a sweet odor. The woods in Georgia are full of this delightful shrub, which is covered with blossoms for many months in the year.

JEFFREYS (Sir George), baron Wem, commonly called Judge Jeffreys, was the sixth son of John Jeffreys, esq., of Acton in Denbighshire; and was educated at Westminster; whence he removed to the Inner Temple, where he applied himself to the study of the law. He soon became recorder of London, and was next made solicitor to the duke of York; and in 1689 was knighted, and made chief justice of Chester. At length, resigning the recordership, he obtained the post of chief-justice of the King's-bench, and, soon after the accession of James II., the great seal. During the reign of king Charles II. he had shown himself a bitter enemy to those dissenting ministers, who, in that time of persecution, were tried by him; and was one of the greatest advisers and promoters of all the oppressions and arbitrary measures carried on in the reign of James II.; and his sanguinary and inhuman proceedings against Monmouth's adherents in the west will ever render his name infamous. See ENGLAND. Whenever the prisoner was of a different party, or he could please James by condemning him, instead of appearing, according to the duty of his office, as his counsel, he could scarcely allow him to speak for himself; but would load him with the grossest and most vulgar abuse, browbeating, insulting, and ridiculing the witnesses that spoke in his behalf; and even threatening the jury with fines and imprisonment, if they made the least hestitation in bringing in the prisoner guilty. Yet it is said, that, when he was under no state influence, he could occasionally act uprightly. The mayor and aldermen of Bristol had been used to transport convicted criminals to the American plantations, and sell them for their own private emolument, privately threatening to hang petty thieves if they did not petition for transportation. This infamous trade, which had been carried on many years, coming to the knowledge of the lord chief-justice, he made the mayor stand at the bar in his scarlet and fur, with his guilty brethren the aldermen, and plead as common criminals. He then obliged them to give securities to answer informations; but the proceedings were stopped by the revolution. On the arrival of the prince of Orange, the lord chancellor, dreading the public resentment, disguised himself in a seaman's dress, in order to leave the kingdom; and was drinking in a cellar, when he was recognised by a scrivener, who gave notice that he was there; and the mob rushing in, seized him, and carried him before the lord mayor; who sent him with a strong guard to the lords of the council, by whom he was committed to the Tower, where he died April 18th, 1689.

JE'GGET, *n. s.* A kind of sausage.

JEHOVAH, or JAH, יהוה, signifies the Being who is self-existent, and gives existence to others. The Jews had so great a veneration for this name that they left off the custom of pronouncing it, whereby its true pronunciation was forgotten. They call it tetragrammaton, or the name with four letters; and assert, that whoever knows the true pronunciation of it cannot fail to be heard by God.

JEHUD, or JOUD, mountains in the northwest part of Hindostan Proper, extending from Attock east, to Bember. They are part of the territory of the mountaineers, called Gickers, Gehkers, or Kakares. After Timur had passed the Indus, in 1398, the chiefs of these mountains came to make their submission to him; as Ambisares, the king of the same country, did to Alexander about 1730 years before.

JEJUNE', *adj.* } Lat. *jejunus*. Empty;
JEJUNE'NESS, *n. s.* } vacant; hungry; dry: deficient in matter; jejuneness, penury; poverty.

Causes of fixation are, the even spreading both parts, and the *jejuneness*, or extreme comminution of spirits. *Bacon.*

Gold is the only substance which hath nothing in it volatile, and yet melteth without much difficulty; the melting sheweth that it is not *jejune*, or scarce in spirit. *Id.*

In gross and turbid streams there might be contained nutriment, and not in *jejune* or limpid water. *Browne.*

You may look upon an enquiry made up of mere narratives, as somewhat *jejune*. *Boyle.*

JEL'LIED, *adj.* } Latin *gelatium*. See
JEL'LY, *n. s.* } GELLY. Any thing brought to a state of gluten; a sweetmeat.

They, distilled
Almost to *jelly* with the effect of fear,
Stand dumb, and speak not to him. *Shakspeare.*

The kiss that sips
The *jellied* philtre of her lips. *Cleaveland.*
The desert came on, and *jellies* brought.
King.
That *jelly's* rich, this malmsey healing;
Pray dip your whiskers.
Pope's Satire of Horace.

JELLY is a form of food, or medicine, prepared from the juice of ripe fruits, boiled to a proper consistence with sugar; or the strong decoctions of the horns, bones, or extremities of animals, boiled to such a height as to be stiff and firm when cold, without the addition of sugar. The jellies of fruits are cooling, saponaceous, and acescent, and therefore are good in all disorders of the primæ viæ, arising from alkalescent juices. Jellies made from animal substances are all alkalescent, and, therefore, good in all cases in which an acidity of the humors prevails: the alkalescent quality is, however, in a great measure taken off by the addition of lemon juice and sugar. A sort of jellies were formerly much in use, called compound jellies; these had the restorative medicinal drugs added to them, but they are now seldom prescribed.

JELLY, OAT, a preparation of common oats, recommended by many of the German physicians in hectic disorders, to be taken with broth of snails or cray-fish. It is made by boiling a large quantity of oats, after the husk is taken off, with some hartshorn and currants, together with a leg of veal cut in pieces, and with the bones all broken. These are to be set over the fire with a large quantity of water, till the whole is reduced to a jelly; which, when strained and cold, will be very firm. A few spoonfuls are to be taken every morning, diluted with a basin of either of the above-mentioned broths, or any other warm liquor.

JEMAULABAD, formerly Narsinga Augady, a town and fortress of India, in the province of Canara. The fort, which has existed from time immemorial, was thoroughly repaired by Tippoo Sultan, and is built upon an immense rock, wholly inaccessible except by one narrow path; it may, indeed, be deemed impregnable. It yielded, however, to the British arms after a few days bombardment in 1790. Long. 75° 24′ E., lat. 13° N.

JEMME, EL, the ancient Tisdra, or Tisdrus, a town of Tunis, in Africa, distinguished by its splendid remains of antiquity. Here is a spacious and beautiful amphitheatre, which consisted originally of sixty-four arches, and four ranges of columns. The highest range is nearly fallen; and Mahomet Bey, during a revolt of the Arabs, lately caused four of the arches to be blown up, in order that it might not be converted into a fortress. In other respects this monument is entire. El Jemme also contains many altars with defaced inscriptions, columns and fragments, one of which is a naked trunk of a Venus, in the posture and dimensions of the Medicean. Ninety miles south of Tunis.

JENA, a small town of the interior of Germany, on the Saale, in the grand duchy of Saxe-Weimar. It is surrounded on every side by hills of considerable elevation; and has above 5000 inhabitants, who derive their subsistence chiefly from the university, the three yearly fairs and some small manufactures of linen and hats. The only public building worth notice is the ducal castle, where a branch of the family of Weimar resides, and in which there is a good library, a museum, and cabinet of natural history. In the vicinity is the old castle of Kirchberg, now in ruins.

Jena is most remarkable for its university, founded in 1558. It belongs to four proprietors, the grand duke having one-half, and the other half being shared between Saxe-Gotha, Saxe-Coburg, and Saxe Meinungen. It has four faculties, viz. divinity, law, medicine, and philosophy, which are taught by eighteen regular and fifteen extraordinary professors: there are also private teachers in the town. The number of students varies considerably; in 1818 they did not exceed 600. Here are also two literary societies; one called the Latin Society, established in 1734; the other a Society for the investigation of the natural history of Germany: the members of both have distinguished themselves; and the literary journals of this place are in great repute in Germany. Another considerable institution at Jena is its court of appeal, which received a considerable extension of jurisdiction in 1816. It is forty-three miles south-west of Leipsic, and thirteen miles east by south of Weimar. For an account of the sanguinary battle of Jena, see PRUSSIA.

JENGHIZ, or JENGHIZ KHAN, khan or emperor of the Moguls, one of the most bloody conquerors that ever existed, was born in 1193, and began to reign when he was only thirteen years of age. He conquered Cathay, Corea, the greatest part of China, and almost all Asia. He destroyed about 14,000,000 of the human race, under pretence of extirpating superstition, and establishing the worship of one God. See MOGULS. He died A. D. 1237.

JENKIN (Robert), a learned English divine in the eighteenth century, who was educated at Cambridge, became master of St. John's College, and wrote several books much esteemed; viz. 1. An Historical examination of the authority of General Councils, 4to.; 2. The Reasonableness and Certainty of the Christian Religion, 2 vols. 8vo; 3. Defensio S. Augustini; written against M. Le Clerc; 4. A Translation from the French of the Life of Apollonius Tyanæus.

JENKINS (Sir Leoline), a learned civilian and able statesman of the eighteenth century, born in Glamorganshire about 1623. Being obnoxious to the parliament, during the civil war, he went abroad; but, returning on the Restoration, he was admitted an advocate in the court of the arches, and succeeded Dr. Exton as judge. When the queen-mother Henrietta died in 1669, at Paris, her whole estate, real and personal, was claimed by her nephew, Louis XIV.; upon which Dr. Jenkins's opinion being called for, and approved, he went to Paris, with three others, on a commission, and recovered her effects; for which he received the honor of knighthood. He officiated as one of the mediators at the treaty of Nimeguen; in which tedious negociation he was engaged about four years and a half; and

was afterwards made a privy counsellor and secretary of state. He died in 1685, and, as he never married, bequeathed his whole estate to charitable uses, and became so great a benefactor to Jesus College, Oxford, that he is generally looked on as the second founder. All his letters and papers were collected and printed in 1724, in 2 vols. folio.

JENKINSON (Charles), first earl of Liverpool, was the eldest son of colonel Jenkinson, the youngest son of Sir Robert Jenkinson, the second baronet of the family, which had been respectably settled at Walcot, near Charlbury, Oxon. for above a century. He was born in 1727, and educated at the Charter House, on the foundation: whence he removed to University College, Oxford, and took his degree of M.A. there in 1752. The family was not at this time opulent: and Mr. Jenkinson is said to have assisted himself considerably in early life by his literary talents. He printed Verses on the Death of Frederick, prince of Wales, which attracted some notice; and in 1756 published A Discourse on the Establishment of a Constitutional Force in England; this was succeeded by A Discourse on the Conduct of Great Britain in regard to Neutral Nations, during the present War, 1758. He was also a contributor to the early numbers of the Monthly Review. In 1761 he obtained a seat in parliament through the influence of lord Bute, and was made under-secretary of state. In 1766 he became a lord of the Admiralty, from which board he subsequently removed to that of the Treasury. In 1772 he was appointed vice-treasurer of Ireland, and soon after obtained the sinecure of the clerkship of the Pells. In 1778 he was secretary at war, and, on the dissolution of the administration of lord North, joined that portion of it which supported Mr. Pitt. He now became president of the board of trade, to which office he united in 1786 the chancellorship of the duchy of Lancaster. In the same year he was elevated to the peerage, by the title of baron Hawkesbury, of Hawkesbury, in the county of Gloucester; and in 1796 became earl of Liverpool. His death took place on the 7th of December, 1808. Lord Liverpool was thought to enjoy, in a particular manner, the favor and confidence of George III.; and, having early devoted his attention to politics, he became exceedingly conversant with the law of nations, and the principles and details of commerce. Besides the works above-mentioned he was the author of A Collection of Treatises from 1646 to 1673, 3 vols. 8vo., 1785; and A Treatise on the Coins of the Realm, in a Letter to the King, 1805.

JENNENS (Charles), generally known by the jocose appellation which his profusion gained him, of Solyman the Magnificent. He was a native of Gopsal, in Leicestershire, and employed a large fortune, acquired by his family in trade at Birmingham, as well in the encouragement of literature as in the most unbounded hospitality, and in the keeping up of a princely establishment. The selection of the words for Handel's celebrated oratorio, the Messiah, is ascribed to him, and he had in contemplation a splendid edition of the works of Shakspeare.

JENNER (Edward), M.D., F.R.S., was the son of the Rev. Stephen Jenner, vicar of Berkeley, in Gloucestershire, where he was born, May 17th, 1749. He was apprenticed to Mr. Ludlow, a surgeon, at Cirencester, on leaving whom, he became a pupil of the celebrated John Hunter, at St. George's Hospital, and while there received an offer to go out with captain Cook in his first voyage; and another to accompany Mr. Warren Hastings to Bengal. These proposals were declined; and he chose to settle at Berkeley, where he studied natural history; and communicated to the Royal Society a paper on the habits of the cuckoo, which was inserted in their Transactions for 1788. Prior to this period he had been endeavouring to investigate the nature of cow-pox, from observing, that among the dairy people of Gloucestershire many resisted inoculation. On enquiry, he found that the cause of this lay uniformly in the patients' having been infected with another cutaneous disease, contracted from their cows. Mr. Jenner now proceeded in a course of experiments to ascertain whether the matter of the cow-pox, transmitted from one inoculated person to another, would prove a preventive of the small-pox. The result was confirmatory of his expectations, and in 1798, having previously taken his doctor's degree at Edinburgh, he published An Enquiry into the Causes and Effects of the Cow-pox, which was followed the next year by Farther Observations on the Variolæ Vaccinæ. The subject now became one of general interest, and honors and rewards crowded in upon the author; the University of Oxford presented him with a medical degree by diploma; he was chosen a fellow of the royal and various literary societies; and he received the grant of £20,000 from parliament. After a career of successful practice at Cheltenham as a physician, and a life devoted to the benefit of mankind, Dr. Jenner died suddenly of an apoplectic stroke at Berkeley, January 25th, 1823. The emperor of Russia, when in this country in 1814, sought an interview with Dr. Jenner, treated him with great attention, and offered, it is said, to bestow a Russian order of nobility on him. He also visited the king of Prussia, marshal Blucher, and the cossack general count Platoff, the latter of whom said to him, 'Doctor, you have extinguished the most pestilental disorder that ever appeared on the banks of the Don.'

JENNET, See GENNET. A Spanish horse.

On the twelfth of December yearly, the emperor rides into the field, which is without the city, with all his nobility, on *jennets* and Turkey horses in great state. ***Milton. History of Muscovia.***

The Spanish king presents a *jennet*,
To shew his love. ***Prior.***

JEN'NETING, *n.s.* Corrupted from Juneting, an apple ripe in June. A species of apple soon ripe, and of a pleasant taste.

JENNINGS (David), D.D., a learned dissenting divine, was the son of an ejected minister, and born at Kibworth, in Leicestershire, in 1691. He was respectably educated in London, and in 1714 entered on the pastoral duty. He

eventually was chosen minister of an independent congregation, meeting in Old Gravel-lane, Wapping. In 1743 he became a trustee of the charities of Mr. William Coward, and one of his lecturers at the chapel in Little St. Helen's, and the next year theological tutor at the academy founded by that gentlemen. He now published several works of merit for the use of the students, particularly An Introduction to the use of the Globes and the Orrery, and also the application of Astronomy to Chronology, &c. 8vo. 1747. An Appeal to Reason and Common Sense for the truth of the Holy Scriptures. An Introduction to the Knowledge of Medals, 8vo.; and a treatise on Jewish Antiquities, 2 vols. 8vo., which is one of the best works extant on the subject. He died September 16th, 1762.

JENSON, or JANSONIUS (Nicholas), a French printer and type founder, who flourished at Venice in the fifteenth century. He was the first who fixed the form and proportions of the Roman character, and his editions are still valued for the beauty of the printing. The first book he printed was Decor Puellarum, in 4to., 1471. He died about 1481.

JENTACULUM, among the ancient Romans, a morning refreshment like our breakfast. It was exceedingly simple, consisting, for the most part, of bread alone. The Greeks distinguished this meal by the names of *ακρατισμος*, or *ακρατισμα*.

JENYNS (Soame), esq., a celebrated English writer, born in London in 1704. He was the only son of Sir Roger Jenyns of Bottisham, Kt. He was entered a fellow commoner at St. John's College, Cambridge, where his genius soon appeared in juvenile essays and poetical effusions, many of which were published in Dodley's Collection. He was elected M. P. for Cambridge in 1741, and, being repeatedly re-elected, continued to sit in parliament till 1780. In 1775 he was appointed a lord of trade, which post he held till the board was abolished in 1780. In one part of his life he was a deist: but, upon a closer enquiry into the evidences of Christianity, his faith and piety returned, in which he continued stedfast till his death. He published 1. A Poem on the Art of Drawing, 1728; 2. Poems in 2 vols. 12mo. 3. Various Essays in the Periodical Paper entitled The World, 1753. 4. An Enquiry into the Nature and Origin of Evil, 12mo, 1757. 5. Political essays and poems, 2 vols. 12mo., 1761. 6. Thoughts on the Causes and Consequences of the present High Price of Provisions, 1761. 7. A View of the Internal Evidence of the Christian Religion, 1776. 8. Disquisitions on Several Subjects; which last produced several anonymous criticisms. He died at London, December 18th, 1787. The intellectual powers of Soame Jenyns were of a superior order. Burke said, Soame Jenyns was one of those who wrote the purest English, that is, the simplest and most aboriginal language, the least qualified with foreign impregnation.

JEOFAILE, from *J'ay faillé*, I have failed, a term in law, used for an oversight in pleading or other proceedings at law.

JEOP'ARD, *v. a.* } Supposed to be derived
JEOP'ARDOUS, *adj.* } from j' ai perdu, or jeu
JEOP'ARDY, *n. s.* } perdu. Skinner and Junius. Hazard; danger; peril. A word not now in use. To jeopard is to put in peril.

He had been accused of Judaism, and did boldly *jeopard* his body and life for the religion of the Jews. 2 *Mac.*

And harde it is, sothe, for a man to seche—
Upon the point of deth, in *jeopardye*—
Unto his foe, to finden remedye.
Chaucer. Complaint of the Blache Knight.

And would ye not poor fellowship expel,
Myself would offer you t'accompany,
In this adventure's chanceful *jeopardy*.
Hubberd.

Thy rage shall burn thee up, and thou shalt turn
To ashes, ere our blood shall quench that fire:
Look to thyself, thou art in *jeopardy*. *Shakspeare.*

We may impute to all excellencies in compositions a kind of poverty, or at least a casualty or *jeopardy*. *Bacon.*

JEPHTHAH, judge of Israel, and successor to Jair in the government of the Hebrew republic, was a native of Mispeh, and the son of one Gilead by a harlot. The unkindness of his brethren, his promotion to the command of the army, his message to the king of the Ammonites, his rash vow, and its melancholy consequences, with his important victories over the Ammonites and Ephraimites, are recorded in Judges xi and xii. These events happened about A. M. 2817. Jephthah, after judging Israel six years, died, and was buried in the city of Gilead. St. Paul (Heb. xi. 32) places Jephthah among the saints of the Old Testament, whose faith distinguished them. With regard to Jephthah's vow, most commentators believe that this daughter of Jephthah was not sacrificed, as that would have been a violation of the law of Moses; and especially when, by the same law, he might have redeemed her for ten shekels of silver; therefore they contend, that Jephthah only devoted her to a state of celibacy, or dedicated her to the service of God.—On the other hand, those who maintain that Jephthah's daughter was actually sacrificed, urge, that vows of perpetual virginity are institutions of a modern date; and, had there been no more in it, there would have been little occasion for rending his clothes, and bemoaning himself as he did; besides the bitter lamentations made by herself, and by the daughters of Israel in succeeding times. But in answer to this it is observed, 1. That these lamentations are expressly recorded to have been made (Jud. xi. 37, 38), not for her untimely death, but on account of her virginity; which, though no nunneries were instituted by the law of Moses might be (and in all probability was) the alternative of Jephthah's vow. And, as a decisive evidence, there was an alternative, the Hebrew word vau, rendered and in our translation, likewise signifies or; and therefore the vow ran in these terms—'Whatsoever cometh forth of the doors of my house to meet me, shall surely be the Lord's, or I will offer it up for a burnt offering,' i. e. provided it be proper for being sacrificed.

JEREMIAH, an inspired writer of the race of the priests, the son of Hilkia of Anathoth, of the tribe of Benjamin. He was called to the prophetic office when very young, about the 13th year of Josiah, and continued in the discharge

of it about forty years. He was not carried captive to Babylon with the other Jews, but remained in Judea to lament the desolation of his country. He was afterwards a prisoner in Egypt with his disciple Baruch, where it is supposed he died in a very advanced age. Some of the Christian fathers say he was stoned to death by the Jews, for preaching against their idolatry; others, that he was put to death by Pharaoh Hophrah, because of his prophecy against him.

JEREMIAH, THE PROPHECY OF, a canonical book of the Old Testament. Part of this prophecy relates to the time after the captivity of Israel, and before that of Judah, from the first chapter to the forty-fourth; part of it to that of the latter captivity, from the forty-fourth chapter to the end. Jeremiah predicts the grievous calamities that were approaching, particularly the seventy years captivity in Chaldea. He also foretels their deliverance and happy return, and the recompence which Babylon, Moab, and other enemies of the Jews, should meet with in due time. There are likewise several intimations in this prophecy concerning the kingdom of the Messiah; also several remarkable visions and types, and historical passages relating to those times. The fifty-second chapter does not belong to the prophecy of Jeremiah, but probably was added by Ezra, and contains a narrative of the taking of Jerusalem, and of what happened during the captivity, to the death of Jechonias. St. Jerome has observed that Jeremiah's style is more easy than that of Isaiah and Hosea; that he retains something of the rusticity of the village where he was born; but that he is also at times learned and majestic.

JERICHO, or HIERICHUS, in ancient geography, a city of Judea, between Jordan and Jerusalem, 150 stadia from the latter, and sixty from the former. Josephus says, 'the whole space from Jerusalem is desert and rocky, and equally barren and uncultivated from Jericho to the lake Asphaltites; yet the places near the town and above it are extremely fertile and delicious, so that it may be justly called a divine plain, surpassing the rest of the land of Canaan, and surrounded by hills in the manner of an amphitheatre.' It produces dates; from which it is called the city of palm trees, by Moses. It is now called Raha; and is situated, Volney informs us, 'in a plain six or seven leagues long, by three wide, around which are a number of barren mountains, that render it extremely hot. Here formerly was cultivated the balm of Mecca.

JERK, *v. a.*, *v. n.* & *n. s.* Saxon ȝeneccan. To strike with a quick smart blow; to lash. It is sometimes written yerk; to strike up suddenly, as an angler withdraws his line on perceiving a bite; to accost eagerly. Jerk, a smart quick lash; a sudden spring; a jilt.

I lack iniquity
Sometimes to do me service: nine or ten times
I thought to've *jerked* him here under the ribs.
Shakspeare.

Well run Tawney, the abbot's churl;
His jade gave him a *jerk*,
As he would have his rider hurl
His blood after the kirk. *Ben Jonson.*

Contemn the silly taunts of fleering buffoonery; and the *jerks* of that wit, that is but a kind of confident folly. *Glanville.*

Nor blush, should he some grave acquaintance meet,
But, proud of being known, will *jerk* and greet.
Dryden.

Wit is not the *jerk* or sting of an epigram, nor the seeming contradiction of a poor antithesis, neither is it so much the morality of a grave sentence, affected by Lucan, but more sparingly used by Virgil. *Id.*

Lobsters use their tails as fins, wherewith they commonly swim backwards by *jerks*, or springs, reaching ten yards at once. *Grew.*

Bastings heavy, dry, obtuse,
Only dullness can produce;
While a little gentle *jerking*
Sets the spirits all a-working. *Swift.*

JERKIN, *n. s.* Sax. cyrtelkin. A jacket; a short coat; a close waistcoat.

A man may wear it on both sides like a leather *jerkin*. *Shakspeare.*

Then strip thee of thy carnal *jerkin*,
And give thy outward fellow a firking.
Hudibras.

Unless we should expect that nature should make *jerkins* and stockings grow out of the ground, what could she do better than afford us wool? *More.*

Imagine an ambassador presenting himself in a poor frize *jerkin*, and tattered clothes, certainly he would have but small audience. *South's Sermons.*

I walked into the sea, in my leathern *jerkin*, about an hour before high water. *Gulliver's Travels.*

JERKIN, *n. s.* A kind of hawk.—Ainsworth. This should be written gyrkin.

JERNINGHAM (Edward), a modern English poet and dramatic writer was descended from the ancient Roman Catholic family of this name in Norfolk, and brother of Sir William Jerningham, bart. Born in 1727, he was sent to the English College at Douay, in Flanders, for his education, and afterwards removed to Paris. On his return to England, however, he became a member of the established church. One of his earliest productions was a poem in favor of the Magdalen, which was followed by The Deserter, 1769; The Funeral of Arabert, Monk of La Trappe, 1771; Faldoni and Teresa, 1773; The Swedish Curate; The Fall of Mexico, 1775; Honoria, or the Day of all Souls, 1782; The Rise and Progress of Scandinavian Poetry, 1784; Enthusiasm, 1789; &c. His play, called Margaret of Anjou, was acted in 1777; the siege of Berwick, a tragedy, in 1794; and the Welsh Heiress, a comedy, in 1795. A collection of his works appeared in 4 vols. 8vo. 1806. He also published An Essay on the Mild Tenor of Christianity, and other religious tracts. His death took place November 17th, 1812. Mr. Jerningham is spoken of with respect by lord Byron in his English Bards, and was a very amiable man.

JEROME, or HIERONYMUS, (St.), a famous doctor of the church, and the most learned of all the Latin fathers, was the son of Eusebius; and was born at Stridon, a city of ancient Pannonia, about A. D. 340. He studied at Rome under Donatus, the learned grammarian. After being baptized, he went into Gaul, and transcribed St. Hilary's book De Synodis. He then went into Aquileia, where he contracted a friendship

with Hellodorus, who prevailed on him to travel with him into Thrace, Pontus, Bithynia, Galatia, and Cappadocia. In 372 he retired into a desert in Syria, where he was persecuted by the orthodox of Melitius's party, as a Sabellian, because he made use of the word hypostasis, as used by the council of Rome in 369. This obliged him to go to Jerusalem; where he studied the Hebrew language, to acquire a more perfect knowledge of the Holy Scriptures; and consented to be ordained, provided he should not be confined to any particular church. In 381 he went to Constantinople to hear St. Gregory of Nazianzen; and in 382 returned to Rome, where he was made secretary to pope Damasus. He soon, however, returned to the monastery of Bethlehem, where he held a controversy with John of Jerusalem and Rufinus concerning the Origenists; and was the first who wrote against Pelagius. He died on the 30th of September, 420, about eighty years of age. The last edition of his works is that of Verona, in 11 vols. folio. His principal works are, 1. A Latin Version of the Scriptures, commonly called the Vulgate. 2. Commentaries on the Prophets, Ecclesiasties, St. Matthew, and the Epistles to the Galatians, Ephesians, Titus, and Philemon. 3. Polemical treatises against Montanus, Helvidius, Jovinian, Vigilantius, and Pelagius. 4. A treatise on the lives and writings of the Ecclesiastical authors who had flourished before his time. His style is lively and animated, and sometimes sublime.

JEROME OF PRAGUE, so called from the place of his birth, in Bohemia. Having embraced the opinions of John Huss, he began to propagate them in 1480. The council of Nice cited him to appear before them, and give an account of his faith. In obedience to this citation, he went to Constance; but on his arrival, in 1415, finding Huss in prison, he set out for his own country. Being seized, however, on the way, imprisoned, and examined, he was so intimidated, that he retracted, and pretended to approve of the condemnation of the opinions of Wickliff and Huss; but on the 26th of May, 1416, he condemned that recantation, and sentence was accordingly passed on him; in pursuance of which he was burnt in 1416. He was a person of great talents, learning, and elocution.

JERSEY is a populous island of the English channel, twelve miles long and six broad. The north side is composed of rocky cliffs forty to fifty fathoms high, while the south shore is nearly level with the sea; a ridge of hills runs through the centre, whose sides are covered with orchards, 24,000 hogsheads of cyder have been yielded by their fruit in one year. The other chief pursuit is the rearing cattle, particularly sheep, whose wool, together with cyder, form the only exports; the island is obliged to import corn from France and England. The number of inhabitants is upwards of 20,000.

The two towns of Jersey are St. Helier and St. Aubin. The former, being the chief place, is situated nearly in the middle of the south side of the bay of St. Aubin, the best road of the island, but still dangerous, from numerous rocks scattered round the entrance. The town consists of several good streets, and is defended by numerous batteries, but chiefly by Elizabeth Castle, standing on a rock insulated at high water.

On the west side of the island is St. Ouen's Bay, and on the east St. Catherine's Bay, which are safe roads according to the wind. All the accessible parts of the island are defended by batteries or towers. See GUERNSEY.

Christianity was first planted here, it is believed, in the sixth century, and the island made part of the see of Dol in Bretagne. It is now governed by a dean. Besides the abbey of St. Helier, there were four priories, Noirmont, St. Clement, Bonnenuit, and le Leck, and above twenty chapels, now mostly in ruins. During the American war this island was twice invaded by the French. The first attempt was in 1779. About 6000 men were embarked in flat-bottomed boats, and endeavoured to land in the bay of St. Ouen, on the 1st of May, supported by five frigates, and other armed vessels; but they met with such vigorous resistance, that they were compelled to retire without having landed a single person. Another attempt was now resolved on. The troops and seamen were equally desirous of retrieving their honor; but they were for some time prevented from making any attempt by bad weather; and, before another opportunity offered, the squadron designed to cover their descent was attacked by Sir James Wallace, who drove them ashore on the coast of Normandy, silenced a battery under whose guns they had taken shelter, captured a frigate of thirty-four guns, with two rich prizes, burnt two other large frigates, and a considerable number of smaller vessels. The scheme, though thus totally disconcerted, was resumed in 1781. The conduct of this expedition was given to baron Rullecourt, a man of courage, but very deficient in the prudence requisite for such an enterprise. His force consisted of 2000 men; with whom he embarked in tempestuous weather, hoping that he might thus be able to surprise the garrison. Many of his transports, however, were dispersed, and he himself, with the remainder, obliged to take shelter in some islands in the neighbourhood. As soon as the weather grew calm, he landed, in a dark night, at Grouville, where he made prisoners of a party of militia. Hence he proceeded with the utmost expedition to St. Helier, and, being wholly unexpected, seized on a party of men who guarded it, together with the commanding officer, and the magistrates. Rullecourt then drew up a capitulation, the terms of which were, that the island should be instantly surrendered to the French, and the garrison sent to England; threatening the town with immediate destruction in case of non-compliance. This point being gained, he summoned Elisabeth Castle to surrender in virtue of the capitulation just concluded. To this a peremptory refusal was given, and followed by such a vigorous discharge of artillery, that he was obliged to retire into the town. In the mean time the British troops stationed in the island under the command of major Pierson began to assemble from every quarter: being required by the French commander to submit, that officer replied, that if the French themselves did not,

within twenty minutes, lay down their arms, he would attack them. An attack was accordingly made with such impetuosity, that the French were totally routed in less than half an hour, and driven into the market-place, where they endeavoured to make a stand. Their commander, exasperated at this change of affairs, endeavoured to wreak his vengeance on the captive governor, whom he obliged to stand by his side during the whole time of the conflict. This, however, was quickly over; the French were broken on all sides, the baron himself mortally wounded, and the next in command obliged to surrender himself and the whole party prisoners of war; the captive governor escaped without a wound. This last disaster put an end to all hopes of the French ministry of being able to reduce the island, and was indeed no small mortification to them; 800 troops having been landed at that time, of which not one escaped. During the late wars Jersey flourished, and was we believe never attacked.

JERSEY, NEW, one of the United States of North America, is bounded north by New York, east by the Hudson and the Atlantic, south by the Atlantic, and west by Delaware Bay and River, which separates it from the states of Delaware and Pennsylvania. It is 163 miles long, and fifty-two broad; containing 8320 square miles. Population, in 1790, 184,189; in 1800 211,149; and, in 1810, 245,592, of whom 10,851 were slaves, and 7843 free blacks. The number of militia, in 1817, amounted to 35,169.

Trenton is the seat of government. The other most considerable towns are Newark, New Brunswick, Elizabeth-town, Burlington, and Amboy.

There are fourteen banks in this state; and the counties, number of townships, population, and chief towns, are thus exhibited:—

Counties.	Townships.	Population.	Chief Towns.
Bergen	7	16,603	Hackinsack
Burlington	12	24,979	Burlington, Bordentown, Mount Holly
Cape May	3	3,632	
Cumberland	8	12,670	Bridgetown
Essex	10	25,984	Newark, Elizabethtown
Gloucester	10	19,744	Gloucester, Woodbury
Hunterdon	10	24,553	Trenton
Middlesex	8	20,381	N. Brunswick, Amboy
Monmouth	7	22,150	Freehold
Morris	10	21,828	Morristown
Salem	9	12,761	Salem
Somerset	7	14,728	Boundbrook
Sussex	15	25,549	Newton.
	116	245,562	

Delaware River separates this state from Pennsylvania, and the Hudson forms the northern part of the eastern boundary. The other most considerable rivers are the Raritan, Passaic, Hackinsack, Great Egg Harbour River, and Musconecunk.

The three northern counties Sussex, Morris, and Bergen, are mountainous. The next four, Hunterdon, Somerset, Essex, and Middlesex, are agreeably diversified with hills and valleys. South Mountain, a great ridge of the Alleghany range, crosses the state in lat. 41° N., and the Kittatinny ridge crosses a little to the north of South Mountain. The greater part of the six southern counties is composed of the long range of level country, which commences at Sandy Hook, and lines the coast of the middle and southern states. Much of this range is nearly barren, producing only shrub oaks and yellow pines; but the rest of the state has a large proportion of good soil, excellent for grazing, and for the various purposes of agriculture. The productions are wheat, rye, maize, buck-wheat, potatoes, oats, and barley. Great numbers of cattle are raised in the mountainous parts for the markets of New York and Philadelphia. Large quantities of butter and cheese are also made. New Jersey is remarkable for an excellent breed of horses. The exports are flour, wheat, horses, cattle, hams, cyder, lumber, flax seed, leather, and iron. The greater part of the produce exported from this state passes through New York and Philadelphia.

Great quantities of leather are manufactured at the valuable tanneries of Trenton, Newark, and Elizabethtown. Large quantities of shoes are made at Newark. There is a glass-house in Gloucester county, and there are paper mills and nail manufactories in various parts of the state. But the most important manufacture is that of iron. In the county of Morris there are seven rich iron mines, two furnaces, two rolling and slitting mills, and about thirty forges. The annual produce of these works is about 540 tons of bar iron, 800 tons of pig, besides large quantities of hollow ware, sheet iron, and nail rods. There are also iron-works in the counties of Burlington, Gloucester, Sussex, &c. The annual produce in the whole state is computed at about 1200 tons of bar iron, 1200 tons of pig, and eighty tons of nails, exclusive of small articles.

Two colleges have been incorporated in this state, one at Princeton, and one at New Brunswick. The latter is not at present in operation. There are theological seminaries at Princeton and New Brunswick; and academies have been established at Amboy, Amwell, Baskingridge, Bedminster, Bergen, Bloomfield, Bordentown, Bridgetown, Burlington, Camden, Elizabethtown, Flemington, Hackinsack, Morristown, New Brunswick, Newark, Newton, Salem, Springfield, Somerville, and Trenton. Most of these academies have but small funds, and five or six of them are not incorporated.

The most numerous denomination of Christians in New Jersey is the English Presbyterians, who have seventy-four churches, and fifty-nine clergymen. The Dutch Reformed have thirty-one churches, and twenty clergymen; the Baptists have thirty churches, and twenty-three clergymen; the Episcopalians have twenty-four churches, and eleven clergymen; the Congregationalists have nine churches, and five clergymen; the Friends have forty-four meeting-houses. The Methodists are numerous; the number of communicants was stated, in 1811, at 6739.

The legislature is composed of a legislative council, and a house of assembly; the former consisting of thirteen members, one from each county, and the latter of thirty-five members, all chosen annually. The executive is composed of a governor chosen annually by a joint vote of both branches of the legislature, a vice-president chosen by the council, and a privy council, composed of three members of the legislative council. The annual elections are in October. New Jersey sends six representatives to congress.

JER'SEY, *n. s.* From the island of Jersey, where much yarn is spun. Combed wool, and yarn made of combed wool.

JERVIS (John), earl of St. Vincent, a late distinguished naval commander, was descended of an ancient family in Staffordshire. His father, Swynfen Jervis esq., was auditor of Greenwich Hospital. Our admiral was born at Meaford Hall, January 9th, 1734 (old style). At the age of fourteen he was a midshipman on board the Gloucester, of fifty guns; and, in 1755, served as lieutenant under Sir C. Saunders, in the expedition againt Quebec. Soon after he was appointed as commander to the Experiment, and afterwards to the Albany sloop. In 1760 he obtained the rank of captain of the Foudroyant, and fought in the action between admiral Keppel and the French fleet in July 1778. In 1782 he engaged and took the Pegasé, of seventy-four guns and 700 men. Receiving a severe wound in the head from a splinter, he obtained the red riband as a reward for this gallant conduct.

In 1794 he had the command of a squadron equipped for the West Indies, and reduced Martinique, Guadaloupe, and St. Lucie; for which he received the thanks of parliament, and the freedom of the city of London. On the 14th of February 1797, however, he obtained his great victory. Being in command of the Mediterranean fleet of fifteen sail, he engaged and defeated twenty-seven Spanish ships of the line, the smallest carrying seventy-four guns, and seven of them mounting from 112 to 130 each. He was now raised to the English peerage, by the titles of baron Jervis and earl of St. Vincent. To this was added a pension of £3000 a year, and a gold medal from the king. In 1801 he became first lord of the admiralty; in which capacity he undertook and executed many salutary reforms in naval expenditure, but resigned his post in 1804. May, 1814, lord St. Vincent was appointed general of marines, and July 19th, 1821, admiral of the fleet. He died March 15th, 1823, in his eighty-ninth year, and a monument was voted by the house of commons to be erected to his memory in St. Paul's cathedral.

JERUSALEM, Heb. from ירו they shall see, and שלם, Salem, Peace, a famous and ancient city, capital of Judea, now a province of Turkey in Asia. According to Manetho, an Egyptian historian, it was founded by the shepherds who invaded Egypt in an unknown period of antiquity. See EGYPT. According to Josephus, it was the capital of Melchisedek's kingdom, called Salem in the book of Genesis: and the Arabians assert, that it was built in honor of Melchisedek by twelve neighbouring kings. We know nothing of it with certainty, however, till the time of king David, who took it from the Jebusites, and made it the capital of his kingdom, which it ever after continued to be. It was first taken in the days of Joash, by Hazael, king of Syria, who slew all the nobility, but did not destroy the city. It was afterwards taken by Nebuchadnezzar king of Babylon, who destroyed it, and carried away the inhabitants. Seventy years after it was rebuilt, by permission of Cyrus king of Persia, and it continued to be the capital of Judea (though frequently suffering much from the Grecian monarchs of Syria and Egypt), till the time of Vespasian emperor of Rome, by whose son Titus it was totally destroyed. See JEWS. It was, however, rebuilt by Adrian: and seemed likely to have recovered its former grandeur, being surrounded with walls, and adorned with several noble buildings; the Christians also being permitted to settle in it. But this was a short-lived change; for when the empress Helena, mother of Constantine the Great, visited this city, she found it in the most ruinous situation. Having formed a design of restoring it to its ancient lustre, she caused, with a great deal of cost and labor, all the rubbish that had been thrown upon those places where our Saviour had suffered, been buried, &c., to be removed. In doing this, they found the cross on which he died, as well as those of the two malefactors who suffered with him; and (as the writers of those times relate) discovered by a miracle that which had borne the Saviour of mankind. She then caused a magnificent church to be built, which enclosed as many of the scenes of our Saviour's sufferings as could conveniently be done, and adorned the city with several other buildings. The emperor Julian is said to have formed a design of rebuilding the temple of Jerusalem, and of restoring the Jewish worship, on purpose to give the lie to our Saviour's prophecy concerning the temple and city of Jerusalem; namely, that the temple should be totally destroyed, without one stone being left upon another: and that the city should be trodden down of the Gentiles till the times of the gentiles were fulfilled. In this attempt, however, according to the accounts of the Christian writers of that age, the emperor was frustrated by an earthquake and fiery eruption from the earth, which totally destroyed the work, consumed the materials which had been collected, and killed a great number of the workmen. This event has been the subject of much dispute. Bishop Warburton published a treatise expressly on the truth of this fact, and collected testimonies in favor of it, from Ammianus Marcellinus, and Gregory of Nazianzen; for which we shall refer our readers to the bishop and the original authors. But it is a matter of very little consequence, whether this event happened, with the circumstances related by these authors, and quoted by the bishop, or not. If Julian did make any attempt to rebuild the temple, it is certain that something obstructed his attempt, because the temple was never rebuilt. If he made no such attempt, the prophecy of our Saviour still holds good; and it surely cannot detract from the merit of a prophecy, that nobody ever attempted to elude it, or prove it to be a falsehood. Jerusalem continued in the hands of the eastern emperors till the reign of the caliph

Omar, who reduced it under his subjection. The Saracens continued in possession of it till 1099, when it was taken by the Crusaders, They founded a new kingdom, of which Jerusalem was the capital, and Godfrey the first king. See GODFREY. The Christian kingdom of Jerusalem lasted eighty-eight years under nine kings, when it was taken by Saladin, sultan of Egypt in 1187. See EGYPT. In 1217 the Saracens were expelled by the Turks, who have ever since continued in possession of it. Jerusalen, in its most flourishing state, was divided into four parts, each enclosed with its own walls; viz. 1. The old city of Jebus, which stood on mount Zion, where the prophets dwelt, and where David built a magnificent castle and palace, which became the residence both of himself and successors; on which account it was emphatically called the city of David. 2. The lower city, called also the Daughter of Zion, being built after it; on which stood the two magnificent palaces which Solomon built for himself and his queen; that of the Maccabæan princes; and the stately amphitheatre built by Herod, capable of containing 80,000 spectators; the strong citadel built by Antiochus, to command and overtop the temple, but afterwards razed by Simon the Maccabee, who recovered the city from the Syrians; and lastly, a second citadel, built by Herod, upon a high and craggy rock, and called by him Antonia. 3. The new city, mostly inhabited by tradesmen, artificers, and merchants; and, 4, Mount Moriah, on which was built the famed temple of Solomon, described in 2 Kings vi. and vii.; and, since then, that rebuilt by the Jews on their return from Babylon, and afterwards built almost anew, and greatly adorned and enriched by Herod. Some idea of the magnificence of this temple may be had from the following considerations: 1. That there were no fewer than 164,300 men employed in the work: 2. That, notwithstanding this prodigious number of hands, it took up seven years in building: 3. That the height of this building was 120 cubits, or eighty two yards; and the courts round it about half as high: 4. That the front, on the east side, was sustained by ramparts of square stone, of vast bulk, and built up from the valley below; which last was 300 cubits high, and being added to that of the edifice amounted to 420 cubits; to which, if we add, 5, The height of the principal tower above all the rest, viz. sixty, it will bring it to 480 cubits, which, reckoning at two feet to a cubit, will amount to 960 feet; but, according to the length of that measure, as others reckon it, viz. at two feet and a half, it will amount to 1200 feet; a prodigious height from the ground, and such as might well make Josephus say, that the very design of it was sufficient to have turned the brain of any but Solomon. 6. These ramparts, which were raised in this manner, to fill up the prodigious chasm made by the deep valley below, and to make the area of a sufficient breadth and length for the edifice, were 1000 cubits in length at the bottom, and 800 at the top, and the breadth of them 100 more. 7. The huge buttresses which supported the ramparts were of the same height, square at the top, and fifty cubits broad, and jutted out 150 cubits at the bottom. 8. The stones of which they were built were, according to Josephus, forty cubits long, twelve thick, and eight high, all of marble, and so exquisitely joined, that they seemed one continued piece, or rather polished rock. 9. According to the same Jewish historian, there were 1453 columns of Parian marble, and 2906 pilasters; of such thickness, that three men could hardly encircle them; with height and capitals proportionable, of the Corinthian order. But it is probable, that Josephus has given us these last two articles from the temple of Herod, there being nothing like them mentioned by the sacred historians, but a great deal about the prodigious cedars of Lebanon used in that noble edifice, the excellent workmanship of them adapted to their several ends; together with their gilding and other ornaments. At present Jerusalem is called by the Turks Cudsembaric, Coudsheriff, and Heleods, or the Holy City.

Dr. Clarke, on his recent visit to this spot, did not find it, as a whole, that picture of desolation which he had been prepared to expect. On reaching an eminence, to the north of the city, he observes, 'the sight burst upon us all. We had not been prepared for the grandeur of the spectacle which the city alone exhibited. Instead of a wretched and ruined town, by some described as the desolated remnant of Jerusalem, we beheld, as it were, a flourishing and stately metropolis, presenting a magnificent assemblage of domes, towers, palaces, churches, and monasteries; all of which, glittering in the sun's rays, shone with inconceivable splendor.' Ali Bey speaks of the streets as tolerably regular, straight, and well paved, several of them having foot-paths, but they are narrow and dull, and many of them on a descent. The houses are two or three stories high, with few windows and very small doors. Most of them are constructed of free-stone, and their fronts wholly without ornament; so that, in walking the streets, it does not require any great stretch of fancy to conceive one's self in the corridors of a vast prison. The population is estimated at 30,000, more than 20,000 of whom are said to be Christians, with about 7000 Mussulmans, besides Arabs, Turks, Jews, &c. Dr. Clarke says, 'in Jerusalem there are sects of every denomination, and perhaps of almost every religion upon the earth. As to those who call themselves Christians, in opposition to the Moslems, we found them divided into sects, with whose distinctions we were often unacquainted. It is said there are no Lutherans; and if we add, that, under the name of Christianity, every degrading superstition and profane rite, equally remote from the enlightened tenets of the gospel and the dignity of human nature, are professed and tolerated, we shall afford a true picture of the state of society in this country.'

The edifice most resorted to by Christian pilgrims is that called the Church of the Holy Sepulchre. It was built, as already intimated, by the empress Helena, the mother of Constantine, and is a handsome structure, 300 feet long, and nearly 200 broad, professing to comprehend within these limits the scene of all the great events of the crucifixion, burial, and resurrection

of the Messiah. Over the door is a bas relief of great antiquity, representing his entrance into Jerusalem, with the multitude strewing palm branches before him. On entering the church, the first thing shown is a slab of white marble in the pavement, surrounded by a balustrade. This is stated to be the spot where the body was anointed by Joseph of Arimathea. There appears next a large round fabric, standing in the midst of the principal aisle, and beneath the main dome.

The first part constitutes a kind of ante-chapel, containing what is said to be the sepulchre, before the mouth of which appears a block of white marble, stated to be the stone on which the angel sat. The sepulchre itself is composed of thick slates of that beautiful stone commonly called Verde antico, and the entrance, which is of the same substance, is broken and rugged, in consequence of the number of pieces carried off as relics. Here lamps are kept continually burning.

Beyond the sepulchre, and still beneath the roof of the same church, are shown two rooms, one above another. Close by the entrance to the lower chamber are the tombs of Godfrey of Bouillon and of Baldwin, the modern kings of Jerusalem, with Latin inscriptions in the Gothic character. At the extremity is exhibited a figure, or cleft, in the natural rock, which is said to be the rent produced at the crucifixion. On ascending to the upper apartment, the pilgrim is shown an altar, venerated as mount Calvary, the place of crucifixion; and on it are shown the marks or holes of the three crosses; and here again the same rent appears in the wall.

In galleries round the church, and in small buildings attached to it on the outside, are apartments for the reception of friars and pilgrims. They are occupied by a number of monks of different nations, who devote themselves to the service of the sepulchre, and many of whom do not stir for many years from the sepulchre. In the course of passion week, particularly, they perform a variety of ceremonies, which were witnessed by Maundrell and Pococke. They represent, for instance, the crucifixion in an effigy of wax; a sermon suited to the subject is preached, and a hymn sung. In due time the nails are taken out, and the image brought down and interred with all the ceremonies of the east. The next day is spent in singing the Lamentations of Jeremiah; and on the following morning, being supposed that of the resurrection, the sepulchre is opened, and all possible marks of joy exhibited. Pococke says that most of these ceremonies were carried on in a very tumultuous and indecent manner.

Dr. Clarke, however, disputes altogether the fact of this being the site of the real crucifixion and burial of Christ. Calvary, besides, is described as without the city, while the church of the sepulchre is within it; so that pilgrims are obliged to suppose that the walls of this fallen place have been extended, so as to include it. Again, while Calvary is said to be a mount, there is not here the least trace of a hill; the ground being entirely plain, except the small rise of about twenty steps leading up to the altar, the supposed scene of crucifixion. This is so obvious, that travellers have been obliged to suppose that the empress Helena artificially levelled the whole of the ground, with a view to the more convenient erection of her church; but it seems very improbable that this pious princess should thus have studiously obliterated every trace of the events which she intended to commemorate. The altar also, although it professes to exhibit the marks of the three crosses, has no dimensions in the least capable of containing them; and the sepulchre, instead of being cut out of the living rock, is composed of pieces cemented together; and the stone, with which it was supposed to have been shut, does not fit it. Dr. Clarke thinks he discovered a place far more likely to be the real theatre of these transactions in riding out of the city, by what is called Sion gate, when he came to a deep dingle or trench, called Tophet or Gehennon, and abounding with sepulchral excavations, for a particular description of which we must refer the reader to his Travels.

Certainly, however, the most splendid edifice in Jerusalem is the Saracenic mosque of the caliph Omar. Into this no Christian is suffered to enter. Dr. Clarke considered it superior in its architecture to any other edifice he saw in Turkey. It appears to occupy part of the site of the ancient temple; and its numerous arcades, splendid dome, noble area, and high state of preservation, render it, especially when the pilgrims are passing to and fro in their imposing costume, a most magnificent display of Moslem superstition.

The monks here resident consisted originally of various nations and professions, each of which had a quarter assigned to it; but the number has of late been reduced to four, the Latins, Greeks, Armenians, and Copts, of which the last are now almost reduced to nothing. Each fraternity has altars and a sanctuary of its own; but the possession of the holy sepulchre has often been contested with great fury, especially between the Greeks and Latins. Maundrell saw upon some of the monks deep scars, which they had received in these combats. In 1690, however, through the indefatigable exertions of the French monarch, the Latins were secured in this possession; and, though Christians of all nations procure access to the church, they alone can solemnize service in it. These guardians of the holy sepulchre are called Terra Sancta friars, and live constantly within the walls. They have a fat and rosy appearance, and are thought to possess a considerable treasure. The Greek monastery consists of many separate, small, but well supported, establishments. The Armenian is the largest and most splendid in Jerusalem. Every thing here is oriental. The patriarch receives his visitors with royal stateliness, in a flowing vest of silk; sits amidst clouds of incense; and regales them with all the luxuries of the east. The monks generally are said to be well acquainted with what is passing in Europe, and watch for the expected dissolution of the Turkish empire.

Jerusalem is included in the pachalic of Damascus; but the surrounding territory forms a

sort of independent district. The grand seignior assigns the revenues here gathered to supplying the expenses of the ladies of the seraglio. For this purpose they are collected by agents, and transmitted to the kislar aga, or chief of the black eunuchs. The exactions of these agents, with the incursions of the Arabs, have of late greatly reduced the city and suburbs.

JERUSALEM ARTICHOKES, *n, s.* A species of sunflower.

Jerusalem artichokes are increased by small off-sets, and by quartering the roots. *Mortimer.*

JESS, *n. s.* Fr. *gecte:* Ital. *getto;* Lat. *jacio.* Short straps of leather tied about the legs of a hawk, with which she is held on the fist.

That like an hawke which feeling herself freed
From bells and *iesses* which did let her flight,
Him seemed his feet did fly and in their speed delight.
Spenser. Faerie Queene.

If I prove her haggard.
Though that my *jesses* were her dear heart strings;
I'd whistle her off, and let her down the wind
To prey at Fortune. *Shakspeare. Othello.*

JES'SAMINE, *n. s.* See JASMINE. A fragrant flower.

Her goodly bosom, like a strawberry bed;
Her neck, like to a bunch of cullambines;
Her breast like lilies, ere their leaves be shed;
Her nipples like young blossomed *jessamines.*
Spenser.

JESSAMINE. See JASMINUM.

JESSELMERE, a large, barren district of Hindostan, in the province of Ajmeer, situated about the twenty-eighth degree of northern latitude. The greater part of it is an uninterrupted tract of sand, without a single stream, and the well water only procurable at a very great depth. Being, however, within the influence of the periodical rains, some parts of it are cultivated; but are of little value. It is governed by its aboriginal chiefs.

JESSO, an island on the eastern coast of Asia, north of Japan, and forming one of an independent archipelago, very little known until the voyages of La Perouse and Broughton.

The island called by the Japanese Jesso (the shore) and Mosin (the body hairy) is named Chica by the natives, according to La Perouse, and Insu (Greenland) according to Broughton; it is separated from Niphon by the strait of Sangaar, five leagues broad, named by the Japanese Matsi, or Strait, and the town on the south Matsimay.

This name is sometimes applied to the whole island, which is entirely composed of high and well wooded mountains, whence descend numerous rivers. The trees are oak, elm, ash, maple, birch, beech, linden, yew, silver pine, poplar, yoke elm, willow, and a great variety of shrubs. The fruit trees are chestnuts, plums, with grapes, and many species of berries. Of esculent vegetables, most of those common to Europe are found here, either wild or uncultivated, such as wheat, maize, millet, French beans, peas, lentils, turnips, radishes, carrots, beet, garlic, onions, besides hemp, tobacco, &c. The wild animals are deer, bears, foxes, and rabbits; the bears are taken when young, and reared like dogs till a certain age, when they are confined in cages, where they are fattened for food. It is said, the women allow them to suck them when first taken; and, although they feast on them with the rest of the family, they weep for their death, as for that of a child. The shores abound with seals and sea-otters, and the bays with fish, particularly sprats, which are driven into them in immense shoals by the whales. The rivers are also full of salmon.

The proper natives of Jesso, or Mosins, according to Krusenstern, call themselves Ainos; they are taller and stouter than the Japanese; their faces are covered with thick black beards, which mingles with their black and rather frizzled hair; and, according to Broughton, their bodies are also covered with hair more than any other people, whence their Japanese denomination of Mosin. Both sexes paint or tattoo figures of flowers or animals on the lips and back of the hands.

Their arms are the bow and arrow: they are said to be without laws, money, or writing, and the only religious worship observed amongst them is the pouring libations and lighting fires in honor of the Japanese divinity, Kamoi. They allow of polygamy, and punish adultery in both parties; but a man who receives from a woman her ear-rings is held guiltless, as it is then supposed that she has seduced him. Incest is not considered a crime, and brothers and sisters marry. Their language has no affinity to any other known one, but is neither rude nor disagreeable to the ear. The Mosins trade with the southern Kurilians by barter. When the latter want commodities they appear near the shores of Jesso, and the Mosins immediately lay the objects they are supposed to want on the beach and retire. The Kurilians then land, and, selecting those they mean to take, place them on one side, with the objects they intend to give in exchange by them, and retire in their turns, when the Mosins reappear; and it is by a succession of this silent bargaining that they at last arrive at an agreement. The chief objects of commerce are dried fish, dried sea-weed (fucus saccharinus) which is considered a delicacy by the Japanese, fish oil, beaver, zibelline, otter, fox, and bear skins, &c.

The dress of the Mosins is chiefly of cloth made from the inner bark of the linden: both sexes are fond of smoking. At the southern and western shores the Japanese have establishments, and are said to have fortified a portion of the latter, lately.

JESSORE, or KHALAFABED, a district of Bengal, north-east of Calcutta, bounded on the north by the Ganges, and on the east by Backergunge. The northern part is very fertile; but the southern, which extends into the sunderbunds or woods, produces only coarse rice and salt. The district is, however, very populous, and the inhabitants are in the proportion of nine Mahommedans to seven Hindoos.

JESSORE, or MOORLEY, the capital of the district of that name, is in the Ayeen Akberry, called Russoolpore. It is situated on the western side of the Boirub, and on the high road from Calcutta to Dacca. It was the residence of a

foujdar under the Mogul government, and it is still a flourishing place. Long. 89° 16′ E., lat. 23° 7′ N.

JEST, *v. n.* & *n. s.* } Lat. *gestus, gesticular.*
JE'STER, *n. s.* } To divert or make merry by words and actions. Jest, any thing ludicrous; the object of jests; ludicrous; not serious; game; not earnest. A jester, one given to merriment or sarcasm; a buffoon; a licensed scoffer kept at court to the time of Charles I.

And, tho' [then] descended doune from *jestes* old
To Diomede; and thus she spake and told.
Chaucer. Troilus and Creseide.

Another sort of light loose fellows do pass up and down, amongst gentlemen, by the name of *jesters*; but are, indeed, notable rogues, and partakers not only of many stealths, but also privy to many traitorous practices. *Spenser on Ireland.*

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.

Fear you the boar, and go so unprovided?
—You may *jest* on: but I do not like these several councils. *Id. Richard III.*

But is this true, or is it else your pleasure,
Like pleasant travellers, to break a *jest*
Upon the company you overtake? *Shakspeare.*

The skipping king, he rambled up and down
With shallow *jesters*, and rash bavin wits;
Soon kindled and soon burnt. *Id. Henry IV.*

If I suspect without cause, why then make sport at me; then let me be your *jest*, I deserve it.
Shakspeare.

As for *jest*, there be certain things which ought to be privileged from it; namely, religion, matters of state, and great persons. *Bacon.*

No man ought to have the less reverence for the principles of religion, or for the holy Scriptures, because idle and profane wits can break *jests* upon them.
Tillotson.

When his playfellows chose him their king, he spoke and did those things in *jest*, which would have become a king in earnest. *Grew.*

He had turned all tragedy to *jest*. *Prior.*

Where are the *jesters* now? the men of health
Complexionedly pleasant? *Blair's Grave.*

Now, as a *jester*, I accost you,
Which never yet one friend had lost you.
Swift.

While thro' their cheerful land the rural talk
The rural scandal and the rural *jest*
Fly harmless, to deceive the tedious time,
And steal unfelt the sultry hours away. *Thomson.*

When you the dullest of dull things have said,
And then ask pardon for the *jest* you made. *Young.*

JESUA LEVITA, a learned Spanish rabbi, in the fifteenth century, who wrote a curious work entitled Halichot Olam, or the Ways of Eternity; a useful introduction to the study of the Talmud. It was reprinted in Hebrew and Latin, at Hanover, in 1714, 4to.

JESUITS, or the society of Jesus, a celebrated religious order of the Romish church, founded by Ignatius Loyola. See LOYOLA. The plan of its constitution and laws was suggested, as the founder asserted, by the immediate inspiration of heaven. But, notwithstanding this high pretension, his design met at first with violent opposition. Pope Paul III., to whom Loyola had applied for his authority to confirm the institution, referred his petition to a committee of the cardinals. They represented the establishment to be unnecessary as well as dangerous, and Paul refused to grant his sanction. At last Loyola removed his scruples to the new foundation by an offer which it was impossible to resist. He proposed, that besides the vows of poverty and of monastic obedience, common to all the orders of regulars, the members of this society should take a third vow of obedience to the pope, binding themselves to go whithersoever he should command for the service of religion, and without requiring any thing from the holy see for their support. At a time when the papal authority had received such a shock by the revolt of so many nations from the Romish church, and also when every part of the popish system was attacked with so much violence and success, the acquisition of a body of men, thus peculiarly devoted to the see of Rome, and whom it might set in opposition to all its enemies, was an object of the highest consequence. Paul, instantly perceiving this, confirmed the institution of the Jesuists by his bull, granted the most ample privileges to the members of the society, and appointed Loyola to be the first general of the order. The event fully justified Paul's discernment. In less than half a century, the society obtained establishments in every country that adhered to the Roman Catholic church; its power and wealth increased amazingly; the number of its members became great; and the Jesuits were celebrated by the friends, and dreaded by the enemies of the Romish faith, as the most able and enterprising order in the church.

The constitution and laws of the society were perfected by Laynez and Aquaviva, the two generals who succeeded Loyola, men far superior to their master in abilities and in the science of government. They framed that system of profound and artful policy which distinguished the order. Many circumstances concurred in giving a peculiarity of character to the order of Jesuits, and in forming the members of it not only to take greater part in the affairs of the world than any other body of monks, but to acquire superior influence in the conduct of them. The primary object of almost all the monastic orders is to separate men from the world, and from any concern in its affairs. In the solitude and silence of the cloister the monk is called to work out his own salvation by extraordinary acts of mortification and piety. He is dead to the world, and ought not to mingle in its transactions. He can be of no benefit to mankind but by his example and his prayers. On the contrary, the Jesuits were taught to consider themselves as formed for action. They were chosen soldiers, bound to exert themselves continually in the service of God, and of the pope his vicar on earth. Whatever tends to instruct the ignorant, or can be of use to reclaim or to oppose the enemies of the holy see, was their object. That they might have leisure for this active service, they were totally exempted from those functions the performance of which is the chief business of other monks. They appeared in no processions; they practised no rigorous austerities; they did not consume their time in the repetition of tedious offices; but attended to all the transactions of the

world, with a view to their influenee upon religion; they were directed to study the dispositions of persons of high rank, and to cultivate their friendship; and, by the very constitution as well as genius of the order, a spirit of action and intrigue was infused into all its members. As the object of the society of Jesuits differed from that of the other monastic orders, the diversity was no less in the form of its government. The other orders are voluntary associations, in which whatever affects the whole body is regulated by the common suffrage of all its members. The executive power is vested in the head of each society; the legislative authority resides in the community. Affairs of moment, relating to particular convents, are determined in conventual chapters; such as respect the whole are considered in general congregations. But Loyola, full of the idea of implicit obedience, which he had derived from his military profession, appointed that the government of his order should be purely monarchical. A general, chosen for life by deputies from the several provinces, possessed power supreme and independent, extending to every person and case. He nominated provincials, rectors, and every other officer employed in the government of the society, and could remove them at pleasure. In him was vested the sovereign administration of the revenues and funds of the order. Every member belonging to it was at his disposal: and by his uncontrollable mandate he could impose on them any task, or employ them as he pleased. To his commands they were required to yield not only outward obedience, but to resign to him their inclinations and sentiments. They were to listen to his injunctions as if they had been uttered by Christ himself. Under his direction they were to be mere passive instruments, like clay in the hands of the potter. Such a singular form of policy could not fail to impress its character on all the members of the order, and to give a peculiar force to all its operations. There is not in the annals of mankind, any example of such a perfect despotism exercised, not over monks shut up in a convent, but over men dispersed among all the nations of the earth. As the constitution of the order vested in the general such absolute dominion, it carefully provided for his being perfectly informed with respect to the character and abilities of his subjects. Every novice who offered himself a candidate was obliged to lay open his conscience to the superior, or a person appointed by him; and not only to confess his sins, but to discover the inclinations, the passions, and the bent of his soul. This was to be renewed every six months. The society, not satisfied with thus penetrating into the innermost recesses of the heart, directed each member to observe the words and actions of the novices: they were constituted spies upon their conduct, and were bound to disclose every thing of importance concerning them to the superior. That this scrutiny into their character might be as complete as possible, the noviciate was long, during which they passed through the several gradations of ranks in the society; and they must have attained the full age of thirty-three years before they could be admitted to take the final vows, by which they became members. By these methods the superiors, under whose immediate inspection the novices were placed, acquired a thorough knowledge of their dispositions and talents. That the general, who was the soul that animated and moved the whole society, might have under his eye every thing necessary to direct him, the provincials and heads of houses were obliged to transmit to him regular and frequent reports of the members under their inspection. In these they descended into minute details with respect to the character, abilities, temper, and experience of each person, and the particular department for which he was best fitted. These reports were entered into registers kept on purpose, that the general might at one view survey the state of the society all over the globe; observe the talents of its members; and thus choose the instruments which his absolute power could employ in any service for which he thought proper to destine them.

As it was the professed intention of the Jesuit to promote the salvation of men, this engaged them in many active functions. They considered the education of youth as their peculiar province; they aimed at being spiritual guides and confessors; they preached frequently in order to instruct the people; they set out as missionaries to convert unbelieving nations. The novelty of the institution, as well as the singularity of its objects, procured the order many admirers and patrons. The governors of the society availed themselves of every favorable circumstance; and the number and influence of its members increased rapidly. Before the expiration of the sixteenth century, they had obtained the chief direction of the education of youth in every catholic country in Europe. They had become the confessors of all its catholic monarchs; a function of importance in any reign, but, under a weak prince, superior even to that of the minister. They were the spiritual guides of almost every person eminent for rank or power. They possessed the highest interest with the papal court, as the most zealous and ablest champions for its authority. The advantages which they derived from all these circumstances are obvious. They formed the minds of men in their youth, and retained an ascendant over them in their advanced years. They possessed the direction of the most considerable courts in Europe. They mingled in all affairs. They took part in every intrigue and revolution. The general, by the extensive intelligence he received, regulated the operations of the order with perfect discernment: and, by means of his absolute power, carried them on with vigor and effect. Together with the power of the order, its wealth increased. Various expedients were devised for eluding the obligation of the vow of poverty. The order acquired ample possessions in every catholic country; and by the number and magnificence of its public buildings, with the value of its property, it vied with the most opulent of the monastic fraternities. Besides the sources of wealth common to the regular clergy, the Jesuits possessed one peculiar to themselves. Under pretext of promoting the success of their missions, and of facilitating the support of their missionaries, they obtained a special li-

cense from the court of Rome to trade with the nations which they labored to convert. In consequence of this they engaged in extensive and lucrative commerce both in the East and West Indies, and opened warehouses in Europe for vending their commodities. They imitated the example of other commercial societies; obtained settlements; and acquired possession of a large and fertile province in South America, and reigned as sovereigns over some hundred thousand subjects. Unhappily the vast influence which the Jesuits acquired, by all these different means, was often exerted with the most pernicious effect. Such was the tendency of that discipline observed by the society in forming its members, and such the fundamental maxims in its constitution, that every Jesuit was taught to regard the interest of the order as the capital object to which every consideration was to be sacrificed. This attachment to their order, the most ardent perhaps that ever influenced any body of men, was the characteristic principle of the Jesuits, and serves as a key to the genius of their policy, as well as the peculiarities of their conduct. As it was for the advantage of the society that its members should possess an ascendant over persons in high rank, or of great power, the desire of acquiring and preserving such an ascendant led the Jesuits to propagate a system of relaxed and pliant morality, which accommodates itself to the passions of men, justifies their vices, tolerates their imperfections, and authorises almost every action that the most audacious or crafty politician would wish to perpetrate. As the prosperity of the order was intimately connected with the preservation of the papal authority, the Jesuits, influenced by the same principle of attachment to the interests of their society, have been the most zealous patrons of those doctrines which tend to exalt ecclesiastical power on the ruin of civil government. They attributed to the court of Rome a jurisdiction as extensive and absolute as was claimed by the most presumptuous pontiffs in the dark ages. They contended for the entire independence of ecclesiastics on civil magistrates. They published such tenets concerning the duty of opposing princes, who were enemies of the Catholic faith, as countenanced the most atrocious crimes, and tended to dissolve all the ties which connect subjects with their rulers. As the order derived both reputation and authority from the zeal with which it stood forth in defence of the Romish church, its members considered it as their peculiar duty to combat the opinions and check the progress of the Protestants. They used every art, and employed every weapon against them. They opposed every gentle and tolerating measure in their favor. They incessantly stirred up against them all the rage of ecclesiastical and civil persecution. Whoever considers the events which happened in Europe, during the sixteenth and seventeenth centuries, will find the Jesuits responsible for most of the pernicious effects arising from that corrupt casuistry, those extravagant tenets, and that intolerant spirit, which disgraced the church of Rome throughout that period, and which brought so many calamities upon civil society.

Amidst the many bad consequences flowing from the institution of this order, mankind derived from it considerable advantages. As the Jesuits, in their first attempts to establish colleges, were violently opposed by the universities in different countries, it became necessary for them, in order to acquire the public favor, to surpass their rivals in science and industry. This prompted them to cultivate the study of ancient literature with extraordinary ardor, and engaged them in various methods for facilitating the instruction of youth. Nor has the order been successful only in teaching literature; it has produced likewise eminent masters in many branches of science, and can boast of a greater number of ingenious authors than all the other religious fraternities taken together. But it was in the new world, that the Jesuits exhibited the most wonderful display of their abilities, and contributed most effectually to the benefit of the human species. The conquerors of that unfortunate quarter of the globe had nothing in view but to plunder, enslave, and exterminate its inhabitants. The Jesuits alone made humanity the object of their settling there. About the beginning of the seventeenth century they obtained admission into the fertile province of Paraguay. They found the inhabitants strangers to the arts, subsisting precariously by hunting or fishing, and hardly acquainted with the first principles of government. The Jesuits instructed and civilised these savages. They taught them to cultivate the ground, to rear tame animals, and to build houses. They brought them to live together in villages; trained them to arts and manufactures; made them taste the sweets of society, and accustomed them to the blessings of security and order. These people became the subjects of their benefactors, who governed them with a tender and paternal attention. Respected and beloved, almost to adoration, a few Jesuits presided over several hundred thousand Indians. They maintained a perfect equality among all the members of the community. Each of them was obliged to labor, not for himself alone, but for the public. The produce of their fields, and the fruits of their industry, were deposited in store-houses, from which each individual received every necessary supply. By this institution almost all the passions which disturb the peace of society, and render the members of it unhappy, were restrained. A few magistrates, chosen by the Indians themselves, watched over the public tranquillity, and secured obedience to the laws. The sanguinary punishments frequent under other governments were unknown. An admonition from a Jesuit, a slight mark of infamy, or, on some particular occasion, a few lashes with a whip, were quite sufficient to maintain good order among these innocent and happy people. But even in these meritorious efforts of the Jesuits for the good of mankind, the genius and spirit of their order appeared. They aimed at establishing in Paraguay an independent empire, subject to the society alone, and which, by the superior excellence of its constitution and police, could scarcely have failed to extend its dominions over all the southern continent of America. With this view, to prevent the Spaniards or Portuguese in the adjacent settlements from acquiring any dangerous

influence over the people within the limits of the province subject to the society, the Jesuits endeavoured to inspire the Indians with hatred and contempt of these nations. They cut off all intercourse between their subjects and the Spanish or Portuguese settlements. They prohibited any private trader of either nation from entering their territories. When they were obliged to admit any person in a public character from the neighbouring governments, they did not permit him to have any conversation with their subjects; and no Indian was allowed even to enter the house where these strangers resided, unless in the presence of a Jesuit. To render any communication between them as difficult as possible, they industriously avoided giving the Indians any knowledge of the Spanish or any other European language; but encouraged the different tribes which they had civilised to acquire a certain dialect of the Indian tongue, and labored to make that the universal language throughout their dominions. To render this empire secure and permanent, they instructed their subjects in the European arts of war. They formed them into bodies of cavalry and infantry, completely armed, and regularly disciplined. They provided a great train of artillery, as well as magazines stored with all the implements of war. Thus they established an army so numerous and well appointed, as to be formidable in a country where a few sickly and ill-disciplined battalions composed all the military force kept up by the Spaniards or Portuguese. Such were the laws, policy, and genius of this formidable order.

But the courts of Europe had observed for two centuries the ambition and power of the order. While they felt many fatal effects of these, they however could not fully discern the causes to which they were to be imputed. They were unacquainted with many of the singular regulations in the political constitution of the Jesuits, which formed the enterprising spirit of intrigue that distinguished its members, and elevated the society to such a height of power. It was a fundamental maxim with the Jesuits, from their institution, not to publish the rules of their order. These they kept concealed as an impenetrable mystery. They never communicated them to strangers, nor even to the greater part of their own members. They refused to produce them when required by courts of justice; and, by a strange solecism in policy, the civil power in different countries authorised or connived at the establishment of an order of men whose constitution and laws were concealed with a solicitude which alone was a reason for examining them. During the prosecutions carried on against them in Portugal and France, the Jesuits imprudently produced the mysterious volumes of their institute. By these authentic records the principles of their government were discovered, and the sources of their power investigated, with a degree of certainty which, previously to that event, it was impossible to attain. The pernicious effects of the constitution of this order had rendered it early obnoxious to some of the principal powers in Europe, and gradually brought on its downfal. The emperor Charles V. saw it expedient to check its progress in his dominions: it was expelled England by proclamation, 2 James I., in 1604; Venice in 1606; Portugal in 1759; France in 1764; Spain and Sicily in 1767; and totally suppressed and abolished by pope Clement XIV. in 1773. See FRANCE.

Since the downfal of Napoleon the Jesuits have shown themselves in France, and various parts of the continent, in considerable numbers. They have at least two flourishing seminaries, we believe, also, in this country: we are, however, amongst those who believe the partial revival of this and every other form of popery is transient: in France we know it only confirms the educated and respectable classes in the Deism of the revolution.

JESUS, THE SON OF SIRACH, a native of Jerusalem, composed, about 200 B. C., the book of Ecclesiasticus, called by the Greeks Πανάρετος, 'replenished with virtue;' who also quote it under the title of the Wisdom of Solomon the Son of Sirach. His grandson, who was also of the same name, and a native of Jerusalem, translated it from the Hebrew into Greek about 121 B. C. This Greek version is extant, but the Hebrew original is lost.

JET, *n. s.* & *v. n.* } Sax gagac; Dut. *get;*
JETTY, *adj.* } Lat. *gagates.* A beautiful fossil. See below. From Fr. *jet:* a spout or shoot of water; a yard. Jet, to shoot forward; to jut out; to strut or agitate the body by a proud gait; to jolt or be shaken; from Fr *jetter.* Jetty, made of jet; black as jet.

His bill wos black, and as the *jet* it shone;
Like asure were his legges, and his tone.
Chaucer. The Nonnes Preestes Tale.

What orchard unrobbed escapes,
Or pullet dare walk in their *jet?*
Tusser's Husbandry.

Contemplation makes a rare turkey-cock of him: how he *jets* under his advanced plumes. *Shakspeare.*

Think you not how dangerous
It is to *jet* upon a prince's right? *Id.*

Black, forsooth; coal-black, as *jet.* *Id.*

There is more difference between thy flesh and hers, than between *jet* and ivory. *Id.*

The bottom clear,
Now laid with many a set
Of seed pearl, ere she bathed her there,
Was known as black as *jet.* *Drayton.*

The people about Capo Negro, Cefala, and Madagascar, are of a *jetty* black.
Browne's Vulgar Errours.

Her hair
Adown her shoulders loosely lay displayed,
And in her *jetty* curls ten thousand Cupids played.
Prior.

Prodigious 'tis, that one attractive ray
Should this way bend, the next an adverse way!
For should the' unseen magnetick *jets* descend
All the same way, they could not gain their end.
Blackmore.

Nigrina black, and Merdamante brown,
Vied for his love in *jetty* bowers below. *Pope.*

Thus the small *jet*, which hasty hands unlock,
Spurts in the gardener's eyes who turns the cock.
Id.

One of us in glass is set,
One of us you'll find in *jet.* *Swift.*

Under flowing *jet,*
The neck slight shaded.
Thomson's Summer.

JET, a black inflammable substance of the bituminous kind, harder than asphaltum, and susceptible of a good polish. It becomes electrical by rubbing, attracting light bodies like yellow amber. Its fracture is striated, and it splits more easily in the direction of the striæ. Its hardness from 6 to 7. The specific gravity of a piece extant in the king's cabinet, at Paris, was found by Brisson to be 1259. Yet Buffon tells us it floats on water, and Muschenbroek will have its specific gravity 1744. It burns with a greenish flame: and it has been frequently confounded with the lapis obsidianus, the specific gravity of which, according to Kirwan, is no less than 1744. It also resembles cannel coal extremely in its hardness, receiving a polish, not soiling the fingers, &c., so that it has also been confounded with this. The distinction, however, is easily made; for cannel coal wants the electrical properties of jet, and its specific gravity is no less than 1273. M. Magellan is of opinion that jet is a true amber, differing from the yellow kind only in the mere circumstance of color, and being lighter on account of the greater quantity of bituminous matter which enters into its composition. When burning it emits a bituminous smell. It is never found in strata or continued masses like fossil stones; but always in separate and unconnected heaps like the true amber. Great quantities of it have been dug up in the Pyrenean Mountains; also near Batalha, a small town of Portugal; and in Galicia in Spain. It is found also in Ireland, Sweden, Prussia, Germany, and Italy. It is used in making small boxes, buttons, bracelets, mourning jewels, &c. Sometimes it is also employed in conjunction with oils in making varnishes. When mixed with lime in powder it is said to make an extraordinary hard and durable cement.

JET D'EAU, a French term, adopted into the English language, for a fountain that casts up water to a considerable height in the air. See HYDROSTATICS.

JET'SAM, *n. s.*, } French *jetter*. Goods or
JET'SON. } other things which, having been cast over board in a storm, or after shipwreck, are thrown upon the shore, and belong to the lord-admiral.

JETTY HEAD, a name usually given in the royal dock-yards to that part of a wharf which projects beyond the rest; but more particularly the front of a wharf whose side forms one of the cheeks of a dry or wet dock.

JEWS.

JEW, *n. s.* } Lat. *Judæus*; Gr. Ιουδαιος;
JEW'RY, *n. s.* } Heb. *jehudi*. The descendants of Abraham, as distinguished from all the Gentile nations. Jewry, used by Chaucer as the district of any place inhabited by Jews.

> She freyneth, and she praieth pitously
> To every *Jew* that dwelled in thilke place,
> To telle hire, if hire childe went out forth by.
> *Chaucer. The Prioresses Tale.*
>
> Ther was in Asie, in a gret citee,
> Amonges Cristen folk a *Jewerie*—
> Sustened by a lord (of that countree),
> For foule usure and lucre of vilanie.
> *Id.*
>
> Glory he requires, and glory he receives
> Promiscuous from all nations *Jew* or Greek.
> *Milton's Paradise Regained.*
>
> 'There's a pasty—a pasty,' repeated the *Jew*,
> 'I don't care if I keep a corner for't too;'
> 'What the de'il mon, a pasty!' re-echoed the Scot,
> 'Though splitting, I'll still keep a corner for that.'
> 'We'll all keep a corner,' the lady cried out,
> 'We'll all keep a corner,' was echoed about.
> *Goldsmith.*

JEWS. This name seems first to have been given to the descendants of the patriarch Abraham, by his eldest son, Isaac, after their captivity in Babylon, and is derived from that of the patriarch Judah, the tribe of that name constituting, with the tribe of Benjamin, the chief part of this people that has been preserved distinct from other nations.

The history of the Jews is the most remarkable, and certainly the most ancient, in the world, taking its date before the commencement of profane history, and resting, in part, on the authenticity of the Old Testament, in which alone it is recorded; for the writings of Josephus seem chiefly to have been derived from that source. To the Bible, therefore, we may refer our readers for the early account of this people, such as their descent from the twelve sons of Jacob, from whence arose their division into twelve tribes; their going down into Egypt; their treatment there; their Exodus, or departure from that country, under the conduct of Moses; their passage through the wilderness, and settlement in the land promised to Abraham. We begin this sketch of their history with their return from Babylon, and the rebuilding of their city and temple under Ezra and Nehemiah, at which time the Old Testament ceases, and profane historians first notice them. For a chronological list of their judges and kings during the commonwealth of Israel, to the taking of Samaria by the Assyrians, see the article ISRAEL; and for that of the kings of Judah, from Solomon's death to the captivity in Babylon, see the article JUDAH.

About 536 B. C. Cyrus the Great, after having subdued Babylon, and the whole of Western Asia, determined to restore the Jews to their native country, and to permit them to rebuild Jerusalem with its temple. He therefore published a decree, allowing them to carry home with them all their sacred vessels, and engaging himself to bear the expense of rebuilding the temple. Many, however, chose rather to stay in Chaldea; and the more zealous who returned were, as we have intimated, portions of the three tribes of Judah, Benjamin, and Levi, who set out under the conduct of Zerubbabel, and laid the foundations of the temple about 538 B. C. The building advanced (Ezra iv. 1), and every thing seemed to succeed with his countrymen, when they were opposed by the Samaritans, the descendants of those heathens who had colonised

the land of the ten tribes. These people, exasperated by the Jews refusal of their assistance in the work, determined to impede them; this they first attempted by misrepresentations of their motives to the Persian court, and prevailed so far as to procure an order for suspending their proceedings, and afterwards obstructed them by open force. The Jews, however, made their appeal to the government, and procured a new decree in their favor, on which they proceeded, maintaining their ground against their enemies by force of arms. When the temple was finished, Nehemiah endeavoured to restore the ancient worship, and to correct various abuses which had crept in among the people, in which he was assisted by Ezra.

The Jews, however, though restored to the free exercise of their religion, were at this time few in number, and their country only a province of Syria, dependent on the kings of Persia. The Syrian governors for a long time committed the administration of their affairs to the high priests, and to this circumstance may be attributed their subsequent misfortunes. Men were thus introduced into that important office through ambition or avarice, and contrary to the Mosaic institution, which had fixed it in the family of Aaron. A fatal proof of this occurred in the year 373 B. C. Bagoses, governor of Syria, having contracted a friendship with Joshua, the brother of Johanan, the high priest, promised to confer the office upon him not long after his brother had been invested with it; when, on an interview taking place between the brothers in the inner court of the temple, Joshua fell by the hands of Johanan, and the temple was thus most scandalously polluted. In consequence of this a heavy fine was laid on it, which was not taken off for seven years. The first public calamity which befel the Jewish nation, after this, happened in the year 351 B. C., when Darius Ochus, king of Persia, besieged and took Jericho, carrying off all the inhabitants into captivity. From this time they continued so faithful to the Persians, that they had almost incurred the displeasure of Alexander the Great. That monarch having resolved upon the siege of Tyre, and being informed that the city was wholly supplied with provisions from Judea, Samaria, and Galilee, sent to Jaddua, then high priest, to demand of him the tribute which he had been accustomed to pay to the Persians. The Jewish pontiff excused himself on account of his oath of fidelity to Darius. Alexander was on this so provoked, that he had no sooner completed the reduction of Tyre than he marched against Jerusalem. The inhabitants, in the greatest consternation, had recourse to prayers; and Jaddua is said to have been commanded, by an intimation from heaven, to go and meet Alexander. He accordingly set out, dressed in his pontifical robes, at the head of all his priests, and attended by the rest of the people attired in white garments. Alexander, it is said, was seized with such awful respect on seeing this venerable procession, that he embraced the high priest, and paid a kind of religious adoration to the name of God engraven on the front of his mitre. On his followers being surprised at this behaviour, the Macedonian monarch informed them that he paid that respect not to the priest, but to his God, having seen a vision at Dia, of a person of the same appearance and dress as the pontiff before him, promising him the conquest of Persia, and encouraging him in his expedition. He afterwards accompanied Jaddua into Jerusalem, where he offered sacrifices in the temple. The high priest, it is said, showed him at this time the prophecies of Daniel, wherein the destruction of the Persian empire by himself is plainly foretold; in consequence of which the king went away highly satisfied, and at his departure asked Jaddua if there was any thing in which he could gratify him or his people. Jaddua then told him, that, according to the Mosaic law, they neither sowed nor ploughed on the seventh year, and therefore would esteem it a high favor if the king would remit their tribute that year. To this request Alexander readily yielded; and having confirmed all their privileges, particularly that of living under their own laws, he departed. This story has been doubted by some writers; but, whatever credit may be attached to it, it is certain that the Jews enjoyed the favor of Alexander.

All their good fortune, however, seemed to expire with that prince. Situated between Syria and Egypt, Judea was necessarily involved in many of the quarrels of Alexander's ambitious successors, who governed those countries. It first fell to the portion of Laomedon, one of that monarch's generals, together with Syria and Phenicia; but soon afterwards, Ptolemy having deprived him of his possessions, Judea was called upon to yield to the conqueror. The Jews refusing to break their allegiance, to their former prince, Ptolemy now invaded them with a great army, soon reduced the open country, and laid siege to Jerusalem, which, being strongly fortified by nature and art, seemed likely to stand out for a long time. Taking advantage, however, of the Jews' superstitious fear of breaking the sabbath, he assaulted the place on that day, and easily took it; 100,000 of them are said to have been now carried into captivity; but Ptolemy, afterwards reflecting on their known fidelity to their conquerors, restored the Jews to all the privileges they had enjoyed under the Macedonian government. Some of his captives he put into garrisons, others he settled in Libya and Cyrene. From those who took up their residence in the latter of these countries descended the Cyrenean Jews, mentioned in the New Testament. Five years after, when he was forced to yield the country to Antigonus, merely reserving to himself Acre, Samaria, Joppa, and Gaza, he settled a multitude of Jews at Alexandria, and endowed them with considerable privileges. The conduct of Antigonus was so tyrannical, that numbers of his Jewish subjects fled into Egypt, and others took refuge with Seleucus, who also granted them considerable immunities. Thus this nation became gradually spread over Syria and Asia Minor, while Judea seemed in danger of being depopulated, when it was recovered by Ptolemy in 292 B. C.

The affairs of the Jews now took a more prosperous turn, and continued improving till the

reign of Ptolemy Philopater, when they were harassed by the incursions of the Samaritans; and Antiochus Theos, king of Syria, at the same time invaded Galilee. Ptolemy, however, marched against Antiochus, and defeated him; after which, having gone to Jerusalem to offer sacrifices, he ventured to enter the temple itself; and penetrated the two outer courts; but, as he was about to enter the sanctuary, he was, it is said, struck with such dread and terror, that he fell down half dead. On this he raised a dreadful persecution against the Jews, which was stopped by a still more extraordinary event (see the article EGYPT), and the Jews again restored to favor. About the year 204 B. C. Judea was subdued by Antiochus the Great; and on this occasion the Jews failed in their loyalty to the Egyptians, the whole nation readily submitting to the king of Syria. That monarch was so well pleased with this, that he sent a letter to his general, informing him that he designed to restore Jerusalem to its ancient splendor, and to recal all the Jews that had been scattered; that on account of his reverence for their God, he would repair their temple, and grant them 20,000 pieces of silver for the expenses of their worship, together with 1400 measures of fine wheat and 375 of salt for their offerings; that the public service should be restored, and the priests; and that no stranger or Jew, that was unpurified, should enter the holy place of the temple; denouncing a penalty of 3000 pieces of silver on any one who should transgress these regulations. He also exempted from taxes, for three years, all Jews who should settle in the metropolis, and set at liberty all that had been sold for slaves.

But this state of prosperity was very soon interrupted, a quarrel, the cause of which is unknown, arising in the year 176 B. C., between Onias the high priest, and Simon the governor of the temple, it led to the most fatal consequences. Simon, not being able to prevail over Onias, informed Apollonius, the governor of the country, that a great treasure was hid in the temple, which might be seized for the king of Syria. On hearing which, that monarch sent Heliodorus to take possession of the supposed treasure; but he, through a miraculous interposition, according to the Jews' account, could not enter the sacred precinct. Simon, upon this, accused the high priest of having invited Heliodorus to Jerusalem, and a civil war was at once excited. Soon after, however, on the complaint of Onias to the king, Simon was sent into exile; but Antiochus Epiphanes having succeeded to the crown of Syria, and being at that time in great want of money, Jason, the high priest's brother, purchased the office for 350 talents, and procured an order that his brother should be confined at Antioch for life. For 150 talents more, Jason obtained permission to build a gymnasium at Jerusalem, like those of the Grecian cities, and to confer the citizenship of Antioch on as many Jews as he pleased. By these means, his countrymen being great admirers of the Greek customs, he soon formed a strong party. A general apostasy now took place; the worship of the temple was neglected, and Jason gave himself up to paganism. He was, however, soon supplanted by his brother Menelaus, whom he had sent with the tribute to Antiochus, and who, having offered 300 talents more than his brother had given, obtained the high priesthood, and returned with his commission to Jerusalem; but Jason was too powerful for him, and he was obliged to retire to Antioch. On this the Jews of the capital informed Antiochus that it was their determination to renounce their religion, and conform to that of the Greeks; and the tyrant granted them troops, by means of which they drove Jason out of the city, who fled for protection to the Ammonites. Menelaus now failing to pay the tribute, he was summoned to Antioch, and commissioned his brother Lysimachus to sell several of the golden vessels of the temple to raise the money. In the mean time his brother Onias, who was still a prisoner at Antioch, hearing of the sacrilege that had been committed, complained bitterly that an insurrection was about to break out among the Jews there, on which Menelaus bribed Andronicus, the governor of the city, to murder Onias. This produced vehement accusations against the murderer on Antiochus's return to the capital, who at length ordered Andronicus to be executed. Still Menelaus preserved his influence by means of his money; but the drawing of such large sums from Jerusalem incensed the people, and they massacred his brother Lysimachus, whom he had left governor.

After this, when Antiochus went to Tyre, the Jews sent deputies to him, justifying the death of Lysimachus, and accusing Menelaus of being the author of all their troubles; the latter, however, who was never at a loss while he could procure money, pleaded his cause with such effect, that the deputies were put to death; and, having thus obtained a complete victory, he became an absolute tyrant. At this time Jerusalem had no protectors; if there were any zealous men left in the sanhedrim, they were so much terrified that they did not venture to resist him, though they were well aware of his design to overthrow the religion and liberty of his country. While these things were passing, Antiochus was occupied in the conquest of Egypt; and it was reported, that he was killed at the siege of Alexandria. On hearing this, the Jews imprudently manifested their joy, when Jason, taking advantage of the opportunity, appeared before Jerusalem with 1000 resolute men: the gates were soon opened by some of his friends, and, Menelaus retiring to the citadel, he filled the city with the most horrid butcheries. He was obliged, however, to leave both the city and country, on receiving the intelligence that Antiochus was marching against him with a powerful army. That prince, highly provoked at this rebellion, and especially at the rejoicings the Jews had made on the report of his death, now resolved to punish the city with the utmost severity. Accordingly, about 170 B.C., having made himself master of it, he treated them with such cruelty, that, within three days, no fewer than 40,000 are said to have been killed, and as many sold for slaves. In the midst of this dreadful calamity, the apostate Menelaus found means not only to escape the

general slaughter, but even to regain the favor of the king, who, having by his means plundered the temple of every thing valuable, returned to Antioch in triumph. But, before he departed, he put Judea under the government of one Philip, a barbarous Phrygian; made Andronicus, a person of a similar disposition, governor of Samaria; and left Menelaus, the most hateful of the three, in possession of the high priesthood. Though the Jews suffered exceedingly under these tyrannical governors, still greater calamities awaited them. About 168 B.C., Antiochus having been most severely humbled by the Romans, conceived the design of wreaking his vengeance on the unhappy Jews. For this purpose he despatched Apollonius at the head of 22,000 men, ordering him to plunder all the cities of Judea, to murder all the men, and sell the women and children for slaves. Apollonius, on his arrival, assumed an appearance of peaceable intentions; nor indeed was he suspected of hostile intentions by the Jews, as he usually had the management of the tribute in Palestine. On the sabbath, however, he suddenly commanded his men to arms. Some he sent to the temple and synagogues, with orders to cut in pieces all whom they found there; whilst the rest, going through the streets, massacred all that came in their way; the Jews not making the least resistance, for fear of breaking the sabbath. He next ordered the city to be plundered and set on fire, pulled down all the respectable buildings, demolished the walls, and carried away captive about 10,000, who had escaped the slaughter. From that time the service of the temple was totally suspended. The Syrian troops built a large fortress on an eminence in the city of David, which commanded that edifice; and strengthened it with a wall and stately towers. From this place the soldiers could easily see and sally out upon all that attempted to enter the temple; many were continually plundered by them, and the rest, not daring to stay any longer in the city, fled for refuge to the neighbouring nations. Antiochus, not yet satiated with the blood of the Jews, resolved either totally to abolish their religion, or to destroy their whole race. He therefore made a proclamation, that all nations within his dominions should forsake their old religion and gods, and worship those of the king under the most severe penalties. He sent overseers into every province to see these orders strictly executed; and, knowing that the Jews were the only people who would disobey them, special directions were given to treat them with the greatest severity. Athenæus, an old and cruel minister well versed in all the pagan rites, was sent on this occasion into Judea. He first dedicated the temple to Jupiter Olympius, setting up his statue on the altar of burnt-offerings. Another altar of smaller size was raised before it, on which they offered the sacrifices of that god. All who refused to come and worship the idol were either massacred or put to some cruel tortures, till they complied or expired under the hands of the executioners. Altars, groves, and statues, were also raised in every part of the country, and the inhabitants forced to conform to this false worship under the same severe penalties; while it was instant death to observe the sabbath, circumcision, or any other institution of Moses.

These horrid scenes at length aroused the zeal of a priest, named Mattathias, for the worship of his fathers. He had fled to Modin, his native town, during the persecution that was raging at Jerusalem; and, while he was there, Apelles, one of the king's officers, came to force the inhabitants to comply with the orders of Antiochus. Mattathias and his sons were earnestly entreated by him to give up their religion, and the greatest promises held out to them of the king's favor on their compliance; Mattathias however declared, that though the whole nation and all the world were to conform, he with his sons would continue faithful to their God. Perceiving one of his countrymen about to sacrifice to an idol, he ran upon him and slew him; while his sons, animated with the same spirit, despatched the officer and his men, overthrew the idol and the altar, and, running through the city, called upon all, who were zealous for the law of God, to follow them. They soon found themselves at the head of a considerable body of their countrymen, with whom they departed into one of the deserts of the country; and were followed thither by many more. Seeing the danger to which they were exposed by their too scrupulous observance of the sabbath, they now determined on defending themselves, if attacked, on that day.

Perceiving his followers daily increasing, Mattathias, in the year 167 B.C., made an attack upon the Syrian army, and the apostate Jews; having taken many of the latter, he put them to death, and obliged a great number to betake themselves to foreign countries. By these means he struck terror into his foes, and, marching from one city to another, overturned the idolatrous altars, re-opened the synagogues, made diligent search for the sacred books, and caused fresh copies of them to be taken; he also restored the reading of the Scriptures, and had all the males, born since the persecution, circumcised. Eventually he was so successful, that in one year he had extended this reformation through the greatest part of Judea; and would most probably have completely accomplished it, had he not been arrested in his course by death. He was succeeded, however, by his son Judas, surnamed Maccabæus, one of the most renowned heroes that the Jewish annals can boast. With a small body of 6000 men he took possession of some of the strongest fortresses in the country, and became the terror of the Syrians, the Samaritans, and apostate Jews. He defeated the Syrians in five pitched battles in one year, and entirely drove them out of the country; and afterwards purified the temple, restoring the worship of the true God, which had ceased for three years and a half. To prevent the Syrian garrison, whom he could not dispossess, from hindering the worship of the temple, he fortified the mountain on which it stood, leaving a garrison to defend it; and strengthened Bethzura, a fortress about twenty miles distant. In the mean time Antiochus, returning from an unsuccessful expedition into Persia, was informed that the Jews had revolted, driven his generals with their armies out of

Judea, and re-established their ancient worship. Filled with fury, at this intelligence, he threatened to exterminate the whole race, and commanded his charioteer to drive towards that country with the utmost speed: scarcely, however, had he given this order, when he was seized with a violent malady in his bowels, that no remedy could abate. Still he hurried forward, until he fell from his chariot, and was forced to be put into a litter. At last he was constrained to stop at Tabæ, a town on the frontiers of Persia and Babylonia, enduring, it is said, excruciating agonies from the vermin that bred in his intestines, and the stench which was insupportable even to himself. The torments of his mind were greater than those he endured in his body; Polybius, agreeing with the Jewish historians, tells us, that he was haunted by spectres and apparitions, which upbraided him with his wicked deeds, so that he was in a continual delirium. Having languished in this dreadful state for a considerable time, he expired; and thus the Jews were delivered from the most inveterate enemy they had ever known. Still the war was carried on by his generals, but Judas always defeated them, and in 163 B. C., obtained a peace on very advantageous terms. On the Syrian generals renewing hostilities, they met the same repulses as before; Judas obtained the victory over them in five engagements, but in the sixth, being abandoned by most of his men, he was slain, together with 800 who continued faithful to him.

This event filled his countrymen with the greatest consternation. Jonathan, his brother, however, succeeded him, and conducted their affairs with the same prudence and success, until he was treacherously seized and put to death by a Syrian usurper of the name of Tryphon, who afterwards murdered his own sovereign. After this the traitor prepared to invade Judea, but his designs were frustrated by Simon, the brother of Jonathan. This pontiff repaired and garrisoned the fortresses of the country, took Joppa and Gaza, and drove the Syrians out of the citadel of Jerusalem; when in the year 135, B. C., he was also murdered through the treachery of Ptolemy, his son in law.

Hyrcanus I. succeeded him, who was the first person since the captivity that had assumed the regal dignity, and who raised the nation to greater prosperity than it had ever enjoyed since that period. He entirely shook off the Syrian yoke, subdued the Samaritans, demolished their capital city, and made himself master of all Syria, as well as Samaria and Galilee, of which he kept undisturbed possession till within a year of his death. In him, we are told by the author of the fourth book of Maccabees, were united three dignities, that never before met in any other person, namely, the royal dignity, the high priesthood, and the gift of prophecy; but the evidence of the last is very equivocal. He was much disturbed in the last year of his reign by a quarrel with the Pharisees, to whom he had been a great friend, and who had occupied the most honorable stations in the government; at length, however, one of them, named Eleazar, began to dispute the legitimacy of Hyrcanus, saying that his mother was a slave, and therefore he could not enjoy the dignity of the priesthood. The whole sect affected to believe this report, which so incensed the king that he immediately joined the Sadducees, and would never be reconciled to their rivals, who raised all the seditions they could during the short time that he survived. He died about 107 years B. C., and was succeeded by Aristobulus, his eldest son, who conquered Iturea.

He was a most cruel tyrant, murdering one of his brothers, together with his mother, and keeping the rest closely confined during his reign, which happily proved but short. To him succeeded, in 105, Alexander Jannæus, the greatest conqueror, next to David, that ever wielded the Jewish sceptre. He was hated, however, by the Pharisees, and was once very near being killed in tumult excited by them; but, having caused his guards to fall upon the mutinous mob, they killed 6000 of them, and dispersed the rest. After this, being unable to remain quiet in his own kingdom, he left Jerusalem, resolving to devote himself wholly to his conquests; but, while he was busied in subduing his enemies abroad, the Pharisees raised a rebellion against him. This was quelled in the year 86 B. C., and the rebels were treated most barbarously. The faction, however, was by these means so thoroughly crushed, that they never dared to lift up their heads as long as he lived. Having conquered several parts of Syria, he died 79, B. C.

Though Alexander had two sons, Hyrcanus and Aristobulus, he bequeathed the government to his wife Alexandra as long as she lived; and directed her just before his death to send for the principal leaders of the Pharisees, and pretend to be entirely devoted to them. With this advice the queen complied; but found afterwards great difficulty how to act with them, as they would at last be satisfied with nothing less than the extirpation of their adversaries. A most cruel persecution, therefore, took place against the Sadducees, which continued for four years; until, upon their earnest petition, they were sent into the several garrisons of the kingdom, to secure them from the rage of their enemies. Being not long after attacked with a dangerous sickness, her youngest son, Aristobulus, formed a strong party to secure the crown to himself: the queen, however, displeased with his conduct, appointed Hyrcanus, whom she had before made high priest, to be her successor also in the kingdom, and soon afterwards expired.

The Pharisees now raised an army against Aristobulus, which almost instantly deserted to him; Hyrcanus, therefore, was obliged to make peace on the terms of abandoning the royal and pontifical dignity. But this did not extinguish his party. A new cabal was raised by Antipater, an Idumæan proselyte, the father of Herod the Great; who carried off Hyrcanus into Arabia, pretending that his life was in danger in Judea, and applied to Aretas, king of that country, who undertook to restore the deposed monarch. Having invaded Judea, he defeated Aristobulus, and closely besieged him in Jerusalem. The latter, therefore, now sought the alliance of the Romans; and having bribed Scaurus, one of

their generals, he defeated Aretas, cutting off 7000 of his men, and driving him quite out of the country. Soon after the two brothers sent presents to Pompey, at that time commander-in-chief of the Roman forces in the east, making him arbitrator of their differences. But he, fearing that Aristobulus, against whom he intended to declare, might obstruct his intended expedition against the Nabatheans, dismissed them with a promise, that, as soon as he had subdued Aretas, he would come into Judea and decide their controversy. This so offended Aristobulus, that he departed without even taking leave of the general, who on his part took no less umbrage at this want of respect. The consequence was, that Pompey entered Judea, and summoned Aristobulus to appear before him. The Jewish prince would now gladly have excused himself, but he was forced by his own people to comply in order to avoid a war. He accordingly waited on him several times, and was dismissed with great marks of friendship. At last, Pompey insisting that he should deliver into his hands all the fortified places, Aristobulus plainly perceived that he was on his brother's side, upon which he fled to Jerusalem, resolving to oppose the Romans to the utmost of his power. Pompey quickly followed him, and, to prevent hostilities, Aristobulus was at last forced to throw himself at the feet of the haughty Roman, and promise him a considerable sum of money. This was accepted; but, Gabinus being sent with some troops to receive the sum, the garrison of Jerusalem now shut the gates against him, and refused to fulfil the agreement. Pompey was so exasperated that he immediately marched with his whole army against the city, and laid regular siege to it. As the fortifications were strong, he might have found it very difficult to accomplish his design, had not the Jews been again seized with a qualm of conscience respecting the observance of the sabbath day. From the time of the Maccabees they had not scrupled to take up arms against an offending enemy on the sabbath; but now they thought, that, though it was lawful on that day to stand on their defence when attacked, it was unlawful to do any thing to prevent those preparations which the enemy might make. Never, therefore, attempting to hinder the erection of batteries, or the making of breaches in their walls on the sabbath, the beseigers at last made so great a breach, that the garrison could no longer resist them. The city was taken in the year 63 B.C.; 12,000 of the inhabitants were slaughtered, and many more put an end to their own lives: the priests, who were engaged in their usual service, choosing rather to be butchered with their brethren than to interrupt the worship. Hyrcanus, again made high priest, was now forbidden to assume the title of king, to wear a crown, or to extend his dominions beyond Judea. The walls of Jerusalem Pompey demolished, to prevent all future attempts at revolt, and left Scaurus as governor, with a strong force: before he departed, however, he offended the Jews more than ever, by penetrating into the sacred recesses of the temple, and taking a view of the golden table, the candlestick, the censers, lamps, and other vessels; but he did not venture to touch them, and on retiring commanded the priests to purify the place in the usual manner.

Pompey, after this, set out for Rome, taking with him as captives, Aristobulus, Alexander, and Antigonus, his sons, to adorn his triumph. Alexander made his escape into Judea, where he raised 10,000 foot, and 1500 horse, and fortified some strong holds, from which he made constant incursions into the neighbouring country: while Hyrcanus was no sooner delivered from the rivalship of his brother, than he became indolent as usual, and trusted the management of his affairs to Antipater, who took this opportunity to advance his own interests. He attempted by all means to ingratiate himself with the Romans, and Scaurus, being in great want of provisions for an army which he had marched against the metropolis of Arabia, received from him a plentiful supply of corn and other necessaries. Soon after this he prevailed on the king to pay 200 talents to the Romans, to preserve the country, as he alleged, from being ravaged by Alexander. The latter, now venturing a battle, was defeated with great loss, and besieged in the fortress of Alexandrion, where he would have been obliged to surrender, but his mother interceded for him with the Roman general. After this the fortresses were again demolished, and Hyrcanus reinstated in his pontifical dignity; the province being divided into five districts, with a separate court of judicature in each.

Thus the government was changed from a monarchy to an aristocracy, and the Jews became subject to a set of the most arbitrary tyrants. About this time Aristobulus, having escaped from Rome, formed new troubles in Judea, but was conquered and again taken prisoner; his son also renewed his attempts, but suffered a similar defeat and lost nearly 10,000 men. After this Crassus was made governor of the province, the only act of whose government, worthy of record, is his having plundered the temple of its treasures and sacred utensils, valued at more than £2,000,000 sterling. Having committed this sacrilege he set out on his expedition against Parthia, where he perished miserably, as a judgment, according to the Jews, for his impiety.

The nation had some respite from oppression during the war between Cæsar and Pompey, and this likewise afforded them an opportunity of gaining the favor of the former, of which the politic Antipater readily availed himself. Cæsar rewarded him for his services by confirming Hyrcanus in the priesthood, and entailing on his posterity the principality of Judea for ever. He restored the Jews to their ancient privileges, ordering a pillar to be erected on which these grants were to be engraved, together with his own decree; and soon after, coming himself to Judea, gave them permission to fortify the city and rebuild the wall which Pompey had demolished. During his life, the Jews, indeed, hardly seemed to feel the Roman yoke.

But after his death those great disorders ensued, which were not effectually checked, till Herod, who had been made king of Judea by

Marc Antony in the year 40 B. C., was settled on the throne. On this occasion another cruel massacre took place followed by the death of Antigonus, who maintained himself against Herod for three years, murdered his brother Phasael, and cut off Hyrcanus's ears to render him unfit for the high priesthood.

The circumstances of the Jews were not at all improved by this change of masters; Herod becoming one of the greatest tyrants that history has ever mentioned. At the beginning of his reign he put to death all those who had taken part with his rival Antigonus, and confiscated their goods for his own use. So jealous was he in this respect, that he stationed guards at the city gates, to watch the bodies as they were conveyed out, lest any of their riches should be carried with them. He next sent for Hyrcanus from Parthia, whither he had been banished, and put him to death in despite of the most solemn promises of safety. Having no other victims, to satiate his thirst for blood, his cruelty turned on his own family. He had married Mariamne, the daughter of Hyrcanus, whose brother Aristobulus, a young prince of great merit, the tyrant caused to be drowned in a bath. Afterwards being summoned to appear, first before Marc Antony and then before Augustus, to answer for some crimes laid to his charge, he left orders that if he was condemned, Mariamne should be put to death. The consequence was, she conceived the greatest aversion for him, and was not backward in showing it. Enraged at this, Herod caused her to be falsely accused of infidelity, and she was condemned and executed. But with her ended all the happiness of her husband. His love increased so much after her death, that for a long time he appeared like a distracted person. Her death was followed by that of her mother Alexandra, and soon after by that of several other persons who had joined her in an attempt to secure the kingdom to her grandsons. Having now freed himself from most of his supposed enemies, Herod began to show a contempt of the Jewish ceremonies, by introducing a number of Roman games at Jerusalem. Ten assassins at last resolved to enter the theatre, while the tyrant was celebrating these games, with daggers concealed under their clothes. They had the desperate satisfaction to think, that, if they perished, the tyrant would be rendered still more odious by the punishment they suffered. Herod, informed of their design, put this however to the proof, and caused them to be put to a most excruciating death: the people were so much exasperated against the informer, that they tore him to pieces, and cast his flesh to the dogs. For a long time he tried in vain to discover the authors of this affront; but at last, by means of the rack, he extorted from some women the names of the principal persons concerned, whom he caused immediately to be put to death, together with their families. In consequence of this, disturbances arose, so that, apprehending nothing less than a general revolt, he began to fortify Jerusalem with several additional works, rebuilt Samaria, and put garrisons into several fortresses. About the year 23, B. C., he began to adorn the towns of Judea with many stately buildings. His most remarkable and magnificent undertaking, however, was the rebuilding and beautifying the temple, which he is said to have accomplished in a style of grandeur superior even to that of Solomon's. Ten thousand artificers were set to work, under the direction of 1000 priests, all of whom were kept in constant pay: 1000 carts were employed in fetching materials; and such a number of other hands were employed, that every thing was got ready within two years. After this they set about pulling down the old building, and rearing up the new one with the same expedition; the holy place, or temple, properly so called, was finished in a year and a half. The remainder in somewhat more than eight years. The temple, or holy place, was sixty cubits high, and sixty broad: in the front he added two wings, which projected twenty cubits more on each side. The stones were white marble, twenty-five cubits in length, twelve in height, and nine in breadth, all wrought and polished with exquisite beauty. Instead of doors, the gates were closed with very costly veils, and on each side were planted two stately columns, from whose cornices hung golden festoons and vines, with clusters of grapes, leaves, &c., curiously wrought. The superstructure, however, which was reared on the old foundation without sufficient additions, proved too heavy, and sunk down about twenty cubits. Yet this foundation was of an astonishing strength and height. The platform was a regular square of a stadium or furlong on each side. Each front had a spacious gate, enriched with suitable ornaments; that on the west had four gates, one of which led to the palace, another to the city, and the two others to the suburbs and fields. This enclosure was surrounded with a strong and high wall of large stones, well cemented; and on the inside had in each front a stately gallery, supported by columns of such a size, that three men could but just embrace them. There were 162 of them, which supported a cedar ceiling of beautiful workmanship, and formed four galleries, the middlemost of which was the largest and highest, being forty-five feet in breadth, and 100 in height; those on each side were but thirty feet wide and fifty high. The piazzas and court were paved with marble of various colors; and, at small distance from the galleries, was a second enclosure, surrounded with a flight of beautiful marble rails, with stately columns at proper distances, on which were engraven admonitions in Greek and Latin, forbidding strangers and Jews that were not purified, to proceed farther under pain of death. This enclosure had but one gate on the east side, none on the west, but on the north and south it had three, at equal distances. A third enclosure surrounded the temple, or holy place, and the altar of burnt offerings, forming what was called the court of the Hebrews. This was also square, having the wall on the outside surrounded by a flight of fourteen steps, which hid a considerable part of it; on the top a terrace of twelve cubits in breadth was carried completely round the whole. In this enclosure there was one gate on the east side, none on the west, but on the north and south sides four, at equal distances; and to each of them five steps

ascended, in order to reach the level of the inner court. On the inside of each of these gates two spacious square chambers were raised in the form of a pavilion, thirty cubits wide, and forty high, each supported by columns of twelve cubits in circumference. The altar of burnt offerings, built of unhewn stones, was forty cubits high; and fifteen feet in height, with the ascent smooth and without steps. It was encircled with a low rail, dividing the court of the priests from that of the lay Israelites, none but the former being allowed to come within the enclosure. Herod had this temple dedicated with the greatest pomp, and presented it with trophies of his former victories.

In the midst of these magnificent works, however, this prince's mind was not diverted from its usual cruelty. His sister Salome prompted him to the murder of his two sons by Mariamne, Alexander and Aristobulus, who had been educated at the imperial court, and were much admired by all who knew them. About this time also, urged by his wicked jealousy, he attempted to destroy the Saviour of the world, and 2000 innocent children perished on the occasion. He had the mortification soon after to discover, that Antipater had conspired against him, for which he had him tried and condemned for treason; but a more terrible calamity awaited him: he was seized with a loathsome and incurable disease, in which his pains were so intolerable, that his life became a burden. To the great joy of the Jews he died about five days after Antipater, having divided his dominions among his sons; Judea he gave to Archelaus, Galilee and Peræa to Herod Antipas, and made Philip tetrarch of Trachonitis, Ituræa, Batanea, and Paneas; he also left considerable legacies to his sister Salome and others of his relations. Aware that the Jews would rejoice at his death, he called together all the chiefs of them to Jericho, and ordered them to be shut up in the circus, leaving directions with Salome and her husband, to have them all butchered, as soon as he expired. 'By these means,' said he, 'I shall not only damp the people's joy, but secure a real mourning for my death!' These cruel orders, however, were not executed. Immediately on the tyrant's death Salome went to the Hippodrome, where the heads of the Jews were imprisoned, and dismissed them, telling them, that the king had no further occasion for their attendance.

Tumults, seditions, and insurrections followed: Archelaus was opposed by his brethren, and obliged to appear before Augustus, to answer some complaints that were made against him; when the emperor, having heard both parties, assigned to Archelaus one-half of the kingdom with the title of ethnarch, or governor of a nation, and divided the remainder between Philip and Herod. For some years Archelaus continued to govern in peace; but at last, the Jews complaining of his tyranny, Augustus summoned him to his presence, and banished him to Vienne in Dauphiny.

Judea was thus reduced to a Roman province, and, being ordered to be taxed, Cyrenius, the governor of Syria, was sent to see the decree executed, which he did, and having sold the palaces of Archelaus, and seized his treasure, returned to Antioch. This new tax first sowed the seeds of dissension between the Romans and Jews. Always impatient of a foreign yoke, and knowing from their prophecies that the time was come for the appearance of their Messiah, whom they expected to be a great and powerful warrior, they thought they had only to take up arms and victory would crown their efforts. From this time, therefore, this infatuated people, while they rejected the true Messiah, were ready to follow every impostor, who chose to assume that character, and thus brought on with their spiritual, their temporal destruction likewise. About the sixteenth year of Christ Pontius Pilate was appointed governor; whose administration, according to Josephus, was one continued scene of venality, rapine, and tyranny. Such a governor was ill calculated to appease the ferments occasioned by the tax. Instead of this he inflamed them by introducing his standards with images, pictures, consecrated shields, &c., into their city; and at last attempting to drain the treasury of the temple, under pretence of bringing an aqueduct into Jerusalem. The most remarkable transaction of his government, however, was his condemnation of Jesus Christ, whom he ordered to be crucified at the instigation of the Jews; seven years after which he was removed: and in a short time Herod Agrippa, the grandson of Herod the Great, was made king by Caligula. He did not, however, long enjoy this honor; for having raised a persecution against the Christians, and blasphemously suffered himself to be styled a God by some deputies from Tyre and Sidon, he was miraculously struck in the bowels with a fatal disease, and died most miserably. On his death Judea was once more reduced to a Roman province, and had new governors appointed over it. About this time also Gessius Florus, the last and worst governor the Jews ever had, was sent into the country. Josephus seems at a loss for words to describe his rapine and cruelty; indeed his whole behaviour was so profligate, that he was looked upon by the Jews rather as a bloody executioner than a magistrate. Many of the inhabitants sought an asylum abroad, while those who remained applied to Cestius Gallus, governor of Syria; beseeching him to pity their unhappy state. Florus, who was present, made a jest of them; and Cestius dismissed them with a general promise that the governor should conduct himself better. He then set about computing the number of Jews at that time in Jerusalem, by the number of lambs offered at the festival, in order to send an account of it to Nero. By his computation, they amounted to 2,556,000; though Josephus estimates them at 3,000,000.

In the year 67, A. D., began the fatal war with the Romans, which ended in the destruction of Jerusalem. It took place in consequence of the decision of a contest with the Syrians concerning Cæsarea; the Jews maintaining that it belonged to them, because it had been built by Herod; and the Syrians asserting that it had always been reckoned a Greek city. Both parties took up arms, but Felix put an end to the contest for a time, by sending some of the chiefs

of each nation to Rome, to plead their cause before the emperor, and Nero decided it against the Jews. Upon this they flew in all places to arms; and, though they every where lost ground, yet from this fatal period their rage never abated. Nothing was heard of but robberies, murders, and every kind of cruelty: and cities and villages were filled with murdered victims. The Jews spared neither Syrians nor Romans: and this led to the destruction of great numbers of their peaceful brethren; 20,000 Jews were massacred at Cæsarea, 50,000 at Alexandria, 2000 at Ptolemais, and 3500 at Jerusalem. A great number of assassins, in the mean time, having joined the factious in Jerusalem, beat the Romans out of Antonia, a fortress adjoining to the temple, and other strong places. The Romans were at last reduced to such straits, that they capitulated on the single condition that their lives should be spared; notwithstanding which they were all massacred by the furious zealots. This treachery was soon revenged on the Jews of Scythopolis. They had offered to assist in reducing their factious brethren; but, being suspected by the townsmen, were obliged to retire into a neighbouring wood, where, on the third night, they were murdered to the number of 13,000, and all their wealth carried off. The rebels then crossed the Jordan, and took the fortresses of Machærus and Cyprus; which last they razed to the ground, after having put all the Romans to the sword.—This brought Cestius Gallus, the Syrian governor, into Judea with all his forces; the Jews, however, partly by treachery and partly by force, overcame him and drove him out of the country.

Dreadful dissensions now prevailed among them, and many of the higher ranks, fearing the resentment of the Romans, left the city; while the Christians, remembering their Saviour's admonition, retired to Pella on the other side of Jordan, which the war did not reach. In the mean time Vespasian the Roman general, and soon afterwards emperor, left Greece, and, marching into Judea with a powerful army, ordered his son Titus to bring fresh forces from Alexandria; before he could arrive, however, the Jews had twice attempted to take Ascalon, but were repulsed on both occasions with the loss of 10,000 men. Early in the year 68 Vespasian entered Galilee at the head of 60,000 men, well armed and disciplined; he took and burned Gadara, and afterwards laid siege to Jotapa, which made so stout a resistance, that, when he took the place, he ordered all the Jews to be slain or carried into captivity: 40,000 perished on this occasion, and only 1200 were made prisoners, among whom was Josephus, the celebrated historian. Japha was taken next, after an obstinate resistance, the men being all massacred and the women and children carried away as captives. The Samaritans, who had collected together on Mount Gerazim, were a week after this put to the sword. Joppa was taken by storm, and 4000 Jews, who attempted to escape by their ships, were either drowned or slain. Tarriches, Tiberias, Gamala, Gischala, and Itabyr, were successively assaulted and carried. On the inhabitants of Gischala being inclined to surrender, a seditious Jew at the head of the faction, named John, opposed it and overawed the whole city. On the sabbath day he entreated Titus to forbear hostilities till to-morrow, and he would then surrender; but instead of this he fled to Jerusalem with as many as would follow him. Being pursued by the Romans, 6000 of his men were killed, and 3000 women and children brought back prisoners to Titus.

The Jews were at this time divided into three parties: one which was for putting an end to the war by submission to the Romans; another, which breathed nothing but war, and obstinately set themselves against all amicable measures. But by far the most numerous and powerful party consisted of men of profligate character, who committed the most horrid and unnatural crimes under the mask of religion, affirming, that it was dishonorable to God to submit to Romans and heathens, and who bound themselves by a vow, that they would put down all foreign authority or perish in the attempt. These dissensions spread throughout all the country, and houses and families were so divided against each other, that, as our Saviour foretold, 'a man's foes were often those of his own household.' 'In short,' says Josephus, 'the zealots acted more like incarnate devils than men.' The other parties suffered much more from them, it is said, than even from the Romans. They murdered all that opposed them in the adjacent country, and then entered Jerusalem, where they met with a stout resistance from Ananus, who had lately been high priest: a fierce engagement took place, and the zealots being driven into the inner enclosure of the temple, were closely besieged. On this John of Gischala, who had till now taken sides with the moderates, was sent to them with terms of peace; but, contrary to expectation, he persuaded them to hold out and call in the Idumeans: 20,000 of these therefore came to their relief and were admitted during a stormy night. The city immediately became the theatre of cruelties of every description, and 12,000 persons of respectable birth perished. At length, the Idumeans complaining of putting so many to death, the zealots erected a mock tribunal for the condemnation of their victims; but the judges having once acquitted a person, who was manifestly innocent, the zealots murdered him in the temple, and deposed the magistrates. They next massacred the common people to such an extent that numbers fled for refuge to the Romans, by whom they were instantly put to death. During these transactions Vespasian staid at Cæsarea, well knowing that the strength of the Jewish nation was rapidly wasting away. At last the zealots, having either killed or driven out of the city all the opposite party, began to contend with each other. One Simon, who had his head-quarters at Massada, formed a party against John, and retreated with the spoil into the fortress. In order to increase his party he promised liberty to the slaves, and proportionable encouragement to the freemen, who would join him; so that he was soon at the head of a large army. Unable to attack Jerusalem, he first invaded Idumea; and after a sharp engagement, in which the victory was doubtful, having corrupted the enemy's general, and having procured the army to be given up to him,

he got possession of the country. Here he committed such excesses, that the wretched inhabitants were obliged to seek shelter in Jerusalem, where John tyrannised in such a manner that the Idumeans revolted, killed a great number of his men, plundered his palace, and forced him to retire into the temple. In the mean time the people set fire to the city, and called a council, in which it was agreed to admit Simon with his troops to oppose John and the zealots. Simon's first attempt, however, was ineffectual, and he was obliged to besiege the zealots in the temple. The miseries of the city were now increased by the starting up of a third party, under the conduct of Eleazar, who seized on the court of the priests, and kept John confined within that of the Israelites. None were admitted into the avenues of the temple but those who came to offer sacrifices; and by these offerings he maintained himself and his men. John was thus hemmed in between two powerful enemies. He defended himself, however, with great resolution; and when the city was invested by the Romans, pretending to come to an agreement with his rivals, he totally cut off or forced Eleazar's men to submit: so that the factions were again reduced to two. The Romans, in 72, began to advance towards the capital, destroying many thousands, and wasting the country as they went along; in 73 Titus invested the city, and immediately sent in offers of peace, which were rejected with contempt.

John now held the whole temple in his possession, together with the valley of Cedron; while Simon possessed the city, some parts of which John had so laid waste that they served for a field of battle, from which they jointly sallied against the common enemy, and to which they returned to renew their own hostilities. The Romans now drew nearer to the walls, having with great labor levelled all the ground as far as Bethara. In the mean time Titus sent Josephus to the besieged with offers of peace; but they were again rejected with indignation. Again he sent Nicanor and Josephus with fresh offers, when the former received a wound in his shoulder; upon which Titus resolved to begin the assault.

The Romans directed their engines against the city on the 14th April. The Jews had likewise machines upon the walls, which they had taken from Cestius, but they were so ignorant of the use of them, that they did little execution, till they were instructed by some Roman deserters: the Roman towers and machines made terrible navock. The least stones they threw were nearly 1 cwt.; and these they could send to the length of a quarter of a mile with incredible force. Titus had reared three towers fifty cubits high; which, being plaited with iron, the Jews tried in vain to set fire to: they were at length forced to retire out of the reach of their arrows; and the battering rams were at full liberty to play against the wall. A breach was soon made, at which the Romans entered; and the Jews, forsaking this enclosure, retired within the next. This happened about the 28th of April. John defended the temple and the castle of Antonia, and Simon the rest of the city. Titus now drew close to the second wall, and applied his battering rams so furiously, that, after a feint of being willing to surrender, the Jews, who were in one of the towers, set it on fire, and threw themselves into the flames. This opened to the Romans an entrance into the second enclosure, when Titus, anxious to save the city, would not suffer any part of the wall to be demolished; so that his men were repulsed by Simon.

The famine, which was in the city, at length brought on a pestilence; and, as these two dreadful judgments increased, the rage of the factious became more violent. 'I should,' says Josephus 'undertake an impossible task were I to attempt a detail of all the cruelties of these impious wretches; it will be sufficient to say, that I do not think that any city, since the creation, ever suffered such dreadful calamities, or abounded with men so fertile in all kinds of wickedness.' Titus, after causing his army to be drawn up, and provisions to be given to his soldiers in the sight of the Jews, again sent Josephus to exhort them not to plunge themselves into inevitable ruin; when this infatuated people not only received him with bitter invectives, but began to threaten his life. Numbers, however, were prevailed on to steal away privately to the Romans, who raised a strong wall round the city to prevent provisions from being brought in. Jerusalem was now filled with dead bodies, which lay rotting in heaps in the streets. The wretched soldiery, taken in the sallies, were crucified by order of Titus to terrify the rest, while the zealots gave it out, that they were such as had fled to him for protection. Many indeed who went over to the Romans were butchered by the soldiers from the idea that they had swallowed great quantities of gold; and, though Titus used all his authority, he could not entirely put a stop to this barbarous conduct. At the same time the faction within the city, making sport of the miseries of their starving brethren, and finding that they could not prevent the people from abandoning them, procured some vile pretenders to prophesy, to encourage the despairing survivors by predicting a speedy and miraculous deliverance.

It was during this scarcity of provision that a wretched mother was reduced to the extremity of killing and eating her own child. At the news of this event every one was horror-struck, the people gave themselves over as abandoned to the divine judgments, and Titus, hearing of it, vowed that the city should be razed to its very foundations. About this time he took the castle of Antonia, and, determining to hasten on the siege, caused the gates of the temple to be set on fire, at which the Jews were so terrified, that they suffered themselves to be devoured by the flames, without attempting to extinguish them.

The two factions having now plundered all the inhabitants, rich and poor, seized the treasury of the temple: they even appropriated the sacred oil, and drank the wine destined for the sacrifices. Nothing but the temple now remained, yet such an infatuation prevailed among them, that they still expected a miraculous deliverance, and the vile monster John seemed confident of its security; so that when Josephus was sent for the last time, to upbraid him for exposing that

sacred place and the wretched remains of God's people to certain destruction, he replied, that he was defending the Lord's vineyard, which, he was certain, could not be taken by any human force. Titus himself condescended to speak to them, and endeavoured to persuade them to surrender; all, however, was in vain, and he was at last forced to proceed to those extremities which he earnestly wished to avoid.

On the 17th of July, Josephus observes, that the daily sacrifices ceased for the first time since their restoration by Judas Maccabæus, no proper person remaining to offer them. Titus upbraided the factious with this portentous circumstance, calling upon them to come out of the temple and fight on more proper ground; but, these remonstrances being of no avail, the Romans on the 28th set fire to the north gallery, which enclosed the outer court of the temple from the castle Antonia to the brook Cedron, a considerable portion of which the Jews had already burned. Thus they obtained an easy entrance into the outer court, and obliged the besieged to retreat to that of the priests. For six days Titus tried to beat down one of the galleries in that part, but it was so strong, that the force of his engines, united with the efforts of his troops in sapping, were unable to overthrow it; he next tried scaling, but was vigorously repulsed, and obliged to desist with the loss of some standards, and a considerable number of men. Finding that his desire of saving the building only led to the destruction of many lives, he now set fire to the gates, which, being plated with silver, burned all night, the meltal running down in the melting. The flames soon reached the porticoes and galleries, while the besieged did nothing to extinguish them, but looked on, uttering impotent curses against the Romans. On the 9th of August Titus gave orders to extinguish the fire; and assembled a council to deliberate and determine whether the remainder of the building should be saved or destroyed. Many were for its immediate destruction; but finding their general inflexibly bent on saving so noble an edifice, against which he said they could have no quarrel, they yielded, and the next day was fixed upon for a general assault. In the interval, the Jews having quarrelled with the Roman soldiers, or directed, as Josephus says, by the hand of Providence, one of the latter snatched a blazing firebrand, and, getting on the shoulders of his comrades, cast it through a window into one of the apartments, which surrounded the sanctuary, and instantly the whole north side up to the third story was in a blaze; this happened on the same day, and in the same month, in which the place had been formerly burned by Nebuchadnezzar. Titus, who had gone to rest for a little time, awaking at the noise, ran to give immediate orders for the fire to be extinguished. He called, entreated, threatened, and even caned his men; but they were so intent upon destroying all that was left, that he was not regarded. Finding all his endeavours vain, he entered the sanctuary, and most holy place, the remaining riches and grandeur of which surpassed, he said, all that had been told him. He saved the golden candlestick, the table of the show-bread, the altar of incense, all of pure gold, and the book of the law, wrapped up in a rich golden tissue. On his leaving the place, the soldiers obliged those who staid behind to come out, and, setting it on fire, began to carry off the rich vessels, robes, platings of the gates, &c. A horrid massacre followed, in which neither age nor sex was spared; thousands perished by the flames, others by falling from the battlements. Among those destroyed were 6000 persons drawn thither by a false prophet, who had promised them on that very day a miraculous deliverance. The Romans carried their fury so far as to burn all the treasure-houses, though they were full of the rich furniture, plate, vestments, &c., which had been laid up in them for security; nothing in fine was left standing except two of the gates, and the court destined for the women.

The seditious in the mean time, under Simon and John of Gischala, found means to retire into the city, and sent to desire a parley with Titus. They were told, that, though they had been the cause of all this bloodshed, yet their lives should be spared, if they would lay down their arms and surrender; but to this they replied, that they had bound themselves by a solemn oath never to surrender; and only begged permission to retire to the mountains with their wives and children. This so provoked the Roman general, that he resolved none of them should be spared; and he immediately abandoned the city to the rage of the soldiers, who murdered all those that fell into their hands, while the factious, who were left, went and fortified themselves in the royal palace, where they put to death 8000 of their own countrymen.

The preparations for the attack of the upper city occupied Titus from the 20th of August to the 8th of September, on which day it was taken and set fire to, his men indiscriminately putting to the sword all the inhabitants, with the exception of those who were shut up in the court of the women. The youngest and most beautiful were reserved for Titus's triumph, and all above seventeen years of age were sent into Egypt, or into Syria and other provinces, to be employed in the public works and the theatres. There were 97,000 of these prisoners, besides 11,000 who were starved through neglect, or who starved themselves in despair. The total number that perished in this war is said to have amounted to 1,400,000, besides great numbers who perished in caves, woods, wildernesses, common sewers, &c. The two grand rebels were found, and reserved for the conqueror's triumph; John, being pinched with hunger, came out and obtained his life, but was condemned to perpetual imprisonment; but Simon, whose retreat was better supplied, held out till the end of October. These, with 700 of the handsomest captives, attended the triumphal chariot; after which, Simon having been dragged through the streets of Rome with a rope round his neck, and severely scourged, was put to death, and John was sent into confinement. The castle of Massada, where Eleazar was entrenched with a numerous garrison, held out for a long time against the Romans, who surrounded it with a high wall, and then set it on fire. The wind blew the flames so fiercely

against the Jews, that Eleazar in despair persuaded them to kill their wives and children, and afterwards to choose ten men to kill the rest; one of the survivors was then to kill the others and himself, after having set fire to the place. This was all accomplished, and when the Romans, the next day, were about to scale the walls, they were surprised at seeing no one on them, until two women came forth from an aqueduct, where they had concealed themselves, and informed them of the horrid catastrophe. Titus ordered his men to demolish every part of the city, and not to leave a vestige of its noble structures, except a piece of the western wall and three towers, as a monument to future ages of the desperate resistance of the Jews, the strength of the city, and the skill and valor of its conqueror.

Thus a complete termination was put to the Jewish worship, and the existence of the nation, nor have they been able since that time to gain any footing in Judea; but have been scattered, according to the predictions of their prophets, over the face of the whole earth, and become a by-word and a reproach among all nations. They still continue vainly to expect the coming of a Messiah, to deliver them from the wretched state into which they have fallen; and this hope has had so powerful an influence, that notwithstanding the many persecutions they have endured, both from Pagans, Mahommedans, and professed Christians, they have never been induced to mingle with any of the nations among which they have been scattered. In different ages they have suffered dreadful massacres. In this country formerly the life of a Jew, and the disposal of all his effects, were subject to the pleasure of the lord of the place where he lived. At the time of the crusades they were harassed by the most cruel exactions, and often treated with the utmost barbarity. The reigns of our Richard I. and John may be reckoned among the times of their greatest oppression. Popular prejudices ran so high against them, that in 1348, when a fatal distemper prevailed in many parts of Europe, they were accused of having poisoned the springs and wells, and a million and a half of them were cruelly massacred. Rather more than a century after this, 500,000 were driven out of Spain, and 150,000 from Portugal; Edward I. imitated this wicked example by expelling great numbers from this country. Since, however, arts and learning have revived in Europe, they have felt the benefit of that increased humanity, which has extended all over the globe; France, Holland, and other states, allow them the rights of citizenship; England and Prussia tolerate and protect them; and even the emperor of Austria has removed some restrictions under which they labored in his dominions. It is to be hoped that this humane treatment will continue and increase, until their prejudices against Christianity will no longer find a support in the conduct of its professed disciples.

The attention of the friends of religion has been much turned of late, especially in this country, towards the amelioration of the condition of this people, and their conversion to Christianity. Many exertions have been made for this purpose, and a society has been for some years in operation, having this latter object especially in view; it is to be lamented, however, that as yet little progress has been made, and but few real conversions effected. The prophecies too, relative to this extraordinary nation, have been much investigated, to ascertain, by the assistance of unfolding events, what expectations may be justly formed with regard to them. Some Christians think that the Holy Scriptures predict their restoration to their own land, there to be converted to Christ, and thence to become missionaries for the conversion of the heathen world; while they expect a personal appearance of the Lord Jesus to reign over them, and to execute judgments upon the western, or Christian church, on account of its dreadful declension and corruptions. A few have asserted that they will fight their way to the Holy Land, and after exterminating the Mahommedans, who at present possess it, build their temple, and set up again their ancient worship. Others oppose both of these hypotheses, contending that the prophecies referred to in their support were almost all written previous to the Babylonian captivity, or at the time the Jews were captives, and therefore were fulfilled at the restoration, which took place in consequence of the decree of Cyrus, king of Persia; that not a vestige of the ten tribes of Israel seems to have been traced, and therefore they may be considered as lost; and that to suppose the restoration of the Jewish nation to their own land, and especially the re-establishment of their ancient worship, is utterly opposed to the nature of the kingdom of Christ, which he himself declares to be spiritual, and not of this world. They consider that the prophecies of the future glory and splendor of the church all relate to the spread of the gospel in the latter days, and the increase of believers in Christ of all nations, who are, according to the declarations of the New Testament, the saints, the true Israel of God; and, finally, that to suppose God's people should ever effect the triumph of their cause by war and bloodshed is directly contrary to the law of the Saviour, which forbids the use of the temporal sword, and allows no weapon but that of the Spirit, that is, the word of God, to be used in the advancement of his kingdom. They moreover contend, that these sentiments, professedly designed by their upholders to conciliate the Jews, are really calculated to strengthen their prejudices against the real doctrine of Christ, and to interpose still greater hindrances to their conversion.

The ceremonies and religious rites of this people should be taken from the law of Moses as found in the Scriptures; but they have added a multitude of absurd customs and traditions, most of them derived from their elders and rabbies, who have lived since the closing of the canon of the Old Testament, and written various commentaries upon it. In the Holy Scriptures, therefore, will be found the most genuine account of their antiquities; and the writings of their historian, Josephus, have added much that is curious and interesting, in illustration of those sacred records.

JEW'EL, *n. s.* } Fr. *joyaux*; Dut. *jewealen*; Italian *gioiello*, from Latin *gaudialis*.
JEW'EL-HOUSE, *n. s.* }
JEW'ELLER, *n. s.* }

Any ornament of great value, used commonly of such as are adorned with precious stones; a term of fondness; an appellation of tender regard. Jewel-house is the place where regal ornaments are reposited. Jeweller, one who traffics in precious stones.

The bridel is in to the four yborne,
And kept among his *jewels* lefe and dere:
The hors vanisht, I not in what manere,
Out of his sight.
Chaucer. The Squieres Tale.

Amongst the rest a *iewell* rich he found,
That was a ruby of right perfect hew.
Spenser. Faerie Queene.

Here, wear this *jewel* for me, 'tis my picture.
Shakspeare.

They found him dead and cast into the streets,
An empty casket, where the *jewel*, life,
By some damned hand was robbed and ta'en away.
Id.

Bid farewell to your sisters.
—Ye *jewels* of our father, with washed eyes
Cordelia leaves you. *Id. King Lear.*

The king has made him master of the *jewel-house*.
Shakspeare.

Jewels too, stones, rich and precious stones,
Stolen by my daughter! *Id. Merchant of Venice.*

But should I now to you relate
The strength and riches of their state;
The powder patches and the pins
The ribbons, *jewels*, and the rings;
The lace, the paint, the warlike things,
That make up all their magazines. *Cowley.*

These grains were as like little dice as if they had been made by a *jeweller*. *Boyle.*

The price of the market to a *jeweller* in his trade is one thing; but the intrinsick worth of a thing to a man of sense is another. *L'Estrange.*

The pleasure of the religious man is an easy and portable pleasure, such an one as he carries about in his bosom, without alarming either the eye or envy of the world: a man putting all his pleasures into this one, is like a traveller's putting all his goods into one *jewel*. *South.*

I will turn *jeweller*: I shall then deal in diamonds, and all sorts of rich stones. *Addison.*

Proud fame's imperial seat
With *jewels* blazed, magnificently great. *Pope.*

JEWEL. See DIAMOND, and RUBY. Jewels made a part of the ornaments with which the Jews, Greeks, and Romans, especially their ladies of distinction, adorned themselves. So prodigious was the extravagance of the Roman ladies, that Pliny the elder says he saw Lollia Paulina with an equipage of this kind amounting, according to Dr. Arbuthnot's calculation, to £322,916 13*s.* 4*d.* of our money. Precious stones, amongst the Romans and all the ancients, were much scarcer and consequently in higher esteem than they are amongst us, since a commerce has been opened with the Indies. The ancients did not know how to cut and polish them to much perfection; but colored stones were not scarce, and they cut them very well either hollow or in relief. When luxury had gained ground amongst them, the Romans hung pendants and pearls in their ears; and for this purpose the ears of both sexes were frequently bored.

JEWEL (John), a learned English writer and bishop, born in 1522, and educated at Oxford. In 1540 he proceeded A. B., became a noted tutor, and was soon after chosen rhetoric lecturer in his college. In February, 1544, he commenced A. M. He had early imbibed protestant principles, and inculcated them to his pupils; but privately till the accession of kind Edward VI., in 1546, when he made a public declaration of his faith, and entered into a close friendship with Peter Martyr. In 1550 he took the degree of B. D., and preached before the university with great applause. Upon the accession of queen Mary, in 1553, he was one of the first who felt the rage of the storm then raised against the Reformation; for before any law was made, or order given by the queen, he was expelled Corpus Christi College by the fellows, by their own private authority; but he continued in Oxford till he was called upon to subscribe to some of the popish doctrines, under the severest penalties, to which he submitted. But this did not procure his safety; for he was obliged to fly, and, after encountering many difficulties, arrived at Frankfort, in the second year of queen Mary's reign, where he made a public recantation of his subscription to the popish doctrines. Thence he went to Strasburg, and afterwards to Zurich, where he resided with Peter Martyr. He returned to England in 1558, after Mary's death; and in 1559 was consecrated bishop of Salisbury. The university of Oxford, in 1565, conferred on him in his absence the degree of D. D. In this character he attended queen Elizabeth to Oxford in 1566, and presided at the disputations held before her on that occasion. He had greatly distinguished himself by a sermon preached at St. Paul's cross when he was made a bishop; in which he gave a public challenge to all the Roman Catholics in the world to produce but one clear testimony out of any father or famous writer, who flourished within 600 years after Christ, for any one of the articles which the Romanists maintain against the church of England; and, two years afterwards, he published his famous Apology for that church. But his watchful and laborious life impaired his health, and brought him quickly to the grave. He died at Monkton Farley in 1571, in the fiftieth year of his age. He wrote 1. A View of a seditious Bull sent into England by Pope Pius V. in 1569. 2. A Treatise on the Holy Scriptures. 3. An Exposition of St. Paul's two Epistles to the Thessalonians. 4. A Treatise on the Sacrament. 5. An Apology for the National Church. 6. Several sermons, controversial treatises, and other works. His admirable Apology was translated from the Latin by Anne, the second of the four learned daughters of Sir Anthony Coke, and mother of Sir Francis Bacon. It was published as it came from her pen, in 1564, with the approbation of the queen and the prelates. It was printed in Greek at Constantinople, under the direction of St. Cyril the patriarch. His Defence of it, against Harding and other popish divines, was in such esteem, that queen Elizabeth, king James I., king Charles I., and four successive archbishops, ordered it to be kept chained in all parish churches, for public use.

JEWEL-BLOCKS, in sea language, two small blocks suspended at the extremity of the main and fore top-sail-yards, by an eye-bolt driven from without into the middle of the yard-arm, parallel to its axis. Their use is to retain the upper part of the top-mast studding-sails beyond the skirts of the top-sails, so that each of those sails may have its full force of action, which would be diminished by the encroachment of the other over its surface. The halliards, by which those studding-sails are hoisted, are accordingly passed through the jewel-blocks; whence, communicating with a block on the top-mast head, they lead downwards to the top or decks, where they may be conveniently hoisted. See SAIL.

JEWS-EARS, *n. s.* From its resemblance of the human ear.—Skinner. A fungus, tough and thin; and naturally, while growing, of a rumpled figure, like a flat and variously hollowed cup; from an inch to two inches in length, and about two-thirds of its length in breadth. Its sides in many places run into the hollow, so as to represent in it ridges like those of the human ear. It generally grows on the lower parts of the trunks of elder-trees decaying. The common people cure themselves of sore throats with a decoction of it in milk.

An herb called *jews-ear* groweth upon the lower parts of elder, and sometimes ashes: in warm water it swelleth, and openeth extremely. *Bacon.*

JEWS-HARP, *n. s.* A kind of musical instrument held between the teeth, which gives a sound by the motion of a broad spring of iron, which, being struck by the hand, plays against the breath.

JEWS-MALLOW, *n. s.* Lat. *corchorus.* Rauwolf says it is sown in great plenty about Aleppo as a pot-herb, the Jews boiling the leaves of this plant to eat it with their meat.

JEWS-STONE, *n. s.* The clavated spine of a very large egg-shaped sea-urchin, petrified by long lying in the earth. It is of a regular figure, oblong, and rounded, swelling in the middle, and gradually tapering; about three-quarters of an inch in length, and half an inch in diameter; ridged and furrowed alternately, in a longitudinal direction; and its color is a pale dusky gray, with a faint cast of dusky reddishness. It is found in Syria.

JEZIDES, among the Mahommedans, the name of a numerous sect inhabiting Turkey and Persia, so called from their head Jezid, an Arabian prince, who slew the sons of Ali, father-in-law to Mahomet; for which reason he is by true Mussulmans reckoned a parricide, and his followers heretics. There are about 20,000 Jezides in Turkey and Persia; who are of two families, black and white. The white are clad like Turks, and distinguished only by their shirts, which are not slit at the neck like those of others, but have a round hole to put the head through. This is in memory of a golden ring, or circle of light, which they say descended from heaven upon the neck of their cheq, the head of their religion, after his undergoing a fast of forty days. The black Jezides, though married, are the monks, or religious of the order; and these are called fakirs. The Turks exact excessive taxes from the Jezides, who hate them as their mortal enemies, and are attached to Christians; being never circumcised but when they are compelled. They are extremely ignorant, never reading even the koran; and, though they make vows and pilgrimages, have no places of religious worship. It is said to be a point of their religion never to speak ill of the devil, lest he should resent the injury, if ever he should come to be in favor with God again, which they think possible. They bury their dead at the first place they come at, rejoicing as at a festival, and celebrating the entry of the deceased into heaven. They go in companies like the Arabians, and change their habitations every fifteen days. When they get wine, they drink it to excess.

JEZRAEL, or JEZREEL, a town in the north of Samaria, towards mount Carmel, on the borders of Galilee (Joshua xix.), said to be one of the towns of Issachar, where stood a palace of the kings of Israel; 1 Kings xxi. 18.

JEZREEL, a valley of Samaria (Judges vi. 17), situated north of the town, running from west to east ten miles, between two mountains; the one to the north commonly called Hermon, near mount Tabor; the other Gilboa. It is two miles broad.

JEZZAR PACHA, or the Butcher Pacha, a famous pacha of Seide and Acre, in modern times. He was born in Bosnia, in the early part of the last century, and originally named Ahmed. In his youth he sold himself to a trader, who took him to Egypt, where he was purchased by the noted Ali Bey, by whom he was promoted in a few years to the office of governor of Cairo. In 1773, when Ali became unfortunate, the emir Yusef confided to our hero the government of Berout, in Syria, in which post he betrayed the trust reposed in him; and Yusef, assisted by the sheik Dhaher and a Russian squadron, laid siege to Berout. Unable to resist these formidable foes, Jezzar surrendered himself into the hands of Dhaher, and went with him to Acre, whence he soon escaped. We now find the capitan pacha Hassan appointing him pacha of Acre and Syria. His zeal in this service was recompensed with new favors, and he was made a pacha of three tails, with the title of vizier. He largely extended the boundaries of his government, and, in spite of the efforts of the Turkish court to displace him, asserted and retained an independent authority as long as he lived. He was absolute master of this part of Syria at the period of the French invasion of Egypt; and with the aid of a naval force under Sir Sydney Smith, and of M. Phelippeaux, a French engineer, defended the city of St. Jean d'Acre against the reiterated attempts of Buonaparte. After a siege of sixty-one days, the conqueror of Italy and Egypt was obliged to relinquish his enterprise. He died at an advanced age, in 1804, leaving behind him a vast treasure.

IF, *conjunction.* Goth. *ef;* Belg. *of;* Sax. ȝIF, literally the verb give: see the examples. Granting or allowing that; whether or not; suppose it be granted that.

For O thing, Sires ! saufly dare I seie,
That frendes, everich, other must obeie,
If they wol longe holden compagnie.
Chaucer. The Frankeleines Tale.

If thou wolt vanquish thin enemie, see thou be patient. *Id. The Persones Tale.*

Absolute approbation, without any cautions, qualifications, *ifs* or ands. *Hooker.*

If that rebellion
Came like itself in base and abject routs ;
I say, *if* damned commotion so appeared,
In his true, native, and most proper shape,
You, reverend father, and these noble lords,
Had not been there. *Shakspeare. Henry IV.*

If they have done this deed, my noble lord—
—*If !* talk'st thou to me of *ifs?* Thou art a traitor.
Shakspeare.

His sword is all his argument, not his book,
Altho' no scholar he can act the cook,
And will cut throats again *if* he be pay'd ;
In th' Irish shambles he first learned the trade.
Marvell.

If e'er he be king I know Britain's doom
We must all to a stake or be converts to Rome. *Id.*

Try but awhile *if* you be wise
The trial neither costs nor ties. *Id.*

Such mechanical circumstances, *if* I may so call them, were not necessary to the experiments. *Boyle.*

Uncertain *if* by augury, or chance ;
But by this easy rise they all advance.
Dryden.

The province of the soul is large enough
To fill up every cranny of your time,
And leave you much to answer, *if* one wretch
Be damned by your neglect. *Id.*

This seeing of all things, because we can desire to see all things, Malbranche makes a proof that they are present to our minds ; and, *if* they be present, they can no ways be present but by the presence of God, who contains them all. *Locke.*

She doubts *if* two and two make four :
It can't—it may be—and it must ;
To which of these must Alma trust ?
Nay, further yet they make her go,
In doubting *if* she doubts or no. *Prior.*

All of them supposed the apostle to have allowed the Epicurean maxims to be good ; *if* so be there were no resurrection. *Atterbury.*

Tisiphone, that oft hast heard my prayer,
Assist, *if* Oedipus deserve thy care.
Pope's Statius.

If they,
Things of ignoble or of savage mood,
Endure and shrink not, we, of nobler clay,
May temper it to bear,—it is but for a day.
Byron. Childe Harold.

IF, an island of France, in the department of the mouths of the Rhone, and late province of Provence ; the most eastern of the three before the harbour of Marseilles. It is very well fortified, and its port one of the best in the Mediterranean.

IGLA, or IGLAWA, a river of Moravia, which rises in Bohemia, and crosses the circles of Znaym and Brunn, joining the Schwarza ; after which the united stream falls into the Theya near Unterwisternitz.

IGLAU, a circle and town of Moravia, extends from the circle of Brunn, along the borders of that of Czaslau and Tabor, in Bohemia, to the south-west extremity of Moravia, where it meets the archduchy of Austria. The whole area is 1060 square miles ; its population 151,000. It is mountainous, but has abundance of good pasture, and some arable land. A silver mine was once wrought, but is now relinquished.

The town is ancient, and situated in a hilly district near the river Iglau. It is fortified, and contains a large provincial school, six churches, and two convents. Here are manufactures of woollens, which are made of great fineness ; the half, or more, is annually exported to Italy by way of Trieste. The trade in corn, hops, and hemp, is also considerable. Population 11,000 : sixty-two miles south-east of Prague, and 122 south-east of Dresden.

IGLESIAS, a large town on the south-west coast of the island of Sardinia. It is a bishop's see and has a cathedral, with three convents and a small bay. Its trade is in olives, honey, and cheese. Population 6000 : thirty-four miles west of Cagliari.

IGNATIA, in botany, a genus of the monogynia order and pentandria class of plants : CAL. five-toothed : COR. long ; the fruit a unilocular plum, with many seeds. There is but one species. viz.

I. amara, a native of India. The fruit contains the seeds called St. Ignatius's beans. It grows in the Philippine Islands, and winds itself about the tallest trees to the top ; it has large, ribbed, bitter leaves, a flower like that of the pomegranate, and a fruit larger than a melon. The fruit is covered with a thin, glossy, blackish, green, and marbled shell, under which is lodged another of a stony hardness ; within this is contained a soft, yellow, bitterish pulp, in which lie the seeds or beans, to the number commonly of twenty-four, each covered with a silvery down. Koning relates, that a person by drinking a spirituous tincture of them was throw into strong convulsions ; and Dr. Grim says, that a dram of the seed, in substance, occasioned for a time, a total deprivation of the senses.

IGNATIUS (St.), surnamed Theophrastus, one of the fathers of the church, was born in Syria, and said to be educated under the apostle John. He was also acquainted, we are told, with some of the other apostles, especially Peter and Paul. Being fully instructed in the doctrines of Christianity, he was ordained by St. John, bishop of Antioch, about A. D. 67. In this important post he continued above forty years, a zealous defender of the Christian religion, till A. D. 107, when Trajan, flushed with a victory which he had obtained over the Scythians and Daci, about the ninth year of his reign, came to Antioch, which he entered with the pomp of a triumph. Ignatius presented himself to the emperor ; and, in a long discourse, vindicated his faith with freedom. He was in consequence cast into prison, and sentence passed upon him ; that, being incurably superstitious, he should be carried bound to Rome, and there thrown to wild beasts. Arriving at Smyrna, he visited Polycarp, bishop of that place, and was himself visited by the pastors of the Asian churches round the country. In return he wrote letters to the churches of the Ephesians, Magnesians, and Trallians, for their instruction and establishment in the faith. He also wrote to the Chris-

tians at Rome, to acquaint them with his state, and passionate desire not to be hindered in the course of martyrdom, which he was now hastening to accomplish. His guard set sail with him for Troas, a noted city of Phrygia Minor, near the ruins of Troy, whither several churches sent messengers to him; and hence too he despatched epistles to the churches of Philadelphia and Smyrna; and, as Eusebius relates, to Polycarp, recommending to him the care of the church of Antioch. From Troas they sailed to Neapolis, in Macedonia; thence to Philippi; and, passing on foot through Macedonia and Epirus, they came to Epidaurum, in Dalmatia; where, again taking shipping, they sailed to Puteoli; whence, after a stay of twenty-four hours, a fair wind quickly carried them to the Roman port near Ostia, at the mouth of the Tiber, about sixteen miles from Rome. That his punishment might be the more public, the festival of the Saturnalia, and that part of it when they celebrated the Sigillaria, was pitched on for his execution; at which time it was the custom to entertain the people with the bloody conflicts of gladiators, and fighting with wild beasts. Accordingly, on the 13 kal. Jan. i. e. Dec. 20, he was brought out into the amphitheatre, and the lions, being let loose, quickly despatched him, leaving nothing but a few of his bones. These were gathered up by two deacons, who had been the companions of his journey; and, being transported to Antioch, were interred in the cemetery; whence, by order of the emperor Theodosius, they were removed with great solemnity to the Tycheon, a Pagan temple within the city, now consecrated to the memory of the martyr. St. Ignatius stands at the head of those Antinicene fathers, who defend the true divinity of Christ, whom he calls the Son of God and his eternal Word. He is also reckoned the champion of the episcopal order, as superior to that of priest and deacon. But the most important use of his writings respects the authenticity of the Holy Scriptures, which he frequently quotes and alludes to. Archbishop Usher's edition of his works, printed in 1647, is thought the best; yet there is a later edition extant at Amsterdam, where, besides the best notes, there are the dissertations of Usher and Pearson.

IGNATIUS'S BEAN. See IGNATIA.

IG'NEOUS, *adj.*
IG'NIPOTENT, *adj.*
IG'NIS-FAT'UUS, *n. s.*
IG'NITE, *v. a.*
IGNIT'ION, *n. s.*
IGNITI'BLE, *adj.*
IGNIV'OMOUS, *adj.*

Lat. *ignis, ignis potens, ignis-fatuus, ignis* et *vomo*. Of or pertaining to fire; containing, emitting, or having the nature of fire: ignipotent, presiding over fire: ignis-fatuus, Will with the wisp, Jack with a lantern; vulgar names for an electric or phosphoric light, seen at night in marshy and damp places: ignite, a chemical term: to kindle; to set on fire: ignition, the act of kindling: ignitible, inflammable; capable of being set on fire: ignivomous, vomiting fire.

That the fire burns by heat, leaves us still ignorant of the immediate way of *igneous* solutions. *Glanville's Scepsis.*

Such bodies only strike fire which have sulphur or *ignitible* parts. *Browne's Vulgar Errours.*

The laborant stirred the kindled nitre, that the *ignition* might be presently communicated. *Boyle.*

Those black circular lines we see on dishes, and other turned vessels of wood, are the effects of *ignition*, by the pressure of an edged stick upon the vessel turned nimbly in the lathe. *Ray.*

Take good firm chalk, *ignite* it in a crucible, and then powder it. *Grew's Musæum.*

Vapours arising from putrified waters are usually called *ignes fatui*. *Newton's Opticks.*

Volcanos and *ignivomous* mountains are some of the most terrible shocks of the globe. *Derham.*

Vulcan is called the power *ignipotent*. *Pope.*

IGNIS FATUUS is a light, supposed to be of a phosphoric nature, appearing frequently in mines, marshy places, and near stagnating waters. It was formerly thought, and is still by the superstitious believed, to be ominous, and to presage death or misfortunes. People have been led by these lights into marshy places, where they have perished; whence its various names; as if it were an evil spirit who delighted in mischief. See CHEMISTRY and METEOR.

IGNITION is commonly restrained to that kind of burning which is not accompanied with flame, such as that of charcoal, cinders, metals, stones, and other solid substances. Vitrification, evaporation, dissipation, and all the other effects of ignition, depend on the presence of air. See COMBUSTION.

IGNOBLE, *adj.*
IGNOBLY, *adv.*

Fr. *ignoble;* Lat. *ignobilis*. From *in* negative particle, and *nobilis*, noble. Mean of birth; not of illustrious race: worthless; not deserving honor; used both of things and persons: ignobly, ignominiously; disgracefully.

The noble isle doth want her proper limbs;
Her royal stock graft with *ignoble* plants. *Shakspeare.*

To these, that sober race of men, whose lives
Religious, titled them the sons of God,
Shall yield up all their virtue, all their fame
Ignobly! *Milton's Paradise Lost.*

As when in tumults rise the *ignoble* crowd,
Mad are their notions, and their tongues are loud.
Dryden.

Here, overmatched in fight, in heaps they lie;
There scattered o'er the fields *ignobly* fly. *Id.*

Man! know thyself; all wisdom centres there;
To none man seems *ignoble*, but to man. *Young.*

The man we celebrate must find a tomb,
And we that worship him *ignoble* graves.
Cowper.

Your first tears quenched by her, and your last sighs
Too often breathed out in a woman's hearing,
When men have shrunk from the *ignoble* care
Of watching the last hour of him who led them.
Byron.

IGNOMINIA, a species of punishment among the ancient Romans, whereby the offender suffered public shame, either by the prætor's edict, or by order of the censor. This punishment, besides the scandal, deprived the party of the privilege of bearing any offices, and almost all other liberties of a Roman citizen.

IGNOMIN'IOUS, *adj.*
IGNOMIN'IOUSLY, *adv.*
IG'NOMINY, *n. s.*

Fr. *ignominie;* Lat. *ignominia*, from *in* privative, and *nomen* name. Mean; shameful; reproachful; dishonorable; used both of persons and things: ignominy, disgrace; infamy; dishonor.

Adieu, and take thy praise with thee to heaven:
Thy *ignominy* sleep with thee in the grave.
Shakspeare.

They with pale fear surprised,
Fled *ignominious.* *Milton.*

Strength from truth divided, and from just,
Illaudable, nought merits but dispraise
And *ignominy*; yet to glory aspires,
Vain-glorious, and through infamy seeks fame.
Id.

Cethegus, though a traitor to the state,
And tortured, 'scaped this *ignominious* fate. *Id.*

It is some allay to the infamy of him who died *ignominiously* to be buried privately. *South.*

Their generals have been received with honour after their defeat, yours with *ignominy* after conquest.
Addison.

They gave, and she transferred the curst advice,
That monarchs should their inward soul disguise;
By *ignominious* arts, for servile ends,
Should compliment their foes, and shun their friends.
Prior.

Nor has this kingdom deserved to be sacrificed to one single, rapacious, obscure, *ignominious* projector.
Swift.

IGNORA'MUS, *n. s.*
IG'NORANCE, *n. s.*
IG'NORANT, *adj.* & *n. s.*
IG'NORANTLY, *adv.*
IGNORE', *v. a.*

Lat. *ignoro*, from *in* privative, and *nosco*, *noro*, to know. French *ignoratio*, *ignorer*. Ignoramus is a word properly used by the grand inquest impanneled in the inquisition of causes criminal and public; and written upon the bill, whereby any crime is offered to their consideration, when they mislike their evidence as defective, or as too weak to make good the presentment: the effect of which word, so written, is that all farther enquiry upon that party, for that fault, is thereby stopped, and he delivered without farther answer. A foolish fellow; a vain uninstructed pretender; a low word: ignorance, want of knowledge in general, as to any particular subject, and discovered by external effect: ignorant, uninformed; unenlightened; unknown, undiscovered (in poetry); ignorantly made or done: an untaught person: ignore, to be ignorant of, not to know. Boyle endeavoured to introduce this word, but it has not been received, and is now applied only to a grand jury when they throw out a bill of indictment; and are said to ignore the bill.

So foolish was I and *ignorant*, I was as a beast.
Psalm lxxiii.

For other thought and other dede also,
Might never ben but soche as purveiance
(Which maie not be disceved never mo)
Hath feled, biforne, withouten *ignoraunce*.
Chaucer. Troilus and Creseide.

If all the clergy were as learned as themselves are that most complain of *ignorance* in others, yet our book of prayer might remain the same. *Hooker.*

In such business
Action is eloquence, and the eyes of the *ignorant*
More learned than the ears.
Shakspeare. Coriolanus.

Ignorance is the curse of God,
Knowledge the wing wherewith we fly to heaven.
Shakspeare.

Still banish your defenders, 'till at length
Your *ignorance* deliver you,
As most abated captives, to some nation
That won you without blows. *Id.*

If you know aught, which does behove my knowledge
Thereof to be informed, imprison't not
In *ignorant* concealment. *Id. Winter's Tale.*

Thy letters have transported me beyond
This *ignorant* present time, and I feel now
The future in the instant. *Id. Macbeth.*

His shipping,
Poor *ignorant* baubles, on our terrible seas
Like egg-shells moved. *Shakspeare.*

Let not judges be so *ignorant* of their own right, as to think there is not left to them, as a principal part of their office, a wise application of laws.
Bacon's Essays.

Did I for this take pains to teach,
Our zealous *ignorants* to preach? *Denham.*

O visions ill foreseen! Better had I
Lived *ignorant* of future! so had borne
My part of evil only. *Milton's Paradise Lost.*

Philosophy would solidly be established, if men would more carefully distinguish those things that they know from those that they *ignore*. *Boyle.*

I *ignored* not the stricter interpretation, given by modern criticks to divers texts, by me alledged. *Id.*

He that doth not know those things which are of use for him to know, is but an *ignorant* man, whatever he may know besides. *Tillotson.*

The greatest and most cruel foes we have,
Are those whom you would *ignorantly* save.
Dryden.

Ignorant of guilt, I fear not shame. *Id.*

Tell an *ignoramus*, in place and power, that he has a wit and an understanding above all the world, and he shall readily admit the commendation. *South.*

If we see right, we see our woes;
Then what avails it to have eyes?
From *ignorance* our comfort flows,
The only wretched are the wise! *Prior.*

It is in every body's power to pretend *ignorance* of the law. *Sherlock.*

Fools grant whate'er ambition craves,
And men once *ignorant*, are slaves. *Pope.*

When a poet, an orator, or a painter has performed admirably, we sometimes mistake his blunders for beauties, and are so *ignorantly* fond as to copy after them. *Watts.*

Knowledge is not happiness, and science
But an exchange of *ignorance* for that
Which is another kind of *ignorance*. *Byron.*

IGNORANCE, or mistake, in law, a defect of will, whereby a person is excused from the guilt of a crime, when, intending to do a lawful act, he does that which is unlawful. For here, the deed and the will acting separately, there is not that conjunction between them which is necessary to form a criminal act. But this must be an ignorance or mistake of fact, and not an error in point of law. As if a man, intending to kill a thief or house-breaker in his own house, by mistake kills one of his own family, this is no criminal action: but if a man thinks he has a right to kill a person excommunicated or outlawed wherever he meets him, and does so, this is wilful murder. For a mistake in point of law, which every person of discretion not only may, but is bound and presumed to know, is, in criminal cases, no sort of defence. Ignorantia juris, quod quisque tenetur scire, neminem excusat, is as well the maxim of English law as it was of the Roman.

IGUARACU, a town in the province of Paraiba, Brasil, standing about two leagues from

the sea. The woods that border the roads here are so thick as to be impassable to a man on foot, unless he carries in his hand a hatchet to cut his way. The town is partly situated upon a hill, and partly in the plain, where a rivulet runs, over which is a stone bridge. The place plainly denotes that it has enjoyed greater prosperity than at present: many houses are only of two stories. The streets are paved, but are much out of repair. It contains several churches and good shops, and about 800 inhabitants. The view from the principal church is said to be grand; and the only regular inn of which the country can boast is established here.

IHRE (John), a celebrated Swedish professor of rhetoric and politics, was born in March, 1707. On account of the early death of his father, a professor of theology at Lund, he was brought up by his grandfather, the archbishop of Upsal, and in 1730 travelled for improvement. On his return he was elected a member of the Academy of Sciences; and in 1757 public professor of poetry. In 1748 he was appointed professor of rhetoric and politics, an office which he discharged with great reputation for forty years. In 1756 he was raised to the rank of counsellor of the chancery. He died in 1780. His works are, Conspectus Prælectionum in Linguam Suecanam 1745; Lexicon Dialectorum, 1766; Glossarium Suio-Gothicum, 2 vols. folio, 1769. He wrote also on the old catalogue of the Suio-Gothic kings, and on the old West-Gothic laws.

JIB, the fore-mast sail of a ship, being a large stay-sail extended from the outer end of the bowsprit, prolonged by the jib-boom, towards the fore top-mast-head. See SAIL. The jib is a sail of great command with any side wind, but especially when the ship is close-hauled, or has the wind upon her beam; and its effort in casting the ship, or turning her head to leeward, is very powerful and of great utility, particularly when the ship is working through a narrow channel.

JIBBEL AURESS, or AURAS, an extensive chain of mountains in North Africa, on the southern part of the province of Constantina, and territory of Algiers. It may be considered as one of the branches of the Atlas; and is about 120 miles in circuit, connecting itself with Mount Jurjura. It was called by Ptolemy, Audus, and, in the middle ages, Mons Aurasius. Various beautiful valleys intervene, and almost the whole of it is extremely fertile. The native tribes enjoy their own laws, and are independent, except in paying a certain tribute to the Algerine government, which is gathered every year by a flying camp. In proceeding to the southward they find higher and more rugged mountains, and a hardier race, who bid these authorities defiance. The most formidable tribe is that of the Neardee, who have their chief fortification on a high, rugged, and conical mountain. Within the last century, a princess of the name of Umhaany, emulating the heroines of old, led to battle in person several of these clans. A number of ancient ruins are spread over these mountains, and several rivers rise from them.

JIB-BOOM, in naval affairs, a boom run out from the extremity of the bowsprit, parallel to its length, and serving to extend the bottom of the jib and the stay of the fore-top-gallant-mast. This boom, which is nothing more than a continuation of the bowsprit forward, to which it may be considered as a topmast, is usually attached to the bowsprit by means of two large boom-irons, or by one boom-iron, and a cap on the outer end of the bowsprit; or, finally, by the cap without, and a strong lashing within, instead of a boom-iron, which is generally the method of securing it in small merchant ships. It may therefore be drawn in upon the bowsprit as occasion requires; which is usually practised when the ship enters a harbour, where it might very soon be broken or carried away, by the vessels which are moored therein, or passing by under sail.

JIDDA, DJIDDA, or DSJIDDA, a town of Arabia, on the Red Sea, situated, according to Bruce, in a very unwholesome, barren, and desert part of the country. From this disagreeable situation, it is probable that it would have been long ago abandoned, had it not been for its vicinity to Mecca, of which it may be considered as the port, and the vast annual influx of wealth occasioned by the India trade. The town itself receives but little advantage, for all the customs are sent to the sheriff of Mecca. 'The gold,' says Mr. Bruce, 'is returned in bags and boxes, and passes on as rapidly to the ships as the goods do to the market, and leaves as little profit behind. In the mean time provisions rise to a prodigious price, and this falls upon the townsmen, while all the profit of the traffic is in the hands of strangers; most of whom, after the market is over (which does not last six weeks), retire to Yemen and the adjacent countries, which abound in every sort of provision.' The port of Jidda is very extensive, and contains numberless shoals, small islands, and sunk rocks, but in the harbour itself ships may ride secure, whatever wind blows. The only danger is in coming in or going out. Jidda was surrounded with walls in 1540, by El Guri, sultan of Egypt, to protect it from the Portuguese; but these are now in a state of decay. The town is superior to that of Mocha; the houses are built of large blocks of madrepore; and, though the streets are narrow (which in this climate affords the advantage of their being shaded during the greatest part of the day), it is of imposing aspect in consequence of the hills which rise behind it. The entrance to the road it would be imprudent to attempt without a pilot; but, if signals be made, the pilots meet a ship at the proper distance, and carry her to the anchorage, which is three miles from the town, in twelve fathoms of water. The landing place is in front of the vizier's palace; the custom-house likewise faces the sea, and is a lofty handsome building. The English are the principal European nation who carry on a trade here. When a vessel arrives, the first thing done is to have all the packages examined by the native government. Presents must then be made to the bashaw and other officers of government; for which purpose two or three articles of each part of the cargo are generally selected. The goods are now sold on credit, till

the returns are procured from Mecca, for which market they are bought. The imports consist almost exclusively of piece-goods from the coast of Coromandel; and a small quantity of spices, beetle-nut, opium, sugar, tin, and tobacco. Almost the only export is coffee; the returns are made in Spanish, Venetian, and German coins, and pearls. The duties are about 12 per cent. Long. 39° 15′ E., lat. 21° 29′ N.

JIG, *n. s.* & *v. a.* } Ital. *giga*; Teut. *geige*;
JIG-MAKER, *n. s.* } a fiddle. A light careless
JIG'GUMBOB, *n. s.* } dance or tune: to dance carelessly or lightly, used in contempt: jig-maker, one who dances or plays merrily: jig-gumbob, a trinket; a knick-knack; a slight contrivance in machinery.

When Cyrus had overcome the Lydians, that were a warlike nation, instead of their warlike musick, he appointed to them certain lascivious lays and loose *jigs*; by which he so mollified and abated their courage, that they forgot their former fierceness.
Spenser on Ireland.

Your only *jig-maker!* what should a man do but be merry? *Shakspeare. Hamlet.*

As fiddlers still,
Though they be paid to be gone, yet needs will
Thrust one more *jig* upon you. *Donne.*

Austerity shall know that you dare, in these *jig*-given times, to countenance a legitimate poem.
Ben Jonson.

All the swains that there abide,
With *jigs* and rural dance resort. *Milton.*

He rifled all his pokes and fobs
Of gimcracks, whims, and *jiggumbobs*. *Hudibras.*

As for the *jigging* part and figures of dances, I count that little. *Locke.*

The muses blushed to see their friends exalting
Those elegant delights of *jig* and vaulting. *Fenton.*

They wrote to her friends in the country, that she should dance a *jig* next October in Westminster Hall.
Arbuthnot.

Another Phœbus, thy own Phœbus reigns,
Joys in my *jigs* and dances in my chains. *Pope.*

JILT, *n. s.*, *v. a.* & *v. n.* Isl. *gilia*, from the verb *gellen*, to seduce; to entrap in an amour. Mr. Lye. Perhaps from giglot, by contraction; or gillet, or gillot, the diminutive of gill, the ludicrous name of a woman. Query from GULL. A woman who gives her lover hopes and deceives him; a name of contempt: jilt to practice amorous deceit.

Avoid both courts and camps,
Where dilatory fortune plays the *jilt*
With the brave, noble, honest, gallant man,
To throw herself away on fools.
Otway's Orphan.

Tell who loves you;
And who is *jilted* for another's sake.
Dryden.

Tell a man, passsionately in love, that he is *jilted*; bring witnesses of the falsehood of his mistress, and three kind words of hers shall invalidate all their testimonies. *Locke.*

She might have learned to cuckold, *jilt*, and sham,
Had Covent Garden been at Surinam. *Congreve.*

When love was all an easy monarch's care,
Jilts ruled the state, and statesmen farces writ.
Pope.

JING'LE, *v. a.* & *n. s.* See GINGLE. To clink or sound sharply.

What should the wars do with these *jingling* fools?
Shakspeare.

With noises
Of roaring, shrieking, howling, *jingling* chains,
We were awaked. *Id. Tempest.*

If you plant where savages are, do not only entertain them with trifles and *jingles*, but use them justly.
Bacon's Essays.

Vulgar judges are nine parts in ten of all nations, who call conceits and *jingles* wit. *Dryden.*

The bells she *jingled*, and the whistle blew. *Pope.*

What crouds of these, impenitently bold,
In sounds and *jingling* syllables grown old! *Id.*

ILA, ILAY, or ISLAY, one of the Western Isles of Scotland, lying south-west of Jura. It is twenty-eight miles long from north to south, and eighteen broad from east to west. On the east side it is full of mountains covered with heath: on the south it is tolerably well cultivated. In some parts there is great plenty of limestone, and lead-mines are worked in three different places. The only harbours in Ila are at Loch-dale and Bowmore. Here are several rivers and lakes well stored with trouts, eels, and salmon. In the centre is Loch Finlagan, about three miles in circuit, with the little isle of that name in the middle. Here the lords of the isles formerly resided in all the pomp of royalty; but the palaces and offices are now in ruins. Instead of a throne, Macdonald stood on a stone seven feet square, in which there was a hollow cut to receive his feet; here he was crowned and anointed by the bishop of Argyle and seven inferior priests, in the presence of the chieftains. This stone still exists. The ceremony (after the new lord had collected his kindred and vassals) was truly patriarchal. After putting on his armour, helmet, and sword, he took an oath to rule as his ancestors had done; to govern as a father would his children: his people, in return, swore that they would pay the same obedience to him as children would to their parent. The dominions of this potentate about 1586 consisted only of Ila, Jura, Knapdale, and Kintyre: so reduced were they from what they had been before the deprivation of the great earl of Ross in the reign of James III. Near this is another little isle, where he assembled his council, Ilan na Corlle, or the island of council; where thirteen judges constantly sat to decide differences among his subjects, and received for their trouble the eleventh part of the value of the affair tried before them. In the first island were buried the wives and children of the lords of the isles; but their own persons were deposited in the more sacred ground of Iona. On the shores of the lake are some marks of the quarters of his Carnauch and Gilli-glasses, i. e. the military of the isles: the first word signifying a strong man, the last, a grim-looking fellow. The former were light-armed, and fought with darts and daggers; the latter with sharp hatchets. These are the troops that Shakspeare alludes to, when he speaks of a Donald, who

From the Western Isles
Of Kernes and Gallow-glasses was supplied.

These lords had also a house and chapel at Laganon, on the south side of Loch-andaal: a strong castle on a rock in the sea, at Dunowaik, at the south-east end of the country; for they made this island their residence after their expul-

sion from that of Man, in 1304. There is a tradition, that while the Isle of Man was part of the kingdom of the Isles, the rents were paid in this country: those in silver were paid on a rock, still called Craig-a-nione, or the rock of the silver rent; the other, Craig-a-nairgid, or the rock of rents in kind. These lie opposite to each other, at the mouth of a harbour on the south side of this island. There are several forts built on the isles in fresh-water lakes, and divers caverns in different parts of the island, which have been used occasionally as places of strength.

It seems to have been long a seat of empire, probably jointly with the Isle of Man, as being most conveniently situated for the government of the rest of the Hebrides; for Crovan, the Norwegian, after his conquest of that island in 1066 retired and finished his days in Ila. On the retreat of the Danes it became the seat of the lords of the isles; and continued, after their power was broken, in the reign of James III. in their descendants the Macdonalds. It was in the possession of Sir James Macdonald in 1598, who gained the battle of Traii-dhruinard. His power gave umbrage to James VI., who directed the lord of Macleod, Cameron of Lochiel, and the Macneils of Barra, to support the Macleans in another invasion. The rival parties met near the hill of Benbigger, east of Killarrow; a fierce engagement ensued; the Macdonalds were defeated, and almost entirely cut off. Sir James escaped to Spain, but returned in 1620, was pardoned, received a pension, and died at Glasgow. But the king, irritated by the disturbances raised by private wars waged between these and other clans, resumed the grant made by his predecessor, and transferred it to Sir John Campbell of Calder, who held it on paying an annual feu-duty of £500 sterling. The island was granted to Sir John as a reward for his undertaking the conquest; but the family considered it as a dear acquisition.

ILCHESTER, or IVELCHESTER, a borough and market town of Somersetshire, seated on the right bank of the river Ivel, about 122 miles from London. It appears to have been strongly fortified by the Romans, and at the time of the Norman conquest contained several churches. The foss-way retains its name, and passes through the principal street; and the pavement of the original ford, formed of flag-stones, may be seen on the west side of the bridge. Upon the bridge, which consists of two large arches, and at its foot, are two dwelling-houses, formerly chapels. The town at present consists of four streets. It has a church, dedicated to St. Mary, with an octagonal tower of stone, fifty feet high; it has also a meeting-house for dissenters. The county court-house and new gaol are good buildings; and here is the county-gaol. A court is held here every Wednesday four weeks. It is a borough by prescription, and is governed by a bailiff and twelve capital burgesses, who, together with the inhabitants not receiving arms, return two members to parliament: the returning officer being the bailiff. Here is a good almshouse for sixteen poor women and a housekeeper.

ILDEFONSO (St.), a small town of Spain, in Segovia, owing its origin to the erection of the royal palace of La Granja. It stands on the north side of the mountain of Guadarama, and contains about 4300 inhabitants. Here are manufactures of steel, linen, and glass; conducted on the government account, and at which are made the splendid mirrors sold at Madrid. The church contains a striking monument of Philip V. The palace takes its name from a granary which once stood upon the same spot, and which was purchased by Philip V. in 1721, from the Hieronymite friars. The external appearance is not magnificent, though the façade towards the gardens is neat. The interior contains a great number of paintings, statues, busts, &c., arranged in galleries. But the chief ornament here is the gardens. The soil was originally most unpromising and devoid of moisture; but the elevations have been levelled, the cavities filled, and the scattered rills of the mountain collected, so as to water the gardens, and form a small river. The water-works are magnificent. The whole seems to have been planned on the model of Versailles. This is the highest royal residence in Europe, being at an elevation of 3800 feet above the sea. Forty miles north by west of Madrid, eight south-east of Segovia, and twenty-three north of the Escurial.

ILE, *n. s.* Corrupted from Fr. *aisle*. A walk or alley in a church or public building. Properly aisle.

> Upward the columns shoot, the roofs ascend,
> And arches widen, and long *iles* extend. *Pope.*

ILERAY, an island of Scotland, on the west coast of north Uist, separated from it and from the isle of Kirkbost by sands, which are overflowed at high water. It is three miles long, half a mile broad, and yields good crops of barley, besides pasture for cattle.

ILERDA, in ancient geography, the capital of a nation of Spain, called the Ilergetes, situated on an eminence between the rivers Sicoris and Cinga. It was often besieged and taken, being exposed to the incursions from Gaul; and under Gallienus it was destroyed by the Germans. It is now called Lerida in Catalonia, on the Segra.

ILE'US, *n. s.* Lat.

> An *ileus*, commonly called the twisting of the guts, is really either a circumvolution, or insertion of one part of the gut within the other. *Arbuthnot.*

I'LEX, *n. s.* Lat.

> The *ilex*, or great scarlet oak, thrives well in England, is a hardy sort of tree, and easily raised of acorns. The Spaniards have a sort they call enzina; the wood of which, when old, is finely chambletted, as if it were painted. *Mortimer.*

ILEX, the holm or holly, a genus of the tetragynia order, and tetrandria class of plants, natural order forty-third, dumosæ: CAL. quadridentated: COR. rotaceous; there is no style: SEED a monospermous berry. There are several species; but the most remarkable is the

I. aquifolium, or common holly. Of this there are many varieties with variegated leaves, which are propagated by the gardeners for sale, and, some years ago, were in great esteem, but at present are little regarded; the practice of filling gardens with shorn evergreens being abolished.

In the disposition of plantations of evergreen trees and shrubs, however, a few of the most lively colors have a good effect in winter, if properly disposed. The common holly grows naturally in woods and forests in many parts of England, where it rises from twenty to thirty feet, and sometimes more, but the ordinary height is not above twenty-five feet: the stem, by age, becomes large, and is covered with a grayish smooth bark; and those trees which are not lopped or browsed by cattle are commonly furnished with branches the greatest part of their length, forming a sort of cone; the branches are garnished with oblong oval leaves, of a lucid green on their upper surface, but are pale on their under, having a strong mid-rib; the edges are indented and waved, with sharp thorns terminating each of the points, so that some of the thorns are raised upward, and others are bent downward, and being very stiff they are troublesome to handle. The leaves are placed alternate on every side of the branches; and from the base of their foot-stalks come out the flowers in clusters, standing on very short foot-stalks; each of these sustain five, six, or more flowers. They are of a dirty white, and appear in May; but are succeeded by roundish berries, which turn to a beautiful red about Michaelmas, and continue on the trees, if not destroyed, till after Christmas. The common holly is a very beautiful tree in winter; therefore deserves a place in all plantations of evergreen trees and shrubs, where its shining leaves and red berries make a fine variety. It is propagated by seeds, which never come up the first year, but lie in the ground; therefore the berries should be buried in the ground one year, and then taken up and sown at Michaelmas, upon a bed exposed only to the morning sun; the following spring the plants will appear, which must be kept clean from weeds; and, if the spring prove dry, it will be of great service to the plants if they are watered once a week; but too much moisture is very injurious to these plants when young. In this seed-bed the plants may remain two years, and then be transplanted in autumn, into beds about six inches asunder, where they may stand two years longer; during which time they must be constantly kept clean from weeds; and, if they have thriven well, they will be strong enough to transplant where they are designed to remain; for, when they are transplanted at that age, they will grow to a larger size than those which are removed when they are much larger: but, if the ground is not ready to receive them, they should be transplanted into a nursery in rows two feet distant, and one foot asunder; where they may remain two years longer. If they are to be grafted with any of the variegated kinds, that should be performed after they have grown one year in the nursery; but the plants so grafted should continue two years after in the nursery, that they may make good shoots before they are removed; though the plain ones should not stand longer than two years in the nursery, because, when they are older, they do not transplant so well. The best season for removing hollies is in autumn, especially in dry land: but, where the soil is cold and moist, they may be transplanted with great safety in spring, if the plants are not too old, or have not stood long unremoved. Sheep in winter are fed with croppings of holly. Birds eat the berries. The bark fermented, and washed from the woody fibres, make the common bird-lime. The plant makes an impenetrable fence, and bears chopping, though it does not, in all respects, answer equally well with the hawthorn. The wood is used in veneering, and is sometimes stained black to imitate ebony. Handles for knives, and cogs for mill-wheels, are made of it.

ILFRACOMBE, a sea-port of Devonshire, with a spacious basin, formed by a fine pier projecting into the Bristol Channel. The high tides here allow large vessels to enter the harbour. This port employs a number of brigs and sloops, chiefly in carrying ore from Cornwall, coal from Wales, and corn to Bristol. A number of fishing skiffs belong to it. It is seated almost opposite Swansea, in Glamorganshire, and is forty-nine miles N. N. W. of Exeter, and 181 west by south of London.

ILHEOS, one of the four provinces of Brasil, which compose the captaincy of Bahia, bounded on the north by the province of Todos Santos; south by the river Grande, which separates it from Porto Seguro; east by the Atlantic; and west by the country of the Indians. It is fertile and well watered, producing considerable quantities of cotton, sugar, and Brasil wood.

Ilheos, the capital of the foregoing province, is situated in a bay, the entrance of which is defended by a fort, which has a small garrison, and a governor. It has two convents of monks, with a college, which formerly belonged to the Jesuits. Ninety-three miles north from Porto Seguro, and 126 south-west of the bay of Todos Santos.

Ilheos, a large river of Brasil, in the province of this name, which rises in the mountains of the interior, runs east, and enters the sea, forming at its mouth a beautiful port. There is an island of the same name situated at the mouth of this river, in long. 39° 27′ W., lat. 14° 37′ S.

ILIA, the daughter of Numitor, and mother of Romulus, the founder of Rome. See Numitor.

IL'IAC, *adj.* } Relating to the lower
IL'IAC-PAS'SION, *n.s.* } bowels. Iliac-passion, a kind of nervous cholic, whose seat is the ilium, whereby that gut is twisted, or one part enters the cavity of the part immediately below or above; whence it is also called the volvulus, from volvo, to roll.

Those who die of the *iliac passion* have their bellies much swelled. *Floyer on the Humours.*

Iliac Region. See Anatomy.

ILIAD, Ιλιας, from Ilium, an ancient epic poem, the finest of the works attributed to Homer. The poet's design was to show the Greeks, who were divided into several states, how much it was their interest to preserve harmony among themselves; for which end he sets before them the calamities that befel their ancestors from the wrath of Achilles, and his misunderstanding with Agamemnon; and the advantages that afterwards accrued to them from their

union. The Iliad is divided into twenty-four books or rhapsodies. See HOMER.

ILINISSA, a lofty peak of the western equatorial Andes, and one of the most picturesque of those which are seen from the city of Quito. The summit rises to the height of 17,238 feet above the level of the sea, and is divided into two points, which Humboldt thinks are the wrecks of a volcano. Ilinissa is in the parallel of Cotopaxi, and joins the summit of Ruminavi by the Alto de Tiopullo, which forms a transverse link, whence the waters run off towards both the Pacific and the Atlantic Oceans.

ILIUM, ILION, or ILIOS, in ancient geography, a name of Troy, most commonly used by the poets, and distinguished by the epithet Vetus, from that afterwards called Ilium Novum. See TROY.

ILIUM NOVUM is thought to be the Iliensium Pagus of Strabo. New or modern Ilium was a village near the sea, with a temple of Minerva, where Alexander, after the battle of Granicus, offered gifts, and named it a city, which he ordered to be enlarged. His orders were executed by Lysimachus, who encompassed it with a wall of forty stadia. It was afterwards adorned by the Romans, who granted it immunities as to their mother city.

ILK, *adj.* Sax. ealc. The same. It is still retained in Scotland, and denotes each; as, ilk ane of you, every one of you. It also signifies, the same; as, Macintosh of that ilk, denotes a gentleman whose surname and the title of his estate are the same; as, Macintosh of Macintosh.

Wo worthe, alas! that *ilke* dayes light
On which I sawe him first with eyen twain.
Chaucer. Troilus and Creseide.

Ther helpeth nought; all goth that *ilke* wey:
Than may I sain that alle thing mote dey.
Id. The Knightes Tale.

Shepherds, should it not yshend
Your roundels fresh, to hear a doleful verse
Of Rosalind, who knows not Rosalind,
That Colin made? *ilk* can I you rehearse.
Spenser.

ILL, *adj., n s.,* & *adv.* Is a contraction of the word evil: the substantive and adverb are used in composition to denote any bad quality. Bad as opposed to good, whether physical or moral; sick; disordered. See EVIL. Ill, wickedness; misfortune; misery. Ill, not well; with pain or difficulty.

Who speketh for me now in my absence?
Alas no wight; and that is all my care;
For, well wote I, as *ill* as I ye fare.
Chaucer. Troilus and Creseide.

There some *ill* planet reigns;
I must be patient, 'till the Heavens look
With an aspect more favourable. *Shakspeare.*

Of his own body he was *ill*, and gave
The clergy *ill* example. *Id. Henry VIII.*

Dangerous conjectures in *ill*-breeding minds.
Id. Hamlet.

I have an *ill*-divining soul:
Methinks I see thee, now thou art below,
As one dead in the bottom of a tomb.
Shakspeare.

You wish me health in very happy season;
For I am on the sudden something *ill*. *Id.*

I was at her house the hour she appointed.
—And you sped, sir?
—Very *ill*-favouredly. *Id.*

The examples
Of every minute's instance, present now
Have put us in these *ill*-beseeming arms. *Id.*

Neither is it *ill* air only that maketh an *ill* seat; but *ill* ways, *ill* markets, and *ill* neighbours.
Bacon's Essays.

Some of an *ill* and melancholy nature, incline the company to be sad and *ill*-disposed; others, of a jovial nature, dispose them to be merry. *Bacon.*

Ill, to man's nature, as it stands perverted, hath a natural motion strongest in continuance. *Id.*

My colleague,
Being so *ill* affected with the gout,
Will not be able to be there in person.
Ben Jonson.

These are the product
Of those *ill* mated marriages thou sawest,
Where good with bad were matched. *Milton.*

Thou desirest
The punishment all on thyself! alas!
Bear thine own first; *ill* able to sustain
His full wrath, whose thou feelest as yet least part,
And my displeasure bear'st so *ill*. *Id.*

Hither, of *ill* joined sons and daughters born,
First from the ancient world these giants came. *Id.*

Your *ill* meaning politician lords,
Under pretence of bridal friends and guests,
Appointed to await me thirty spies,
Who, threatening cruel death, constrained the bride
To wring from me and tell to them my secret. *Id.*

Shall these e'er dare to contradict my will,
And think a prince o'the blood can e'er do *ill*
Marvell.

Much better, when I find virtue in a fair lodging, than when I am bound to seek it in an *ill* favoured creature, like a pearl in a dunghill. *Sidney.*

Near to an old *ill* favoured castle they meant to perform their unknightly errand. *Id.*

The ungrateful treason of her *ill* chosen husband overthrows her. *Id.*

I have known two towns of the greatest consequence lost, by the governours falling *ill* in the time of the sieges. *Temple.*

Young men to imitate all *ills* are prone;
But are compelled to avarice alone:
For then in virtue's shape they follow vice.
Dryden.

Strong virtue, like strong nature, struggles still,
Exerts itself, and then throws off the *ill*. *Id.*

Ill bears the sex a youthful lover's fate,
When just approaching to the nuptial state. *Id.*

Lead back thy Saxons to their ancient Elbe:
I would restore the fruitful Kent, the gift
Of Vortigern, or Hengist's *ill* bought aid. *Id.*

Ill at ease, both she and all her train
The scorching sun had borne, and beating rain. *Id.*

No look, no last adieu before he went!
In an *ill* boding hour to slaughter sent.
Id. Æneid.

Did you never taste delicious drink out of an *ill* looked vessel? *L'Estrange.*

Actions are pleasing or displeasing, either in themselves, or considered as a means to a greater and more desirable end: the eating of a well-seasoned dish, suited to a man's palate, may move the mind, by the delight itself that accompanies the eating, without reference to any other end; to which the consideration of the pleasure there is in health and strength may add a new gust, able to make us swallow an *ill* relished potion. *Locke.*

They would not make bold, as every where they do, to destroy *ill* formed and mis-shaped productions. *Id.*

Plain and rough nature, left to itself, is much better than an artificial ungratefulness, and such studied ways of being *ill* fashioned. *Id.*

Holding of *ill* tasted things in the mouth, will make a small salivation. *Grew.*

Our generals at present are such as are likely to make the best use of their numbers, without throwing them away on any *ill* concerted projects. *Addison on the War.*

I see thy sister's tears,
Thy father's anguish, and thy brother's death,
In the pursuit of our *ill* fated loves. *Addison.*

We simple toasters take delight
To see our women's teeth look white,
And every saucy *ill* bred fellow
Sneers at a mouth profoundly yellow. *Prior.*

The second daughter was a peevish, forward, *ill* conditioned creature as ever was. *Arbuthnot.*

A spy distinguished from his airy stand,
To bribe whose vigilance, Ægisthus told
A mighty sum of *ill* persuading gold. *Pope.*

There motley images her fancy strike,
Figures *ill* paired, and similes unlike. *Id.*

If a man had but an *ill* favoured nose, the deep thinkers would contrive to impute the cause to the prejudice of his education. *Swift.*

When desperate *ills* demand a speedy cure,
Distrust is cowardice, and prudence folly.
Dr. Johnson's Irene.

Love, fame, ambition, avarice—'tis the same,
Each idle—and all *ill*—and none the worst—
For all are meteors with a different name,
And Death the sable smoke where vanishes the flame. *Byron. Childe Harold.*

ILLAC'HRYMABLE, *adj.* Lat. *illachrymabilis.* Incapable of weeping.

ILLAPSE', *n. s.* Lat. *illapsus.* Gradual emission or entrance of one thing into another.

As a piece of iron red hot, by reason of the *illapse* of the fire into it, appears all over like a fire, so the souls of the blessed, by the *illapse* of the divine essence into them, shall be all over divine. *Norris.*

Sudden attack; casual coming.

Life is oft preserved
By the bold swimmer in the swift *illapse*
Of accident disastrous. *Thomson's Summer.*

To ILLA'QUEATE, *v. a.* Lat. *illaqueo.* To entangle; to entrap; to ensnare.

I am *illaqueated*, but not truly captivated into your conclusion. *More's Divine Dialogues.*

ILLAQUEA'TION, *n. s.* From illaqueate. The act of catching or ensnaring.

The word in Matthew doth not only signify suspension, or pendulous *illaqueation*, but also suffocation. *Browne.*

A snare; any thing to catch another; a noose.

ILLA'TION, *n. s.* Lat. *illatio.* Inference; conclusion drawn from premises.

Herein there seems to be a very erroneous *illation* from the indulgence of God unto Cain, concluding an immunity unto himself. *Browne.*

Illation so orders the intermediate ideas as to discover what connection there is in each link of the chain, whereby the extremes are held together. *Locke.*

IL'LATIVE, *adj.* Lat. *illatus.* Relating to illation or conclusion.

In common discourse or writing such casual particles as for, because, manifest the act of reasoning as well as the *illative* particles then and therefore. *Watts.*

ILLAU'DABLE, *adj.* Lat. *illaudabilis.* Unworthy of praise or commendation.

Strength from truth divided, and from just,
Illaudable, nought merits but dispraise. *Milton.*

ILLAU'DABLY, *adv.* From illaudable. Unworthily; without deserving praise.

It is natural for all people to form, not *illaudably*, too favourable a judgment of their own country. *Broome.*

ILLE ET VILAINE, a north-west department of France, including the north-east part of Brittany, and bounded partly by the English Channel and partly by the frontier line of other departments of Brittany. Its superficial extent is about 2750 square miles: its population 508,000. The surface is in general level, or intersected by small hills, and it is watered by the Ille, Vilaine, Meu, and Seiche; the small portion of coast which it has on the side of the English channel is bordered with a multitude of islets. Hardly half this department is in a state of cultivation, and the agriculture practised is of a very rude kind. The climate, however, is good, the pastures rich, and the breeding of cattle very successful. Flax is cultivated to a large extent, and affords materials for linen manufactures. Apples, pears, and various fruits are abundant, and the cyder and perry good, but the climate is not warm enough for the vine. The fisheries on the coast are also productive. The department is divided into the arrondissements of Rennes (the capital), St. Malo, Fougeres, Vitré, Redon, and Montfort.

ILLECEBRUM, in botany, a genus of the monogynia order, and pentandria class of plants: natural order twelfth, holoraceæ. CAL. pentaphyllous. and cartilaginous: COR. none: the stigma simple: CAPS. quinquevalved, and monospermous. There are several species, of which the most remarkable are

I. capitatum, and I. paronychia. Both have trailing stalks nearly two feet long, which spread on the ground, garnished with small leaves like those of knot grass. The heads of the flowers come out from the joints of the stalks, having neat silvery bractea surrounding them, which make a pretty appearance. Their flowers appear in June, and there is generally a succession of them for at least two months. When the autumn proves warm, they ripen their seeds in October. The seeds should be sown in a bed of light earth in the beginning of April: the plants come up in May, when they should be kept clean from weeds till they are fit to remove. Some should be planted in small pots, and the rest in a warm border, observing to water and shade them till they have taken new root. These plants are sometimes killed in severe winters; for which reason some of them should be planted in pots, that they may be sheltered.

ILLE'GAL, *adj.* Lat. *in* and *legalis.* Contrary to law.

No patent can oblige the subject against law, unless an *illegal* patent passed in one kingdom can bind another, and not itself. *Swift.*

ILLEGAL'ITY, *n. s.* From illegal. Contrariety to law.

He wished them to consider what votes they had passed, of the *illegality* of all those commissions, and

of the unjustifiableness of all the proceedings by virtue of them. *Clarendon.*

ILLE'GALLY, *adv.* From illegal. In a manner contrary to law.

ILLEG'IBLE, *adj.* *In* and *legibilis.* From Lat. *lego.* That cannot be read.

The secretary poured the ink-box all over the writings, and so defaced them that they were made altogether *illegible.* *Howel.*

ILLEGIT'IMACY, *n. s.* From illegitimate. State of bastardy.

ILLEGIT'IMATE, *adj.* Lat. *in* and *legitimus.* Unlawfully begotten; not begotten in wedlock.

Grieve not at your state:
For all the world is *illegitimate.* *Cleaveland.*

Being *illegitimate,* I was deprived of that endearing tenderness and uncommon satisfaction, which a good man finds in the love and conversation of a parent. *Addison's Spectator.*

ILLEGIT'IMATELY, *adv.* From illegitimate. Not begotten in wedlock.

ILLEGITIMA'TION, *n. s.* From illegitimate. The state of one not begotten in wedlock.

Richard III. had a resolution, out of his hatred to both of his brethren, to disable the issues, upon false and incompetent pretexts, the one of attainder, the other of *illegitimation.* *Bacon.*

ILLER, a large river and circle of Suabia. The former rises in the Tyrol, passes by Kempten and Memmingen, and falls near Ulm into the Danube, which it renders navigable. Wood is floated down; and it forms, during the latter part of its course, the boundary between Bavaria and Wirtemberg.

The circle comprises the country to the south of the circle of the Upper Danube, but it underwent considerable changes in 1810; in 1815 also part of it, which had formerly belonged to Austria, was restored; and next year, on the final arrangement of the Bavarian provinces, the name of this circle was suppressed, and the part of it that remained to Bavaria was annexed to the circle of the Upper Danube.

ILLEV'IABLE, *adj.* Fr. *lever.* That cannot be levied or exacted.

He rectified the method of collecting his revenue, and removed obsolete and *illeviable* parts of charge. *Hale.*

ILLFA'VORED, *adj.* Deformed.

O what a world of vile *illfavoured* faults
Look handsome in three hundred pounds a-year! *Shakspeare.*

ILLFA'VOREDLY, *adv.* With deformity. Roughly; ruggedly: in ludicrous language.

He shook him very *illfavouredly* for the time, raging through the very bowels of the country, and plundering all wheresoever he came. *Howel.*

ILLFA'VOREDNESS, *n. s.* Deformity.

ILLIB'ERAL, *adj.* Lat. *illiberalis.* Not noble; not ingenuous.

The charity of most men is grown so cold, and their religion so *illiberal.* *King Charles.*

Not munificent; not generous; sparing.

Yet subsist they did, and well too: an argument that that earth did not deal out their nourishment with an oversparing or *illiberal* hand. *Woodward.*

ILLIBERAL'ITY, *n. s.* Lat. *illiberalitas.* From illiberal. Meanness of mind; parsimony; niggardness; want of munificence.

The *illiberality* of parents, in allowance towards their children, is an harmful error, and acquaints them with shifts. *Bacon.*

ILLIB'ERALLY, *adv.* From illiberal. Dis ingenuously; meanly.

One that has been bountiful only upon surprise or incogitancy, *illiberally* retracts. *Decay of Piety.*

ILLIC'IT, *adj.* Fr. *illicite;* Latin *illicitus.* Unlawful; as, an illicit trade.

ILLICIUM in botany, a genus of the pentagynia order, and dodecandria class of plants: CAL. tetraphyllous, and deciduous: there are eight petals, and eight petaloid subulated nectaria. There are sixteen stamina with bifid antheræ: CAPS. are ovate, compressed, and monospermous. There are two species, viz.

I. anisatum, a native of the woods of China and Japan. It rises with an erect branched stem to the height of a cherry tree; and is covered with an ash colored bark, under which is another bark that is green, fleshy, somewhat mucous, and of an aromatic taste, combined with a small degree of astringency. The wood is hard and brittle; the pitch small in quantity, fungous, and of a green herbaceous color. The leaves resemble those of laurel; the flowers those of narcissus. These last generally stand single, are of a pale white, and consist of sixteen petals, which differ in their form. The extremity of the flower-stalk being continued into the germen or seed bud of the flower, forms eight conjoined capsules, or one deeply divided into eight parts. Of these capsules, some frequently decay; the rest enclose each a single seed, somewhat resembling that of palma christi, and which, when the hardish corticle that closely covers and involves it is broken, exhibits a kernel that is white, fleshy, soft, and of a vapid taste. The bonzes, or priests of China and Japan, persuade the inhabitants that the gods are delighted with this tree. Hence they generally place before their idols garlands and bundles made of the branches.

I. floridanum, with red flowers, and very odorous fruit, is a native of China.

To ILLI'GHTEN, *v. a.* In and lighten. To enlighten; to illuminate. A word, I believe, only in Raleigh.

Corporeal light cannot be, because then it would not pierce the air, nor diaphanous bodies; and yet every day we see the air *illightened.* *Raleigh.*

ILLIM'ITABLE, *adj.* Lat. *in* and *limes.* That cannot be bounded or limited.

Although in adoration of idols, unto the subtiler heads, the worship perhaps might be symbolical; ye was the idolatry direct in the people, whose credulity is *illimitable,* and who may be made believe that any thing is God. *Browne.*

With what an awful world-revolving power,
Were first the unwieldy planets launched along
The *illimitable* void! *Thomson's Summer.*

ILLIM'ITABLY, *adv.* From illimitable. Without susceptibility of bounds.

ILLIM'ITED, *adj.* Fr. *illimité;* Lat. *in* and *limes.* Unbounded; interminable.

ILLIM'ITEDNESS, *n. s.* From illimited. Exemption from all bounds.

The absoluteness and *illimitedness* of his commission was generally much spoken of. *Clarendon.*

ILLINOIS, a river of the Illinois territory, formed by the junction of the Theakiki and Plein, in the north-west part of Indiana, North America. In the Illinois territory it pursues a south-westerly direction, and flows into the Mississippi, twenty-one miles above the Missouri. It is upwards of 400 yards wide at its mouth, and is about 400 miles long from its junction to the Mississippi, and is of easy navigation. It has a very gentle current, unbroken by falls or rapids, and passes through a fine country. The Plein, its northern head branch, interlocks with the Chicago, which flows into lake Michigan.

ILLINOIS, a state of North America, bounded north by the north-west territory, east by Indiana, south by the Ohio, which separates it from Kentucky, and west by the Mississippi; 345 miles long from north to south, and 210 from east to west; containing about 52,000 square miles. In 1810 it was divided into two counties, and subdivided into twelve townships; and contained 12,282 inhabitants, all free people, slavery not being admitted.

The counties, chief towns, and population, for the fore part of the year 1818 are thus exhibited:—

Counties.	Pop.	Chief Towns.
Bond	1382	Perrysville.
Crawford	2074	
Edwards	1948	Palmyra.
Franklin	600	
Gallatin	3256	
Jackson	1294	Brownsville.
Johnson	678	
Madison	5456	Edwardsville.
Monro	1358	Harrisonville.
Pope	1975	
Randolph	2939	Kaskaskia.
St. Clair	4519	Belleville.
Union	2482	
Washington	1707	
White	3539	Carmi.
Total	35,220	

By a more recent enumeration it appears that the population has exceeded the number required by the law of congress for the admission of this territory into the union as a state. See AMERICA, NORTH.

Kaskaskia is the seat of government. The other most considerable towns are Shawneetown, Cahokia, Edwardsville, Brownsville, Belleville, and Carmi.

The Mississippi, Ohio, and Wabash, form about two thirds of the whole boundary of this district. The other most considerable rivers are the Illinois, Kaskaskia, Muddy, Saline, Little Wabash, Michilimackinack, Crow Meadow, Rainy, Vermilion, Mine, Spoon, Rocky, and Sangamoin.

The peninsula between the Mississippi and Illinois rivers has been surveyed as military bounty lands. Congress appropriated for this object 3,500,000 acres; and the surface actually surveyed amounts to an area about equal to 240 townships, each six miles square; equal to 8640 square miles, or 5,530,000 acres, nearly. It was necessary that the number surveyed should exceed the number appropriated, as the act of congress provides that the several portions granted shall be fit for cultivation. These lands are described as being very good.

The southern and middle parts of the territory are for the most part level. The banks of the Illinois and Kaskaskia, in some places, present a sublime and picturesque scenery. Several of their tributary streams have excavated for themselves deep and frightful gulfs, particularly those of the Kaskaskia, whose banks, near the junction of Big Hill Creek, present a perpendicular front of solid limestone 140 feet high. The north-western part of the territory is a hilly broken country, though there are no high mountains. The climate resembles that of Indiana and Ohio. The low and wet lands in the southern part are unhealthy.

The soil has been divided into six distinct kinds. 1. Bottom land, bearing a heavy growth of honey-locust, pecan, black-walnut, beach, sugar-maple, buckeye, pawpaw, grape-vines, &c. This land is of the first quality, and is found in greater or less quanties on all the considerable rivers. It is of inexhaustible fertility, and is annually cultivated without manure. 2. Newly formed land, found at the mouths and confluences of rivers, It produces sycamore, cotton-wood, water maple, water ash, elm, willow, oak, &c. There are many thousand acres of this land at the mouth of the Wabash, and at the confluence of the Ohio with the Mississippi. It is annually inundated, and is unhealthy. 3. Dry prairies, approaching the rivers and bordering on the bottom land, from thirty to 100 feet higher, and from one to ten miles wide. These prairies are destitute of trees, except where they are intersected by streams of water and occasional tracts of woodland. It has been estimated that as much as two-thirds of the whole territory consists of open prairie. The dry prairie has a black rich soil, well adapted to purposes of agriculture, and is covered with rank grass. 4. Wet prairie, found remote from streams, or at their sources. This is generally cold and unproductive, abounding with swamps and ponds, covered with tall coarse grass. 5. Land covered with timber, moderately hilly, well watered, and of a rich soil. 6. Hills, of a sterile soil and destitute of timber, or covered with stunted oaks and pines.

The prevailing forest tree in Illinois is oak, of which as many as thirteen or fourteen different species have been enumerated. Honey-locust, black-walnut, mulberry, plum, sugar-maple, black-locust, elm, bass-wood, beach, buckeye, hackberry, coffee-nut, sycamore, spice-wood, sassafras, black and white haws, crab-apple, wild cherry, cucumber, and pawpaw, are found in their congenial soils throughout the territory. White pine is found on the head branches of the Illinois.

Copper and lead are found in several parts of

the territory. Coal has been discovered in several places, on the Big Muddy in great quantities near Brownsville, on the Kaskaskia near the town of that name, near the town of Edwardsville, on the Illinois fifty miles above Illinois lake, and in other places. Salt water is found in several places sufficient to furnish immense quantities of salt. The famous salt works belonging to the United States are in the vicinity of Shawneetown. See SALINE. Iron ore has also been discovered.

The productions are corn in abundant crops, tobacco, flax, hemp, oats, potatoes, and some cotton in the southern parts. Wheat does well when properly managed, except on the bottoms, where the soil is too rich.

ILLIT'ERATE, *adj.* Lat. *illiteratus*. Unlettered; untaught; unlearned; unenlightened by science.

The duke was *illiterate*, yet had learned at court to supply his own defects, by the drawing unto him of the best instruments of experience. *Wotton.*

The *illiterate* writer, emperick like applies
To minds diseased unsafe chance remedies:
The learned in schools, where knowledge first began
Studies with care the anatomy of man;
Sees virtue, vice, and passions in their cause,
And fame from science, not from fortune draws.
Dryden.

In the first ages of Christianity not only the learned and the wise, but the ignorant and *illiterate* embraced torments and death. *Tillotson.*

ILLIT'ERATENESS, *n. s.* From illiterate. Want of learning; ignorance of science.

Many acquainted with chymistry but by report, have, from the *illiterateness* and impostures of those that pretend skill in it, entertained an ill opinion of the art. *Boyle.*

ILLIT'ERATURE, *n. s.* In and literature. Want of learning. A word not much used.

The more usual causes of this deprivation are, want of holy orders, *illiterature*, or inability for the discharge of that sacred function, and irreligion. *Ayliffe's Parergon.*

ILL'NESS, *n. s.* From ill. Badness or inconvenience of any kind, natural or moral: sickness; wickedness.

Thou would be great;
Art not without ambition; but without
The *illness* should attend it. *Shakspeare.*

He that has his chains knocked off, and the prison-doors set open, is perfectly at liberty, though his preference be determined to stay by the *illness* of the weather. *Locke.*

On the Lord's day which immediately preceded his *illness*, he had received the sacrament. *Atterbury.*

Since the account her majesty received of the insolent faction, during her late *illness* at Windsor, she hath been willing to see them deprived of power to do mischief. *Swift.*

ILLNATURE, *n. s.* } Ill and nature. Ha-
ILLNA'TURED, *adj.* } bitual malevolence; want of humanity: habitually malevolent; wanting kindness or good will; mischievous.

The fondly studious of increase,
Rich foreign mold on their *illnatured* land
Induce. *Philips.*

Illnature inclines a man to those actions that thwart and sour and disturb conversation, and consists of a proneness to do ill turns, attended with a secret joy upon the sight of any mischief that befalls another, and of a nutter insensibility of any kindness done him. *South.*

These ill qualities denominate a person *illnatured*, they being such as make him grievous and uneasy to all whom he deals and associates himself with. *Id.*

Stay, silly bird, the *illnatured* task refuse;
Nor be the bearer of unwelcome news. *Addison.*

It might be one of those *illnatured* beings who are at enmity with mankind, and do therefore take pleasure in filling them with groundless terrors. *Atterbury.*

Who can describe
Their affectation, pride, *illnature*, noise
Proneness to change, even from the joy that pleased 'em. *Rowe's Ambitious Stepmother.*

ILLOG'ICAL, *adj.* } Ill and logical. Ig-
ILLOG'ICALLY, *adv.* } norant or negligent of the rules of reasoning.

One of the dissenters appeared to Dr. Sanderson so bold and *illogical* in the dispute, as forced him to say, he had never met with a man of more pertinacious confidence, and less abilities. *Walton.*

Reason cannot dispute and make an inference so utterly *illogical*. *Decay of Piety.*

ILLUDE', *v. a.* Lat. *illudo*. To deceive; to mock; to impose on; to play upon; to torment by some contemptuous artifice of mockery.

Sometimes athwart, sometimes he strook him strait,
And falsed oft his blow, t' *illude* him with such bait.
Faerie Queene.

In vain we measure this amazing sphere,
While its circumference, scorning to be brought
Even into fanceed space, *illudes* our vanquished thought. *Prior.*

ILLUME', *v. a.* }
ILLU'MINE, *v. a.* }
ILLU'MINATE, *v. a.* }
ILLUMINA'TION, *n. s.* }
ILLU'MINATIVE, *adj.* }
ILLU'MINATOR, *n. s.* } Fr. *illuminer*; Span. *alumbrar*; Lat. *lumen* and *illumino*, to enlighten. The primary idea is the communication of light: the words are nearly synonymous: illumine, is a poetic variation of illuminate. To enlighten; to adorn with lamps; to enlighten with knowledge or grace; to adorn with pictures of gold and various colors, as in old missals; to illustrate: illumination is either the act of supplying light, or the effect of it: illuminative, having the power to give light: illuminator, the agent by whom light is shed on any subject.

Satan had no power to abuse the *illuminated* world with his impostures. *Sandys' Travels.*

Do thou vouchsafe, with thy love-kindling light,
T' *illuminate* my dim and dulled eyn. *Spenser.*

Hymns and psalms are such kinds of prayer as are not conceived upon a sudden; but framed by meditation beforehand, or by prophetical *illumination* are inspired. *Hooker.*

When yon same star, that's westward from the pole,
Had made his course, t' *illumine* that part of heaven,
Where now it burns. *Shakspeare. Hamlet.*

The sun is but a body illightened, and an *illumination* created. *Raleigh's History.*

We have forms of prayer imploring God's aid and blessing for the *illumination* of our labours, and the turning them into good and holy uses. *Bacon.*

No painting can be seen in full perfection, but as all nature is *illuminated* by a single light. *Wotton.*

What makes itself and other things be seen, being accompanied by light, is called fire: what admits the *illuminative* action of fire, and is not seen, is called air. *Digby on Bodies.*

He made the stars,
And set them in the firmament of heaven,
T' *illuminate* the earth and rule the night.
Milton.

To confirm his words, out flew
Millions of flaming swords, drawn from the thighs
Of mighty cherubims: the sudden blaze
Far round *illumined* hell. *Id.*

What in me is dark,
Illumine! what is low, raise and support! *Id.*

But he though blind of sight,
Despised and thought extinguished quite,
With inward eyes *illuminated*,
His fiery virtue roused
From under ashes into sudden flame.
Id. Samson Agonistes.

Flowers are strewed, and lamps in order placed,
And windows with *illuminations* graced. *Dryden.*

When he *illuminates* the mind with supernatural light, he does not extinguish that which is natural. *Locke.*

No holy passion, no *illumination*, no inspiration, can be now a sufficient commission to warrant those attempts which contradict the common rules of peace. *Sprat's Sermons.*

Reason our guide, what can she more reply
Than that the sun *illuminates* the sky;
Than that night rises from his absent ray,
And his returning lustre kindles day? *Prior.*

Illuminators of manuscripts borrowed their title from the illumination which a bright genius giveth to his work. *Felton.*

To Cato, Virgil paid one honest line;
O let my country's friends *illumine* mine.
Pope.

My health is insufficient to amplify these remarks, and to *illumine* the several pages with variety of examples. *Waits.*

The mountain's brow
Illumed with fluid gold, his near approach
Betokens. *Thomson's Summer.*

ILLUMINATI, Lat. i. e. enlightened, a name assumed by a secret society, said to be founded on the 1st of May 1776, by Dr. Adam Weishaupt, professor of canon law in the University of Ingoldstad. The avowed object of this order was, 'to diffuse from secret societies, as from so many centres, the light of science over the world; to propagate the purest principles of virtue; and to reinstate mankind in the happiness which they enjoyed during the golden age fabled by the poets.' Such a philanthropic object was doubtless well adapted to make a deep impression on the minds of ingenuous young men; and to such alone did Weishaupt at first address himself. But 'the real object,' we are assured by professor Robison and abbé Barruel, 'was, by clandestine arts to overturn every government and every religion; to bring the sciences of civil life into contempt; and to reduce mankind to that imaginary state of nature, when they lived independent of each other on the spontaneous productions of the earth.' Free masonry being in high reputation all over Europe, when Weishaupt first formed the plan of his society, he availed himself of its secrecy, to introduce his new order, of which he constituted himself general, after initiating some of his pupils, whom he styled Areopagites, in its mysteries. And when report spread the news throughout Germany, of the institution of the order of Illuminées, it was generally considered as a mere college lodge, which could interest the students no longer than during the period of their studies. Weishaupt's character too, which at this time was respectable for morality, as well as erudition, prevented all suspicion of his harbouring any such dark designs as have since come to light. But it would far exceed the limits to which our work is restricted, to give even an outline of the nature and constitution of this extraordinary society; of its secrets and mysteries; of the deep dissimulation, consummate hypocrisy, and shocking impiety of its founder, and his associates; of their Jesuitical art in concealing their real objects, and their incredible industry and astonishing exertions in making converts; of the absolute despotism, and complete system of espionage, established throughout the order; of its different degrees of Novices, Minervals, Minor and Major Illuminées, Epopts or Priests, Regents, Magi, and Man-kings; of the Recruiters, or Insinuators, with their various subtle methods of insinuating into all characters and companies; the blind obedience exacted of the Novices; &c. &c. Such of our readers as wish to be fully informed of these matters, we must refer to the abbé Barruel's works, and to professor Robison's Proofs of a Conspiracy against all the Religions and Governments of Europe.

ILLUMINATING, a kind of miniature painting, anciently much practised for illustrating and adorning books. Besides the writers of books there were artists called illuminators, whose profession was to ornament and paint manuscripts. The writers first finished their part, and the illuminators embellished them with ornamented letters and paintings. We often find blanks left in MSS., for the illuminators, which were never filled up. Some of the ancient MSS. are gilt and burnished in a style superior to later times. Their colors were excellent, and their skill in preparing them must have been very great. The practice of introducing ornaments, drawings, emblematical figures, and even portraits, into MSS., is of great antiquity. Varro wrote the lives of 700 illustrious Romans, which he enriched with their portraits, as Pliny attests in his Natural History. Pomponius Atticus was the author of a work on the actions of the great men amongst the Romans, which he ornamented with their portraits. But these works have not been transmitted to posterity. There are, however, many precious documents remaining, which exhibit the advancement and decline of the arts in different ages and countries. These inestimable paintings and illuminations display the manners, customs, habits, ecclesiastical, civil, and military, weapons and instruments of war, utensils and architecture, of the ancients; and are of the greatest use in illustrating many important facts relative to the history of the times in which they were executed. A very ancient MS. of Genesis, which was in the Cotton library, and almost destroyed by a fire in 1731, contained 250 curious paintings in water colors: twenty-one fragments, which escaped the fire,

were engraved by the society of antiquaries of London. Several specimens of curious paintings also appear in Lambecius's catalogue of the imperial library of Vienna, in which forty-eight drawings, of nearly equal antiquity with those in the Cotton library, are engraven; and several others may be found in various catalogues of the Italian libraries. The drawings in the Vatican copy of Virgil made in the fourth century, before the arts were entirely neglected, illustrate the different subjects treated of by the Roman poet. A miniature drawing is prefixed to each of the gospels brought over to England by St. Augustine in the sixth century, preserved in the library of Corpus Christi College, Cambridge: in the compartments of those drawings are depicted representations of several transactions in each gospel. Cædmon's Poetical Paraphrase of the book of Genesis, written in the eleventh century, which is preserved amongst F. Junius's MSS. in the Bodleian library, exhibits many specimens of utensils, weapons, instruments of music, and implements of husbandry used by the Anglo-Saxons. After the introduction of printing, this elegant art of illuminating gradually declined, and at length was quite neglected. On the whole, it may be observed, that, from the fifth to the tenth century, the miniature paintings in Greek MSS. are generally good, as are also some among those of Italy, England, and France. From the tenth to the middle of the fourteenth century they are commonly very bad, and may be considesed as so many monuments of the barbarity of those ages; towards the end of the fourteenth the paintings in MSS. were much improved; and, in the two succeeding centuries, many excellent illuminations were produced.

ILLUMINED, Illuminati, in church history, a term anciently applied to such persons as had received baptism. This name was occasioned by a ceremony in the baptism of adults; which consisted in putting a lighted taper in the hand of the person baptised, as a symbol of the faith and grace he had received in the sacrament.

Illumined, Illuminati, is also the name of a sect of heretics, who sprang up in Spain about A. D. 1575, and were called by the Spaniards Almabrados. Their principal doctrines were, that by means of a sublime manner of prayer, to which they had attained, they entered into so perfect a state, that they had no occasion for ordinances, sacraments, or good works; and that they could give way, even to the vilest actions, without sin. The sect of Illumined was revived in France in 1634, and was soon after joined by the Guerinetes, or disciples of Peter Guerin; but they were so hotly pursued by Louis XIII., that they were soon destroyed.

ILLU'SION, *n. s.* Fr. *illusion;* Lat. *illusio.* Mockery: false show; counterfeit appearance; error.

For prestes of the temple tellen this,—
That dremes ben the revelacions
Of goddes; and alles well thei tell, iwis!
That thei ben infernalle *illusions.*
Chaucer. Troilus and Creseide.

That, distilled by magick flights,
hall raise such artificial sprights,
As, by the strength of their *illusion,*
Shall draw him on to his confusion.
Shakspeare.

There wanted not some about him that would have persuaded him that all was but an *illusion.*
Bacon.

So oft they fell
Into the same *illusion;* not as man,
O'er whom they triumphed.
Milton.

An excuse for uncharitableness, drawn from pretended inability, is of all others the most general prevailing *illusion.* *Atterbury.*

Many are the *illusions* by which the enemy endeavours to cheat men into security, and defeat their salvation. *Rogers.*

To dream once more I close my willing eyes,
Ye soft *illusions,* dear deceits, arise! *Pope.*

We must use some *illusion* to render a pastoral delightful; and this consists in exposing the best side only of a shepherd's life, and in concealing its miseries. *Id.*

But, in the world's full light, those charming dreams,
Those fond *illusions* vanish. *Thomson.*

ILLU'SIVE, *adj.* Lat. *illusus.* Deceiving by false show.

The heathen bards, who idle fables drest,
Illusive dreams in mystic forms exprest.
Blackmore.

While the fond soul
Wrapt in gay visions of unreal bliss,
Still paints the *illusive* form.
Thomson's Spring.

ILLU'SORY, *adj.* From Lat. *in* and *lusorius;* Fr. *illusoire.* Deceiving; fraudulent.

Subtilty, in those who make profession to teach or defend truth, hath passed for a virtue: a virtue indeed, which, consisting for the most part in nothing but the fallacious and *illusory* use of obscure or deceitful terms, is only fit to make men more conceited in their ignorance. *Locke.*

ILLUSTRATE, *v. a.* Illustra'tion, *n. s.* Illus'trative, *adj.* Illus'tratively, *adv.* Illus'trious, *adj.* Illus'triously, *adv.* Illus'triousness, *n. s.* Fr. *illustrer;* Lat. *illustro;* Span. *esclarecér;* Gr. λαμπρυνω. To brighten with light; to explain; clear; elucidate; to make apparent: illustration, an explanation or exposition: illustrative, having the quality of elucidating: illustrious, from Latin *illustris,* famous; renowned; noble, either in descent or by exploits; eminent; excellent.

The magnanimous and most *illustrate* king Cophetisa set eye upon the pernicious and indubitate beggar Zenelophon. *Shakspeare.*

Matter to me of glory! whom their hate
Illustrates, when they see all regal power
Given to me to quell their pride. *Milton.*

Hell could no longer hold us in her bounds,
Nor this unvoyageable gulf obscure
Detain from following thy *illustrious* track.
Id. Paradise Lost.

They play much upon the smile or *illustrative* argumentation, to induce their enthymemes unto the people. *Browne.*

Authors take up popular conceits, and from tradition unjustifiable, or false, *illustrate* matters of undeniable truth. *Id.*

Things are many times delivered hieroglyphically, metaphorically, *illustratively,* and not with reference to action. *Id.*

Of every nation, each *illustrious* name,
Such toys as those have cheated into fame.
Dryden.

Whoever looks about him will find many living *illustrations* of this emblem. *L'Estrange.*

Space and duration, being ideas that have something very abstruse and peculiar in their nature, the comparing them one with another may perhaps be of use for their *illustration.* *Locke.*

Thee she enrolled her gartered knights among,
Illustrating the noble list. *Philips.*

In other languages the most *illustrious* titles are derived from things sacred. *South.*

He disdained not to appear at festival entertainments, that he might more *illustriously* manifest his charity. *Atterbury.*

You, carrying with you all the world can boast,
To all the world *illustriously* are lost. *Pope.*

It is often a difficult matter to *illustrate* gracefully the text of a sermon from the context, and to point out the connexion between them. *Blair's Sermons.*

——— ——— It is also in my orders
That your *illustrious* lady admitted.
Byron. The Two Foscari.

ILLUSTRIOUS, ILLUSTRIS, was, in the Roman empire, a title of honor peculiar to people of a certain rank. It was first given to the most distinguished amongst the knights, who had a right to bear the latus clavus; afterwards, they were entitled illustrious who held the first rank among those called Monorati; viz., the præfecti prætorii, præfecti urbis, treasurers, comites, &c. There were, however, different degrees among the illustrious. There were illustres whom they called majores, and others called illustres minores: the præfectus prætorii was a degree below the master of the offices, though they were both illustres.

ILLYRIA, ILLYRICUM, or ILLYRIUM, in ancient geography, a country in Europe, extending from the Adriatic to Pannonia. Illyricum is the name used by Livy, Herodotus, and St. Paul. Its boundaries are variously assigned. Pliny makes it extend in length from the Arsia to the Drinius, thus including Liburnia on the west, and Dalmatia on the east; which is also the opinion of Ptolemy; who settles its limits from Mount Scardus and the Upper Mœsia on the east, to Istria on the west. It was a Roman province, divided by Augustus into the Superior and Inferior, but of which the limits are left very indeterminate both by ancient historians and geographers. It now forms part of Croatia, Bosnia, Istria and Sclavonia.

ILLYRIA, a modern kingdom of South Europe, subject to Austria, comprehending Carinthia, Carniola, the vicinity of Trieste, Friuli, Cividal, Venetian Istria, a part of Croatia, and several islands in the gulf of Quarnero. It is bounded by Salzburg, Styria, Croatia, the Adriatic, the government of Venice, and the Tyrol. Most of this district has been long subject to Austria: the name of Illyria was given to it by Buonaparte in 1810, and it was retained by the Austrians, on new-modelling the territorial divisions, in 1816. It is called a kingdom, and consists of the two governments of Laibach and Trieste; the former inland, the latter maritime. These are subdivided into circles, the extent and population of which are as follow:—

GOVERNMENT OF TRIESTE.

Circles.	Square Miles.	Population.
Trieste	1440	175,935
Karlstadt	1278	108,205
Goritz	974	115,142
Fiume	1320	131,484
	5,012	531,066
GOVERNMENT OF LAIBACH.		
Circles.		
Laibach	1425	139,088
Neustadtl	1646	166,527
Adelsberg	1458	104,200
Klagenfurt	1875	162,759
Villach	2175	137,337
	8,579	689,911
Total	13,591	1,220,977

The chief towns are those that give name to the circles.

Austrian Illyria is mountainous; being intersected by the Carinthian and Julian Alps, including the rugged and lofty range called the Karst. These mountains are mostly covered with forests, and it has several other bare and unproductive tracts; but, on the other hand, there are a number of fertile valleys, enjoying a mild and warm climate. On the coast of the Adriatic, however, the bora, an impetuous wind severely felt in Croatia, is very destructive, and exhausts the soil. The principal rivers of Illyria are the Save, the Drave, the Laibach, and the Isonzo.

All the finer fruits of the south of Europe are produced here, and flax is cultivated in some districts; but the forests supply immense quantities of timber. Silk is also cultivated, and on the sea coast the fishing is extensive. The mineral kingdom is also rich. At Idria quicksilver and cinnabar are produced in large quantities: and copper and iron mines every where abound. Other mineral products are calamine, vitriol, alum, saltpetre, and pit-coal: on the coast bay salt is made. Olives, oil, timber, and the product of the mines, are the staple commodities. The pastures are in general good, and the rearing of cattle and sheep is carried on with success. The manufactures are various, but not on a large scale, and consist of linen, woollen, and silk; straw-plaiting, and hardware. The Austrian empire has no sea-ports except on the Adriatic, and Trieste and Fiume, the principal towns of Illyria, lie exactly in the road to the interior of the empire: the former is accordingly an entrepot for the trade of Germany, and the latter for that of Hungary.

This country remained under the dominion of Buonaparte, after the campaign of 1809, four years. The operations of the Austrians and British for its recovery took place in the close of 1813.

ILLYRIAN ISLANDS. Under this name are sometimes comprised the islands in the Adriatic, lying along the coast of Dalmatia. The principal are Veglia, Cherso, Arbe, Pago, Isola, Grossa, Brazza, Lesina, Lissa, Curzola, Sabioncello, Meleda, and Lagosta. They all belong to the house of Austria.

ILLYRIUS (Matthias Flaccus, or Francowitz), one of the most learned divines of the Augsburg confession, born in Istria, anciently called Illyrica, in 1520. He is said to have been a man of extensive learning, and great zeal; but of a passionate temper. He studied under Luther and Melancthon; and published a great number of works. He also had the chief direction of the Centuriæ Magdeburgenses. He died in 1575.

ILMEN, a considerable lake of Russia, in the government of Novogorod: it is forty-eight miles long, and from twelve to eighteen wide, receiving various rivers. The Russians call it Osero-Ilmen.

ILMINSTER, a market town of Somersetshire, four miles north-west from Crewkerne, and 133 W.S.W. from London. This town is seated on the Ille; and, though low, is healthy, and was formerly a manufacturing town of some importance. It consists principally of two streets, one of which is a mile in length. The church is a handsome Gothic building, ornamented with a quadrangular tower in the centre, containing five bells and a clock. Within is a monument, erected in the beginning of the seventeenth century, to the memory of Nicholas Wadham and Dorothy his wife, the founders of Wadham College, Oxford. Here is a free grammar-school, endowed by them, with considerable property, now greatly improved, together with a good salary and a house for the head master and his assistant. Market on Saturday.

ILUS, in fabulous history, the fourth king of Troy, and son of Tros by Calirrhoe, father of Laomedon, and grandfather of Priam. He received the Palladium from Jupiter. See PALLADIUM.

I'M. Contracted from I am.

IM, is used commonly, in composition, for in before mute letters. What is *im* in Latin, when it is not negative, is often *em* in French; and our writers, as the Latin or French occurs to their minds, use *im* or *em*: formerly *im* was more common, and now *em* seems to prevail.

IM'AGE, *n. s.* & *v. a.*
IM'AGERY, *n. s.*
IMAG'INABLE, *adj.*
IMAG'INANT, *adj.*
IMAG'INARY, *adj.*
IMAGINA'TION, *n. s.*
IMAG'INATIVE, *adj.*
IMAG'INE, *v. a.*
IMAG'INER, *n. s.*

Fr. *image*, *imaginable*, *imaginant*, *imaginatif*; Latin *imago*; Span. *imagén*; Greek εικων. The root of all these words is image; any corporeal representation; a picture; a likeness; an idol; a copy; similitude in appearance; an idea or picture painted in the fancy: imagery, sensible representations; phantasms of the mind; show; appearance: imaginable, possible to be conceived: imaginant, forming ideas: imaginary, fancied; visionary; unreal; existing only in imagination: imagination, a faculty of the mind by which ideal pictures are formed; the power of forming fanciful pictures, or representing absent things and beings to one's self and others; conception; contrivance; a fanciful opinion: imaginative, fantastic; full of fancies or imaginations: imagine, to copy by fancy; scheme; contrive: imaginer, one who forms ideas.

Manasseh set the carved *image* in God's house. *Chronicles.*

Thou hast seen all their vengeance, and all their *imaginations* against me. *Lam.* iii. 60.

Whose is this *image* and superscription? *Matt.*

Whan that hire father slaine was on a night,
Unto Dianes temple goth she right
And hente the *image* in hire handles two,
Fro which *image* wold she never go.
Chaucer. The Frankeleines Tale.

His wordis ben so comfortabill, and comyth so in seson
That my wit is ovircome to make eny reson
Contrary to counsaill, at myn *ymagynocioune*:
Wherfor I wol tel a Tale to your consolacioune.
Id. The Pardonere and Tapstere.

He ne ete, dronke, ne slept, ne worde seide,
Imagining, aie, that she was unkinde;
For which, well nigh he wext out of his mind.
Id. Troilus and Creseide.

Of marble stone was cut
An altar carved with cunning *imagery*.
Faerie Queene.

The one is too like an *image*, and says nothing; and the other too like a lady's oldest son, evermore talking. *Shakspeare.*

Thy brother I,
Even like a stony *image*, cold and numb. *Id.*

False sorrow's eye,
Which, for things true, weeps things *imaginary*. *Id.*

The *image* of the jest
I'll shew you here at large. *Id.*

Long mayest thou live,
To bear his *image* and renew his glories! *Id.*

I have bewept a worthy husband's death,
And lived by looking on his *images*:
But now two mirrours of his princely semblance
Are cracked in pieces by malignant death. *Id.*

Princes have but their titles for their glories,
An outward honour for an inward toil;
And, for unfelt *imaginations*,
They often feel a world of restless cares. *Id.*

Deny to speak with me? They're sick, they're weary?
They have travelled all night? Mere fetches;
The *images* of revolt. *Id. King Lear.*

This is the man should do the bloody deed:
The *image* of a wicked heinous fault
Lives in his eye. *Id. King John.*

Look what notes and garments he doth give thee,
Bring them, I pray thee, with *imagined* speed.
Shakspeare.

Present fears
Are less than horrible *imaginings*. *Id.*

Fortune is nothing else than a power *imaginary*, to which the successes of human actions and endeavours were for their variety ascribed. *Raleigh's History.*

The juggler took upon him to know that such an one should point in such a place of a garter that was held up; and still he did it, by first telling the *imaginer*, and after bidding the actor think. *Id.*

We will enquire what the force of *imagination* is, either upon the body *imaginant*, or upon another body. *Id.*

Imagination I understand to be the representation of an individual thought. *Imagination* is of three kinds: joined with belief of that which is to come; joined with memory of that which is past; and of things present, or as if they were present: for I comprehend in this *imagination* feigned and at pleasure, as if one should *imagine* such a man to be in the vestments of a pope, or to have wings. *Id.*

Lay fetters and restraints upon the *imaginative* and fantastick part, because our fancy is usually pleased with the entertainment of shadows and gauds. *Taylor's Rule of Holy Living*

Things of the world fill the *imaginative* part with beauties and fantastick *imagery*. *Taylor.*

O whither shall I run, or which way fly
The sight of this so horrid spectacle,
Which erst my eyes beheld, and yet behold!
For dire *imagination* still pursues me. *Milton.*

——————; on his right
The radiant *image* of his glory sat,
His only Son. *Id. Paradise Lost.*

Our simple apprehension of corporeal objects, if present, is sense; if absent, *imagination:* when we would perceive a material object, our fancies present us with its idea. *Glanville.*

Sometimes despair darkens all her *imaginations*; sometimes the active passion of love cheers and clears her invention. *Sidney.*

I fancyed pleasures, none but one who loves
And doats as I did, can *imagine* like them.
Otway.

It is not *imaginable* that men will be brought to obey what they cannot esteem. *South.*

Men sunk into the greatest darkness *imaginable*, retain some sense and awe of a Deity. *Tillotson.*

The face of things a frightful *image* bears,
And present death in various forms appears.
Dryden's Æneid.

wish there may be in this poem any instance of good *imagery*. *Dryden.*

How are immaterial substances to be *imagined*, which are such things whereof we can have no notion? *Id.*

When in those oratories might you see
Rich carvings, portraitures, and *imagery*;
Where every figure to the life expressed
The godhead's power. *Id. Knight's Tale.*

He made us to his *image* all agree
That *image* is the soul, and that must be,
Or not the maker's *image*, or be free. *Id.*

Still must I be upbraided with your line;
But your late brother did not prize me less,
Because I could not boast of *images*. *Id.*

We are apt to think that space, in itself, is actually boundless; to which *imagination*, the idea of space, of itself, leads us. *Locke.*

What are our ideas of eternity and immensity but the repeated additions of certain ideas of *imagined* parts of duration and expansion, with the infinity of number, in which we can come to no end of addition? *Id.*

The *image* of deity may be a proper object for that which is but the *image* of a religion. *South.*

The crowd indeed
Who kneel before the *image*, not the god,
Worship the deity their hands have made.
Rowe's Ambitious Stepmother.

Why wilt thou add to all the griefs I suffer,
Imaginary ills and fancied tortures. *Addison.*

Honour's a fine *imaginary* notion
That draws in raw and inexperienced men
To real mischief, while they hunt a shadow. *Id.*

What can thy *imagery* or sorrow mean:
Secluded from the world, and all its care,
Hast thou to grieve or joy, to hope or fear?
Prior.

Outcasts of mortal race! can we conceive
Image of aught delightful, soft, or great? *Id.*

His ear oft frighted with the *imaged* voice
Of heaven, when first it thundered. *Id.*

All the visionary beauties of the prospect, the paint and *imagery* that attracted our senses, fade and disappear. *Rogers.*

It might be a mere dream which he saw; the *imagery* of a melancholick fancy, such as musing men mistake for a reality. *Atterbury.*

Fate some future bard shall join,
In sad similitude of griefs to mine,
Condemned whole years in absence to deplore,
And *image* charms he must behold no more.
Pope.

Where beams of warm *imagination* play,
The memory's soft figure melt away. *Id.*

When we speak of a figure of a thousand angles, we may have a clear idea of the number one thousand angles; but the *image*, or sensible idea, we cannot distinguish by fancy from the *image* of a figure that has nine hundred angles. *Watts.*

Imagination's fool and error's wretch
Man makes a death which Nature never made. *Young.*

For this was thy fair *image*
Stampt on his soul in godlike lineaments?
Porteus's Death.

Now my sere fancy 'falls into the yellow
Leaf,' and *imagination* droops her pinion,
And the sad truth which hovers o'er my desk
Turns what was once romantic to burlesque.
Byron. Don Juan.

IMAGE, in theology, the use and adoration of images have been long controverted. The first instance that occurs in any credible author, of images among Christians, is that recorded by Tertullian de Pudicitiâ, of certain cups, or chalices, on which was represented the parable of the good shepherd carrying the lost sheep on his shoulders: but this instance only proves, that the church at that time did not think emblematical figures unlawful ornaments of chalices. Another instance is taken from Eusebius, who says, that in his time there were to be seen two brass statues in the city of Paneas or Cæsarea Philippi; the one of a woman on her knees with her arms stretched out, the other of a man over against her with his hand extended to receive her: these statues were said to be the images of our Saviour and the woman whom he cured of an issue of blood. From the foot of the statue representing our Saviour, says the historian, sprung up an exotic plant, which, as soon as it grew to touch the border of his garment, was said to cure all sorts of distempers. Eusebius, however, vouches none of these things; nay, he supposes that the woman who erected this statue of our Saviour was a pagan, and ascribes it to a pagan custom. Philostorgius expressly says, that this statue was carefully preserved by the Christians, but that they paid no kind of worship to it, because it is not lawful for Christians to worship brass or any other matter. Justin Mart. Apol. ii. p. 44. Clem. Alex. Strom. 5, Strom. 1, and Protr. p. 46, Aug. de Civit. Dei. lib. vii. c. 5, and lib. iv. c. 32. Id. de Fide et Symb. c. 7, Lactant. lib. ii. c. 3, Tertull. Apol. c. 12, Arnob. lib. vi. p. 202. Tertullian, Clemens Alexandrinus, and Origen, were of opinion, that, by the second commandment, painting and engraving were unlawful to a Christian, styling them evil and wicked arts. Tert. de Idol. cap. 3, Clem. Alex. Admon. ad Gent. p. 41, Origen contra Celsum. lib. vi. p. 182. The use of images in churches, as ornaments, was first introduced by some Christians in Spain, in the beginning of the fourth century; but the practice was condemned as a dangerous innovation, in a council held at Eliberas in 305. Epiphanius, in a letter preserved by Jerome,

com. II. ep. 6, bears a strong testimony against images; and he may be considered as one of the first Iconoclasts. The custom of admitting pictures of saints and martyrs into churches was rare in the end of the fourth century; but became common in the fifth. But they were still considered only as ornaments, and even in this view they met with very considerable opposition. In the following century the custom of thus adorning churches became almost universal, both in the east and west. Petavius expressly says, that no statues were yet allowed in the churches; because they bore too near a resemblance to the idols of the Gentiles. Towards the close of the fourth, or beginning of the fifth century, images, which were introduced by way of ornament, and then used as an aid to devotion, began to be actually worshipped. However, it continued to be the doctrine of the church in the sixth, and in the beginning of the seventh century, that images were to be used only as helps to devotion, and not as objects of worship. The worship of them was condemned in the strongest terms by Gregory the Great; as appears by two of his letters, written in 601. From this time to the beginning of the eighth century, there occurs no instance of any worship, given or allowed to be given to images by any council or assembly of bishops whatever. But they were commonly worshipped by the monks and populace in the beginning of the eighth century; insomuch, that in 726, when Leo published his famous edict, it had already spread into all the provinces subject to the empire. See ICONOCLASTÆ.

IMAGE, in optics, a figure in the form of any object, made by the rays of light issuing from the several points of it, and meeting in so many other points, either at the bottom of the eye, or on any other ground, or on any transparent medium, where there is no surface to reflect them. Thus we are said to see all objects by means of their images formed in the eye.

IMAGE, in rhetoric, also signifies a lively description of any thing in a discourse. Images in discourse are defined by Longinus to be, in general, any thoughts proper to produce expressions, and which present a kind of picture to the mind. But, in the more limited sense, images are such discourses as come from us, when, by a kind of enthusiasm, or an extraordinary emotion of the soul, we seem to see the things whereof we speak, and present them before the eye of those who hear us. These images, or pictures, are of great use, to give weight, magnificence, and strength, to a discourse. They warm and animate it; and, when managed with art, seem, as it were, to subdue the hearer, and put him in the power of the speaker.

IMAGO, in entomology, a name given by Linnæus to the third state of insects, when they appear in their proper shape and colors, and undergo no more transformation. See ENTOMOLOGY.

IMAM, or IMAN, a minister in the Mahommedan church, answering to a parish priest among us. The word properly signifies a prelate, one who presides over others; but the Mussulmans frequently apply it to a person who has the care of a mosque, who is always there first, and reads prayers to the people, which they repeat after him. The imam is to be clear of all gross sins, otherwise he may be deposed, and his dignity conferred on another. After an imam, however, has once been owned as such, he who denies that his authority comes immediately from God is accounted impious; he who does not obey him is a rebel. The imams have no outward mark of distinction; their habit is the same with that of the Turks in common, except that the turban is a little larger, and folded somewhat differently. Imam is also applied, by way of excellence, to the four chiefs or founders of the four principal sects among the Mahommedans. Thus Ali is the imam of the Persian sect, or sect of the Schiates; Abubeker the imam of the Sunnites, which is the sect followed by the Turks; Saphii, or Safiy, the imam of another sect, &c

IMAUS, in ancient geography, the largest mountain of Asia, and a part of Taurus; from which the whole of India extends into a vast plain, resembling Egypt. (Strabo, Pliny.) It extends through Scythia as far as to the Mare Glaciale, dividing it into Scythia intra Imaum, and Scythia extra Imaum (Ptolemy); and, stretching out along the north of India to the eastern ocean, separates it from Scythia. It had various names according to the different countries through which it extended.

IMBECILE', *adj.* & *v. a.* } Fr. *imbecille*;
IMBECIL'ITY, *n. s* } Lat. *imbecilis, in, sine*, and *baculo*. Weak; feeble; wanting strength either of mind or body, generally used with relation to the former. This word is corruptly written *embezzle*; to weaken an estate or fortune by unjust appropriation.

These wicked wretches, these houndes of hel,
(As I have told plaine in this sentence)
Were not content my dere love thus to quel;
But yet they must *embesile* his presence,—
As I perceive by covert violence
They have him conveied to my displeasure
For here is lafte but naked sepulture.
Chaucer. Lament of Mary Magdelein.

That way we are contented to prove, which, being the worse in itself, is notwithstanding now, by reason of common *imbecility*, the fitter and likelier to be brooked.
Hooker.

Strength would be lord of *imbecility*,
And the rude son would strike his father dead.
Shakspeare.

Princes must in a special manner be guardians of pupils and widows, not suffering their persons to be oppressed, or their states *imbeciled*.
Taylor's Rule of Holy Living.

When man was fallen, and had abandoned his primitive innocence, a strange *imbecility* immediately seized and laid hold of him. *Woodward.*

IMBIBE', *v. a.* } Fr. *imbiber*; Lat. *imbibo*.
IMBI'BER, *n. s.* } To drink in; to draw in
IMBIBIT'ION, *n. s.* } or suck up; to drench, saturate, or soak. This sense, though unusual, perhaps unexampled, is necessary in English, unless the word imbue be adopted, which our writers seem not willing to receive. To admit into the mind. Imbiber, one who drinks. Imbibition, the act of sucking or drinking in.

Most powders grow more coherent by mixture of water than of oil; the reason is the congruity of bodies, which maketh a perfecter *imbibition* and incorporation.
Bacon.

A pot of ashes will receive more hot water than cold, for as much as the warm water *imbibeth* more of the salt. *Browne.*

A drop of oil, let fall upon a sheet of white paper, that part of it, which, by the *imbibition* of the liquor, acquires a greater continuity and some transparency, will appear much darker than the rest; many of the incident beams of light being now transmitted, that otherwise would be reflected. *Boyle.*

It is not easy for the mind to put off those confused notions and prejudices it has *imbibed* from custom. *Locke.*

Metals, corroded with a little acid, turn into rust, which is an earth tasteless and indissolvable in water; and this earth, *imbibed* with more acid, becomes a metallick salt. *Newton.*

Those that have *imbibed* this error, have extended the influence of this belief to the whole gospel, which they will not allow to contain any thing but promises. *Hammond.*

The torrent merciless *imbibes*
Commissions, perquisites, and bribes. *Swift.*

Conversation with foreigners enlarges our minds, and sets them free from any prejudices we are ready to *imbibe* concerning them. *Watts.*

Illumined wide
The dewy-skirted clouds *imbibe* the sun.
Thomson's Autumn.

IMBITTER, *v. a.* From bitter. To make bitter; figurately to deprive of pleasure; to make unhappy; to exasperate.

Is there any thing that more *imbitters* the enjoyments of this life than shame? *South.*

Let them extinguish their passions which *imbitter* their lives, and deprive them of their share in the happiness of the community. *Addison's Freeholder.*

IMBOD'Y, *v. a.* & *v. n.* To invest with a body; to make corporeal; to incorporate, to condense, to enclose; to unite in a mass, or to coalesce.

I by vow am so *imbodied* yours,
That she which marries you must marry me.
Shakspeare.

The soul grows clotted by contagion,
Imbodies and imbrutes; 'till she quite lose
The divine property of her first being. *Milton.*

Never since created man
Met such *imbodied* force, as named with these,
Could merit more than that small infantry
Warred on by cranes. *Id. Paradise Lost.*

Under their head *imbodyed* all in one. *Milton.*

Though assiduity in the most fixed cogitation be no trouble to immaterialized spirits, yet is it more than our *imbodied* souls can bear without lassitude. *Glanville's Scepsis.*

Then Clausus came, who led a num'rous band
Of troops *imbodied*, from the Sabine land.
Dryden. Æneas.

An opening cloud reveals
An heavenly form *embodied*, and arrayed
With robes of light. *Dryden.*

The idea of white, which snow yielded yesterday, and another idea of white from another snow to-day, put together in your mind, *imbody* and run into one. *Locke.*

In those strata we shall meet with the same metal or mineral *imbodied* in stone, or lodged in coal, that elsewhere we found in marle. *Woodward.*

IMBOIL', *v. n.* From boil. To exestuate; to effervesce; to move with violent agitation, like hot liquor in a caldron. Not now in use.

With whose reproach and odious menace,
The knight *imboiling* in his haughty heart,
Knit all his forces, and 'gan soon embrace
His grasping hold. *Faerie Queene.*

IMBOL'DEN, *v. a.* From bold. To raise to confidence; to encourage.

'Tis necessary he should die:
Nothing *imboldens* sin so much as mercy.
Shakspeare.

I think myself in better plight for a lender than you are, the which hath something *imboldened* me to this unseasoned intrusion. *Id.*

I was the more *emboldened*, because I found I had a soul congenial to his. *Dryden.*

Nor flight was left, nor hopes to force his way;
Imboldened by despair, he stood at bay. *Id.*

Their virtues and superior genius *imboldened* them, in great exigencies of state, to attempt the service of their prince and country out of the common forms. *Swift.*

IMBO'SOM, *v. a.* From bosom. To hold on the bosom; to cover fondly with the folds of one's garment; to hide under any cover.

The Father infinite,
By whom in bliss *imbosomed* sat the Son.
Milton.

Villages *imbosomed* soft in trees,
And spiry towns by surging columns marked.
Thomson.

To admit to the heart, or to affection.

But glad desire, his late *imbosomed* guest,
Yet but a babe, with milk of sight he nurst.
Sidney.

Who glad to *imbosom* his affection vile,
Did all she might, more plainly to appear.
Faerie Queene.

IMBOUND', *v. a.* From bound. To enclose; to shut in.

That sweet breath,
Which was *imbounded* in his beauteous clay.
Shakspeare.

IMBOW', *v. a.* } From bow. To arch;
IMBOW'MENT, *n. s.* } to vault.

Prince Arthur gave a box of diamond sure,
Imbowed with gold and gorgeous ornament.
Faerie Queene.

Imbowed windows be pretty retiring places for conference: they keep both the wind and sun off. *Bacon.*

The roof all open, not so much as any *imbowment* near any of the walls left. *Id.*

Let my due feet never fail,
To walk the studious cloister's pale,
And love the high *imbowed* roof,
With antick pillar massy proof. *Milton.*

IMBOW'ER, *v. a.* From bower. To cover with a bower; to shelter with trees.

Thick as autumnal leaves that strow the brooks
In Valumbrosa, where the Etrurian shades
High over-arched *imbower*. *Milton's Paradise Lost.*

And stooping thence to Ham's *embowering* walks,
In spotless peace retired. *Thomson.*

IMBRANG'LE, *v. a.* To entangle. A low word.

With subtle cobweb cheats
They're catched in knotted law, like nets;
In which, when once they are *imbrangled*,
The more they stir, the more they're tangled.
Hudibras.

IM'BRICATED, *adj.* From Lat. *imbrex*. Indented with concavities; bent and hollowed like a roof or gutter-tile.

Imbricated Shells, in natural history, are those which are elevated into transverse ridges, lying over one another at the base, in the manner of the tiles on a house-top. Also the name of a peculiar species of cordiformis, or heart-shell, whose sides are remarkably ridged in this transverse manner, and at the same time so divided longitudinally, by seven high ribs running from the apex to the edge, that the whole represents the roof of a house with the beams and rafters, before they are covered by the tiling.

IMBRICATION, *n. s.* Lat. *imbrex*. Concave indenture.

All is guarded with a well-made tegument, adorned with neat *imbrications*, and many other fineries. *Derham.*

IMBROS, an island in the Grecian archipelago, situated east of Mount Athos, west of the peninsula of the Dardanelles, south of Samothracia, and north-east of Lemnos. N. lat. 40° 10′, E. long. 23° 25′. It is not much visited by European travellers, and greatly resembles most of the other Greek islands, presenting the same aspect of fertility, the same delightful climate, and similar manners of the inhabitants. Imbros was anciently much larger than it is at present, but the inroads of the sea have by degrees reduced it to a surface the circumference of which is scarcely thirty miles. A porphyry rock forms the basis of the island, in several places appearing bare, and interrupting the vegetation of the soil; in some parts covered with sponges on the sea-coast, where it is carpeted with a great quantity of moss; while caper-bushes, asphodel, and other plants spontaneously take root in its interstices. In the beds of the torrents are found grouped together the agnus castus and the nerion; and here also are found jasper, and banks of yellow earth for dyeing, which the inhabitants export to Constantinople. This island is infested with several sorts of serpents, none of which, however, are venomous. Olives, wild pear-trees, and kermesoaks, the acorns of which serve to fatten a great number of pigs, are the only trees that grow in Imbros. Its principal produce is corn, which is an article of exportation; in other respects it has little commerce, and the inhabitants are by no means industrious; as they have no good ports, they are seldom visited by foreign vessels. The whole island contains but five or six villages, and 1000 houses.

The English traveller, Sibthorpe, happening to land here, was very hospitably entertained by the Papas, at a panagia, or village festival. He was conducted to a hamlet surrounded by olive trees, where two priests were officiating in a rustic kind of chapel, in the presence of a great number of peasants. In these remote corners of the Greek commonwealth the distribution of provisions forms a part of every religious festival, as it did among the first Christians. The Englishman, having presented his offering, was considered as a member of the parish, and admitted to the sacred banquet. Five lambs, sacrificed in honor of the patron, whose festival they were celebrating, were cut in pieces and distributed among the men, women, and children, as were also other provisions, such as kourkous and misitra, flummery, olives, and raisins. The priest then blessed the bread and the wine, and every man of the community presented himself, to receive from the hands of the pastor a small piece of the bread dipped in the wine. The women did not partake of this mystical distribution, probably on account of the wine, the use of which their habitual sobriety forbids to the Greek women. While eating the consecrated bread, every one made with his finger, the sign of a cross on his mouth. This ceremony passed with great simplicity, while happiness seemed to brighten the countenances of the rustic guests. There was only one of the priests, however, who showed any affability towards the stranger; the others were gloomy and silent.

IMBROWN, *v. a.* From brown. To make brown; to darken; to obscure; to cloud

Where the morning sun first warmly smote
The open field, and where the unpierced shade
Imbrowned the noontide bowers. *Milton.*

The foot grows black that was with dirt *imbrowned*,
And in thy pocket gingling halfpence sound. *Gay.*

Another age shall see the golden ear
Imbrown the slope, and nod on the parterre. *Pope.*

Imbrowned with native bronze, lo! Henley stands. *Id.*

IMBRUE′, *v. a.* From in and brue. To steep; to soak; to wet much or long. This seems indifferently written with *im* or *em*.

Thou mad'st many hearts to bleed
Of mighty victors, with wide wounds *embrued*,
And by thy cruel darts to thee subdued. *Spenser.*

At me, as at a mark, his bow he drew,
Whose arrows in my blood their wings *imbrue*. *Sandys.*

The merciless Turks, *embrued* with the Christian blood, were weary of slaughter, and began greedily to seek after the spoil. *Knolles.*

There streams a spring of blood so fast
From those deep wounds, as all *embrued* the face
Of that accursed caitiff. *Daniel's Civil War.*

Lucius pities the offenders,
That would *embrue* their hands in Cato's blood. *Addison.*

Lo! these hands in murder are *imbrued*,
Those trembling feet by justice are pursued. *Prior.*

There, where two ways in equal parts divide,
The direful monster from afar descried,
Two bleeding babes depending at her side;
Whose panting vitals, warm with life, she draws,
And in their hearts *embrues* her cruel claws. *Pope.*

His virgin sword Ægysthus' veins *imbrued*;
The murderer fell, and blood atoned for blood. *Id.*

A good man chuses rather to pass by a verbal injury than *imbrue* his hands in blood. *Clarissa.*

To pour; to emit moisture. Obsolete.

Some bathed kisses, and did oft *embrue*
The sugared liquor through his melting lips. *Faerie Queene.*

IMBRUTE′, *v. a.* & *v. n.* From brute. To degrade to brutality; to sink down to brutality.

I, who erst contended
With gods to sit the highest, am now constrained
Into a beast; and mix with bestial slime,
This essence to incarnate and *imbrute*. *Milton.*

The soul grows clotted by contagion,
Imbodies and *imbrutes*, 'till she quite lose
The divine property of her first being. *Id.*

IMBST, or UIMST, a town of the Austrian states, in the Tyrol, on the Inn. It has 2200 inhabitants, and is the chief place of a district, including the Upper Immerthal and the Vinstgau, with a population of 96,000. Imbst has acquired notoriety from the number of Canary birds reared in it for sale. The annual value of birds was formerly £4000. Eight miles south-west of Stambs, and nine S. S. E. of Ruetten.

IMBUE', *v. a.* Lat. *imbuo.* To tincture deep; to imbibe or soak with any liquor or die.

——————— they satiate and soon fill,
Though pleasant, but thy words, with grace divine
Imbued, bring to their sweetness no satiety.
Milton.

I would render this treatise intelligible to every rational man, however little versed in scholastick learning, among whom I expect it will have a fairer passage, than among those that are deeply *imbued* with other principles. *Digby.*

Clothes which have once been thoroughly *imbued* with black, cannot well afterwards be dyed into lighter color. *Boyle.*

Where the mineral matter is great, so as to take the eye, the body appears *imbued* and tinctured with the color. *Woodward.*

To IMBURSE', *v. a.* Fr. *bourse.* To stock with money. This should be *emburse*, from Fr. *embourser.*

IMIRETTA, a country of Asia, north of Persia, stretches along the southern limit of Caucasus, having the Black Sea on the west and Georgia on the east, and lies between the forty-third and forty-fourth degree of north latitude. The internal government is in a great measure independent; but, in 1784, Russia assumed a nominal supremacy here. Almost every family chooses for itself a habitation in the woody hills, or pleasant valleys, where they live in the most retired manner. The Imiretians are said to have deep sounding tones by which they understand and call each other on any important occasion; and, on this signal being given, hundreds of people issue from places where no one could have supposed there had been a creature. They are chiefly of Georgian origin. The capital is Cotatis, on the left bank of the Phasis.

IMITABIL'ITY, *n. s.* IM'ITABLE, *adj.* IM'ITATE, *v. a.* IMITA'TION, *n. s.* IM'ITATIVE, *adj.* IM'ITATOR, *n. s.* Lat. *imitabilis*; Fr. *imitable*; Span. *imitàr*; Lat. *imitor.* The quality of being imitable: imitable, worthy or possible to be imitated: imitate, to copy; endeavour to resemble; to counterfeit; to pursue the course of a composition with parallel images: imitation, the act of copying; the copy; a method of translation: imitative, inclined to copy or resemble; thus man is an imitative being: aiming at resemblance, as, painting is an imitative art; formed after some original: imitator, one that copies after or resembles another.

How could the most base men, and separate from all *imitable* qualities, attain to honour but by an observant slavish course? *Raleigh.*

We *imitate* and practise to make swifter motions than any out of our muskets. *Bacon.*

As acts of parliament are not regarded by most *imitable* writers, I account the relation of them improper for history. *Hayward.*

Despise wealth, and *imitate* a god. *Cowley.*

This hand appeared a shining sword to wield,
And that sustained an *imitated* shield.
Dryden's Æneid.

This temple, less in form, with equal grace,
Was *imitative* of the first in Thrace. *Dryden.*

Imitators are but a servile kind of cattle, says the poet. *Id.*

Since a true knowledge of nature gives us pleasure, a lively *imitation* of it, either in poetry or painting, must produce a much greater; for both these arts are not only true *imitations* of nature, but of the best nature. *Id.*

In the way of *imitation*, the translator not only varies from the words and sense, but forsakes them as he sees occasion; and, taking only some general hints from the original, runs division on the ground-work. *Id.*

According to the multifariousness of this *imitability*, so are the possibilities of being. *Norris.*

For shame! what, *imitate* an ode? *Gay.*

The characters of men placed in lower stations of life, are more useful, as being *imitable* by greater numbers. *Atterbury.*

Several other arts *imitate* as well as Poetry; and an *imitation* of human manners and characters may be carried on in the humblest Prose, no less than in the more lofty Poetic strains. *Blair's Lectures.*

IMITATION, in music, admits of two different senses. Sound and motion are either capable of imitating themselves by a repetition of their own particular modes; or of imitating other objects of a nobler and more abstracted nature. Nothing perhaps is so purely mental, nothing so remote from external sense, as not to be imitable by music. 'Dramatic or theatrical music,' says Rousseau, 'contributes to imitation no less than painting or poetry: it is in this common principle that we must investigate both the origin and the final cause of all the fine arts. But this imitation is not equally extensive in all the imitative arts. Whatever the imagination can represent to itself is in the department of poetry. Painting, which does not present its pictures to the imagination immediately, but to external sense, and to one sense alone, paints only such objects as are discoverable by sight. Music might appear subjected to the same limits, with respect to the ear; yet it is capable of painting every thing, even such images as are objects of ocular perception alone: by a magic almost inconceivable it seems to transform the ears into eyes, and endow them with the double function of perceiving visible objects by the mediums of their own; and it is the greatest miracle of an art, which can only act by motion, that it can make that very motion represent absolute quiescence. Night, sleep, silence, solitude, are the noble efforts, the grand images, represented by a picturesque music. Though all nature should be asleep, he who contemplates her does not sleep; and the art of the musician consists in substituting, for this image of insensibility in the object, those emotions which its presence excites in the heart of the contemplator. He not only,' continues Rousseau, 'ferments and agitates the ocean, animates the flame to conflagration, makes the fountain murmur in his harmony, calls the rattling shower from heaven, and swells the torrent to restless rage; but he paints the horrors of a boundless and frightful desert, involves the

subterraneous dungeon in tenfold gloom, soothes the tempest, tranquillises the disturbed elements, and from the orchestra diffuses a recent fragrance through imaginary groves; nay, he excites in the soul the same emotions which we feel from the immediate perception and full influence of these objects.' Imitation, in its technical sense, is a reiteration of the same air, or of one which is similar, in several parts where it is repeated by one after the other, either in unison, or at the distance of a fourth, a fifth, a third, or any other interval whatever. The imitation may be happily enough pursued, even though several notes should be changed; provided the same air may always be recognised, and that the composer does not deviate from the laws of proper modulation. Frequently, in order to render the imitation more sensible, it is preceded by a general rest, or by long notes, which seem to obliterate the impression formerly made by the air, till it is renewed with greater force and vivacity by the commencement of the imitation.

IMMAC'ULATE, *adj.* Fr. *immaculé*; Lat. *immaculatus*. Spotless, pure, undefiled, as applied to character; limpid, clear, not turbid, as applied to fluids.

To keep this commandment *immaculate* and blameless, was to teach the gospel of Christ. *Hooker.*

His words are bonds, his oaths are oracles;
His love sincere, his thoughts *immaculate*.
Shakspeare.

Thou clear, *immaculate*, and silver fountain,
From whence this stream, through muddy passages,
Hath had his current and defiled himself. *Id.*

The king, whom catholicks count a saint-like and *immaculate* prince, was taken away in the flower of his age. *Bacon.*

Were but my soul as pure
From other guilts as that, Heaven did not hold
One more *immaculate*. *Denham's Sophy.*

The world's infectious; few bring back at eve
Immaculate, the manners of the morn. *Young.*

Hence chartered boroughs are such public plagues,
And burghers, men *immaculate* perhaps
In all their private functions, once combined,
Become a loathsome body, only fit
For dissolution, hateful to the main. *Cowper.*

IMMAN'ACLE, *v. a.* From *manacle*. To fetter; to confine.

Thou can'st not touch the freedom of my mind
With all thy charms, although this corporal rind
Thou hast *immanacled*. *Milton.*

IMMANE', *adj.* Lat. *immanis*. Vast; prodigiously great.

IM'MANENT, *adj.* Fr. *immanent*; Lat. *in* and *maneo*. Intrinsic; inherent; internal.

Judging the infinite essence by our narrow selves, we ascribe intellections, volitions, and such *immanent* actions, to that nature which hath nothing in common with us. *Glanville.*

What he wills and intends once, he willed and intended from all eternity; it being grossly contrary to the very first notions we have of the infinite perfections of the Divine Nature to state or suppose any new *immanent* act in God. *South.*

IMMAN'IFEST, *adj.* In and manifest. Not manifest; not plain. Not in use.

A time not much unlike that which was before time, *immanifest* and unknown. *Browne's Vulgar Errours.*

IMMAN'ITY, *n. s.* Lat. *immanitas*. Barbarity; savageness.

It was both impious and unnatural
That such *immanity* and bloody strife
Should reign among professors of one faith.
Shakspeare.

IMMAR'TIAL, *adj.* In and martial. Not warlike.

My powers are unfit,
Myself *immartial*. *Chapman's Odyssey.*

IMMASK', *v. a.* In and mask. To cover, to disguise.

I have cases of buckram for the nonce, to *immask* our noted outward garments.
Shakspeare. Henry IV.

IMMATE'RIAL, *adj.* }
IMMATERIAL'ITY, *n. s.* }
IMMATE'RIALLY, *adv.* }
IMMATE'RIALISED, *adj.* }
IMMATE'RIALNESS, *n. s.* }
IMMATE'RIATE, *adj.* }
Fr. *immateriel*; Lat. *in* and *materia*. Incorporeal; distinct from, or void of matter; unimportant; without weight; impertinent; without relation. This sense has crept into the conversation and writings of many persons, but ought to be rejected. Immaterially, in a manner not depending upon matter: immaterialised, incorporeal. The other words are synonymous.

Angels are spirits *immaterial* and intellectual, the glorious inhabitants of those sacred palaces, where there is nothing but light and immortality; no shadow of matter for tears, discontentments, griefs, and uncomfortable passions to work upon; but all joy, tranquility, and peace, even for ever and ever, do dwell. *Hooker.*

It is a virtue which may be called incorporeal and *immateriate*, whereof there be in nature but few. *Bacon.*

After a long enquiry of things immerse in matter, I interpose some object which is *immateriate*, or less materiate; such as this of sounds. *Id.*

As then the soul a substance hath alone,
Besides the body, in which she is confined;
So hath she not a body of her own,
But is a spirit, and *immaterial* mind. *Davies.*

Montanus, in his consultations, holds melancholy to be material or *immaterial*.
Burton's Anatomy of Melancholy.

Though assiduity in the most fixed cogitation be no trouble to *immaterialized* spirits, yet it is more than our embodied souls can bear without lassitude.
Glanville's Scepsis.

The visible species of things strike not our senses *immaterially*; but, streaming in corporal rays, do carry with them the qualities of the object from whence they flow, and the medium through which they pass.
Browne's Vulgar Errours.

No man that owns the existence of an infinite spirit can doubt the possibility of a finite spirit; that is, such a thing as is *immaterial*, and does not contain any principle of corruption. *Tillotson.*

When we know cogitation is the prime attribute of a spirit, we infer its *immateriality*, and thence its immortality. *Watts.*

Those *immaterial* felicities we expect, suggest the necessity of preparing our appetites, without which heaven can be no heaven to us. *Decay of Piety.*

IMMATURE', *adj.* }
IMMATURE'LY, *adv.* }
IMMATURE'NESS, *n. s.* }
IMMATU'RITY, *n. s.* }
Lat. *immaturus*. Not arrived at fulness or completion; unripe; hasty; before the natural time; premature; a state short of perfection; incompleteness. Used generally in the figurative sense.

The land enterprize of Panama was an ill-measured and *immature* counsel, grounded upon a false account, that the passages were no better fortified than Drake had left them. *Bacon.*

We are pleased, and call not that death *immature*, if a man lives 'till seventy. *Taylor.*

The earth was formed, but in the womb as yet
Of waters, embryon *immature* involved,
Appeared not. *Milton's Paradise Lost.*

I might reasonably expect a pardon from the ingenuous for faults committed in an *immaturity* of age and judgment. *Glanville.*

This is your time for faction and debate,
For partial favour, and permitted hate;
Let now your *immature* dissension cease,
Sit quiet. *Dryden.*

IMMEABIL'ITY, *n. s.* Lat. *immeabilis.* Want of power to pass. So it is used in the example; but it is rather incapability of affording passage.

From this phlegm proceed white cold tumours, viscidity, and consequently *immeability* of the juices. *Arbuthnot.*

IMMEAS'URABLE, *adj.* } From in and
IMMEAS'URABLY, *adv.* } measure. That cannot be measured; immense; indefinitely extensive; beyond all measure.

The Spaniards *immeasurably* bewail their dead. *Spenser.*

Churches reared up to an height *immeasurable*, and adorned with far more beauty in their restoration than their founders before had given them. *Hooker.*

From the shore
They viewed the vast *immeasurable* abyss,
Outrageous as a sea, dark, wasteful, wild. *Milton.*
There ye shall be fed, and filled,
Immeasurably; all things shall be your prey. *Id.*

What a glorious shew are those beings entertained with, that can see such tremendous objects wandering through those *immeasurable* depths of ether! *Addison's Guardian.*

Nor friends are there, nor vessels to convey,
Nor oars to cut the *immeasurable* way.
Pope's Odyssey.

IMMECHAN'ICAL, *adj.* In and mechanical. Not according to the laws of mechanics.

We have nothing to do to show any thing that is *immechanical*, or not according to the established laws of nature. *Cheyne.*

Nothing will clear a head possessed with *immechanical* notions. *Mead.*

IMME'DIACY, *n. s.* } Fr. *immediat*; Lat.
IMME'DIATE, *adj.* } in and *medius*. Next
IMME'DIATENESS, *n. s.* } unto; presently following; without any interposing medium: this seems to be the primary and essential meaning. Not acting by second causes; instant; present with regard to time: immediacy, personal greatness; power of acting without dependance. This is a harsh word, and sense peculiar, I believe, to Shakspeare: immediately is instantly, without the intervention of other cause or event: the substantive has a similar meaning.

He led our powers,
Bore the commission of my place and person,
The which *immediacy* may well stand up,
And call itself your brother. *Shakspeare. King Lear.*

Her father hath commanded her to slip
Away with Slender, and with him at Eaton
Immediately to marry. *Shakspeare.*

Immediate are my needs, and my relief,
Must not be tost and turned to me in words
But find supply *immediate*. *Id. Timon.*

It is much to be ascribed to the *immediate* will of God, who giveth and taketh away beauty at his pleasure. *Abbot*

Death denounced that day,
Which he presumes already vain, and void
Because not yet inflicted, as he feared,
By some *immediate* stroke. *Milton's Paradise Lost.*

Reason in man obscured, or not obeyed
Immediately inordinate desires
And upstart passions catch the government
From reason, and to servitude reduce
Man till then free. *Id.*

Moses mentions the *immediate* causes of the deluge, the rains and the waters; and St. Peter mentions the more remote and fundamental causes, that constitution of the heavens. *Burnet.*

God's acceptance of it, either *immediately* by himself, or mediately by the hands of the bishop, is that which vests the whole property of a thing in God. *South.*

But, she, howe'er, of victory sure,
Contemns the wreath too long delayed;
And armed with more *immediate* power,
Calls cruel silence to her aid. *Prior.*

The news *immediate* to her mother brought,
While, pierced with anxious thought, she pined away
The lonely moments for Lavinia's fate.
Thomson. Autumn.

IMMED'ICABLE, *adj.* Lat. *immedicabilis.* Not to be healed; incurable; beyond the skill of a physician.

My griefs ferment and rage,
Nor less than wounds *immedicable*,
Rankle and fester, and gangrene
To black mortification. *Milton's Agonistes.*

IMMEM'ORABLE, *adj.* } These words are
IMMEMO'RIAL, *adj.* } derived from *in* and *memoria*. Immemorable is not worth recollection; and immemorial, past the time of recollection: so ancient that they cannot be traced to their origin.

All the laws of this kingdom have some memorials in writing; yet all have not their original in writing; for some obtained their force by *immemorial* usage or custom. *Hale.*

By a long *immemorial* practice, and prescription of an aged thorough-paced hypocrisy, they come to believe that for a reality, which, at first practice of it, hey themselves knew to be a cheat. *South.*

IMMENSE', *adj.* } Fr. *immense*; Lat.
IMMEN'SITY, *n. s.* } *immensus*; Greek α-
IMMENSURABIL'ITY, *n. s.* } μετρια. That which
IMMEN'SURABLE, *adj.* } cannot be limited, bounded, or measured; infinite: terms applicable to buildings and to the universe; applicable also to the attributes of Deity, which are beyond the grasp of finite understandings.

O goodness infinite! goodness *immense!*
That all this good of evil shall produce! *Milton.*

By the power we find in ourselves of repeating, as often as we will, any idea of space, we get the idea of *immensity*. *Locke.*

He that will consider the *immensity* of this fabrick, and the great variety that is to be found in this inconsiderable part of it which he has to do with, may think that in other mansions of it there may be other and different intelligent beings. *Locke.*

As infinite duration hath no relation unto motion and time, so infinite or *immense* essence hath no relation unto body; but is a thing distinct from all corporeal magnitude, which we mean when we speak of *immensity*, and of God as of an *immense* being. *Grew.*

All these illustrious worlds,
And millions which the glass can ne'er descry,
Lost in the wilds of vast *immensity*,
Are suns, are centers. *Blackmore's Creation.*

We shall find that the void space of our system is *immensely* bigger than all its corporeal mass. *Bentley.*

How our hearts tremble at thy love *immense!*
In love *immense*, inviolably just. *Young.*

Lo from the dread *immensity* of space
Returning, with accelerated course,
The rushing comet to the sun descends.
Id. Night Thoughts.

Meantime refracted from yon eastern cloud,
Bestriding earth, the grand ethereal bow
Shoots out *immense*. *Thomson.*

IMMERGE,' *v. a.* } Lat. *immergo*. To
IMMERSE', *v. a.* & *adj.* } put under water; to
IMMER'SION, *n. s.* } sink or cover deep; to keep in a state of intellectual depression: immerse, buried; covered (not much in use): immersion, the act of putting a body below the surface of any fluid; the state of being overwhelmed or lost.

After long enquiry of things *immerse* in matter, I interpose some object which is immateriate or less materiate; such as this of sounds, that the intellect may become not partial. *Bacon.*

He stood
More than a mile *immersed* within the wood;
At once the wind was laid. *Dryden.*

It is a melancholy reflection that our country, which, in times of popery, was called the nation of saints, should now have less appearance of religion in it than any other neighbouring state or kingdom; whether they be such as continue still *immersed* in the errors of the church of Rome, or such as are recovered out of them. *Addison's Freeholder.*

Achilles's mother is said to have dipped him, when he was a child, in the river Styx, which made him invulnerable all over, excepting that part which the mother held in her hand during this *immersion*. *Id. Guardian.*

They observed that they were *immersed* in their rocks, quarries, and mines, in the same manner as they are at this day found in all known parts of the world. *Woodward.*

Many persons, who, through the heat of their lusts and passions, through the contagion of ill example, or too deep an *immersion* in the affairs of life, swerve from the rules of their holy faith; yet would, upon extraordinary warnings, be brought to comply with them. *Atterbury.*

We are prone to engage ourselves with the business, the pleasures, and the amusements of this world: we give ourselves up too greedily to the pursuit, and *immerse* ourselves too deeply in the enjoyments of them. *Id.*

It is impossible to have a lively hope in another life, and yet be deeply *immersed* in the enjoyments of this. *Id.*

One half sate up, though numbed with the *immersion*,
While t'other half were laid down in their place,
At watch and watch. *Byron. Don Juan.*

IMMER'IT, *n. s.* Lat. *immeritum*. Want of worth; want of desert. This is a better word than demerit, which is now used in its stead.

When I receive your lines, and find their expressions of a passion, reason and my own *immerit* tell me it must not be for me. *Suckling.*

IMMETHOD'ICAL, *adj.* } In and metho-
IMMETHOD'ICALLY, *adv.* } dical. Confused; without regularity or method.

M. Bayle compares the answering of an *immethodical* author to the hunting of a duck: when you have him full in your sight, he gives you the slip, and becomes invisible. *Addison.*

IM'MINENCE, *n. s.* } Fr. *imminent*; Lat.
IM'MINENT, *adj.* } *imminens*. Nearness of any ill or danger; threatening; impending, always used in an ill sense.

What dangers at any time are *imminent*, what evils hang over our heads, God doth know, and not we. *Hooker.*

I do not speak of flight, of fear, of death;
But dare all *imminence*, that gods and men
Address their dangers in. *Shakspeare.*

Three times to-day
You have defended me from *imminent* death. *Id.*

These she applies for warnings and portents
Of evils *imminent*; and on her knee
Hath begged, that I will stay at home to-day. *Id.*

To them preached
Conversion and repentance, as to souls
In prison, under judgments *imminent*.
Milton.

Men could not sail without *imminent* danger and inconveniences. *Pope.*

IM'MINGLE, *v. a.* } From in and *mingo*,
IMMISCIBIL'ITY, *n. s.* } or *misceo*. To mingle; to
IMMIS'CIBLE, *v. a.* } mix; unite: immiscible, that does not admit of being mingled.

Some of us, like thee, through stormy life
Toiled, tempest-beaten, ere we could attain
This holy calm, this harmony of mind,
Where purity and peace *immingle* charms.
Thomson.

IMMINU'TION, *n. s.* From Lat. *imminuo*. Diminution; decrease.

These revolutions are as exactly uniform as the earth's are, which could not be, were there any place for chance, and did not a Providence continually oversee and secure them from all alteration or *imminution*. *Ray on the Creation.*

IMMIS'SION, *n. s.* } Lat. *immissio, immitto*.
IMMIT', *v. n.* } The act of sending in; contrary to emission: to send in.

To IMMIX', *v. a.* In and mix. To mingle.

Samson, with these *immixt*, inevitably
Pulled down the same destruction on himself.
Milton.

IMMIX'ABLE, *adj.* In and mix. Impossible to be mingled.

Fill a glass sphere with such liquors as may be clear, of the same color, and *immixable*. *Wilkins.*

IMMOBIL'ITY, *n. s.* Fr. *immobilité*; from Lat. *immobilis*. Unmoveableness; want of motion; resistance to motion.

The course of fluids through the vascular solids must in time harden the fibres, and abolish many of the canals; from whence dryness, weakness, *immobility*, and debility of the vital force. *Arbuthnot on Aliments.*

IMMOD'ERATE, *anj.* } Fr. *immoderé*;
IMMOD'ERATELY, *adv.* } Lat. *immoderatus*.
IMMODERA'TION, *n. s.* } From *in* privative, and *modus*: excessive; beyond a due measure; in an excessive degree: want of moderation; excess.

Immoderately she weeps for Tybalt's death. *Shakspeare.*

One means, very effectual for the preservation of health, is a quiet and cheerful mind, not afflicted with violent passions, or distracted with *immoderate* cares. *Ray on the Creation.*

The heat weakened more and more the arch of the earth, sucking out the moisture that was the cement of its parts, drying it *immoderately*, and chapping it. *Burnet's Theory.*

IMMOD'EST, *adj.* } Fr. *immodeste;* Span.
IMMOD'ESTY, *n. s.* } *immodesta;* Lat. *immodestus; sine modestiâ.* A term peculiarly applicable to the conduct of females; less in degree than impudent, but implying more culpability than indecent; a want of delicacy, chastity, or purity; and applicable, not merely to the disposition, but to the externals, as words, looks, attire, &c.: it has also been used to signify unreasonable, exorbitant, arrogant, but these terms belong to immoderate.

'Tis needful that the most *immodest* word
Be looked upon and learned; which once attained,
Comes to no further use
Than to be known and hated. *Shakspeare.*

She railed at herself, that she should be so *immodest* to write to one that she knew would flout her. *Id.*

Immodest deeds you hinder to be wrought;
But we proscribe the least *immodest* thought. *Dryden.*

Immodest words admit of no defence,
For want of decency is want of sense. *Roscommon.*

It was a piece of *immodesty*. *Pope.*

IM'MOLATE, *v. a.* } Fr. *immoler;* Lat.
IMMOLA'TION, *n. s.* } *immolo.* To sacrifice; to kill and offer in sacrifice: immolation implies either the act or the offering.

In the picture of the *immolation* of Isaac, or Abraham sacrificing his son, Isaac is described as a little boy. *Browne.*

These courtiers of applause being oftentimes reduced to live in want, these costly trifles so engrossing all that they can spare, that they frequently enough are forced to *immolate* their own desires to their vanity. *Boyle.*

Now *immolate* the tongues, and mix the wine,
Sacred to Neptune, and the powers divine. *Pope.*

We make more barbarous *immolations* than the most savage heathens. *Decay of Piety.*

IMMO'MENT, *adj.* In and moment. Trifling; of no importance or value. A barbarous word.

I some lady-trifles have reserved,
Immoment toys, things of such dignity
As we greet modern friends withal. *Shakspeare.*

IMMOR'AL, *adj.* } From *in* privative, and
IMMORAL'ITY, *n. s.* } *mos.* Wanting regard to the laws of natural religion; practically vicious; dishonest; wanting virtue: acts opposed to the laws of God, as theft, adultery, false witness, &c.

Such men are put into the commission of the peace who encourage the grossest *immoralities*, to whom all the bawds of the ward pay contribution. *Swift.*

There's Epicurus
And Aristippus, a material crew!
Who to *immoral* courses would allure us;
By theories quite practicable too. *Byron. Don Juan.*

IMMORTAL, *adj.* } Fr. *immortalité;*
IMMORTAL'ITY, *n. s.* } Lat. *immortalis.*
IMMOR'TALLY, *adv.* } From *in* and *mor-*
IMMOR'TALISE *v. a.* & *n. n.* } *talis.* Exempt from death; being never to die; perpetual: immortalise, to make immortal; to exempt from oblivion; to become immortal, in this sense peculiar to Pope: immortally, for ever; without death, and without evil.

But that *immortall* light, which there doth shine,
Is many thousand times more bright, more cleare
More excellent, more glorious, more divine;
Through which to God all mortall actions here
And even the thoughts of men, doe plaine appeare;
For from the eternal truth it doth proceed,
Thro' heavenly vertue which her beames doe breed.
Spenser. Hymnes.

Though virtue vitall dyd vanishe away,
Hir virtues inward remayn *immortal*,
Eterne, and exempte from deathe and dekay,
As fountaynes flowying with course contynuall.
G. Cavendish's Metrical Visions.

Drive them from Orleans, and be *immortalized*. *Shakspeare.*

Her body sleeps in Capulet's monument,
And her *immortal* part with angels lives. *Id.*

Give me my robe, put on my crown; I have
Immortal longings in me. *Id.*

There is your crown,
And he that wears the crown *immortally*,
Long guard it yours! *Id. Henry IV.*

For mortal things desire their like to breed,
That so they may their kind *immortalize*. *Davies.*

Only some twinkling stars remain beheld:
Then mortal made; yet, as one fainting dies,
Two other in its place succeeding rise;
And drooping stock with branches fresh *immortalise*.
Fletcher's Purple Island.

Quaff *immortality*, and joy. *Milton.*

Nine times the space that measures day and night
To mortal men, he with his horrid crew
Lay vanquished, rolling in the fiery gulf,
Confounded though *immortal*. *Id. Paradise Lost.*

The Paphian queen,
With gored hand, and veil so rudely torn,
Like terror did among the *immortals* breed,
Taught by her wound that goddesses may bleed.
Waller.

What pity 'tis that he cannot wallow *immortally* in his sensual pleasures! *Bentley.*

Fix the year precise,
When British bards begin t' *immortalize*. *Pope.*

When we know cogitation is the prime attribute of a spirit, we infer its immateriality, and thence its *immortality*. *Watts.*

But not the pomp that royalty displays,
Nor all the imperial pride of lofty Troy,
Nor virtue's triumph of *immortal* praise,
Could rouse the languor of the lingering boy.
Beattie.

But here, here in this goblet is his title
To *immortality*,—the *immortal* grape
From which he [Bacchus] first expressed the soul, and gave
To gladden that of man, as some atonement
For the victorious mischiefs he had done.
Byron. Sardanapalus.

IMMOVE'ABLE, *adj.* } Lat. *in* and *moveo*
IMMOVE'ABLY, *adv.* } Not ableto be forced from its place; not liable to be carried away; real in law; unshaken; unaffected.

His name was Talus, made of iron mould,
Immoveable, resistlesse, without end.
Spenser. Faerie Queene.

From beds of raging fire, to starve in ice
Their soft ethereal warmth, and there to pine

Immoveable, infixed, and frozen round,
Periods of time, thence hurried back to fire.
Milton. Paradise Lost.

We shall not question his removing the earth, when he finds an *immoveable* base to place his engine upon.
Browne.

How much happier is he, who, centrating on himself, remains *immovable*, and smiles at the madness of the dance about him! *Dryden.*

How revered is the face of this tall pile,
Whose ancient pillars rear their marble heads
To bear aloft its arch'd and pond'rous roof,
By its own weight made stedfast and immoveable.
Congreve.

Immovably firm to their duty, when they could have no prospect of reward. *Atterbury.*

IMMU'NITY, *n. s.* Fr. *immunité*; Lat. *immunitas*; Span. *immunidad*; Ital. *immunita*, *vacuus* à *munere*. Freedom; exemption; privilege; discharge from obligation.

Simon sent to Demetrius, to the end he should give the land an *immunity*, because all that Tryphon did was to spoil. 1 *Mac.* xiii. 34.

Of things harmless whatsoever there is, which the whole church doth observe, to argue for any man's *immunity* from observing the same, it were a point of most insolent madness. *Hooker.*

Common apprehensions entertain the antidotal condition of Ireland, conceiving only in that land an *immunity* from venamous creatures. *Browne.*

Granting great *immunities* to the commons, they prevailed so far as to cause Palladius to be proclaimed successor. *Sidney.*

IMMURE', *v. a.* & *n. s.* Old Fr. *emurer*; Lat. *in* and *muris*. To enclose with walls; to confine; to shut up or imprison. Immure, a wall; an enclosure.

Lysimachus *immured* it with a wall. *Sandys.*

Pity, you ancient stones, these tender babes,
Whom envy hath *immured* within your walls!
Shakspeare.

One of these three contains her heavenly picture;
And shall I think in silver she's *immured*! *Id.*

Their vow is made
To ransack Troy; within whose strong *immures*
The ravished Helen, Menelaus' queen,
With wanton Paris sleeps. *Id.*

At the first descent on shore he was not *immured* with a wooden vessel, but he did countenance the landing in his long-boat. *Wotton.*

IMMU'SICAL, *adj.* In and musical. Inharmonious: wanting proportion of sound.

All sounds are either musical, which are ever equal, or *immusical*, which are ever unequal, as the voice in speaking, and whisperings. *Bacon.*

We consider the *immusical* note of all swans we ever beheld or heard of. *Browne.*

IMMUTABILITY, *n. s.* } Fr. *immuable*, *immutabilité*; Lat. *immutabile*.
IMMU'TABLE, *adj.* }
IMMU'TABLY, *adv.* } Exemption from change; invariableness: unalterable; ever the same. Immutability can only be predicated of the Deity, and is one of his essential attributes.

By two *immutable* things, in which it was impossible for God to lye, we have a strong consolation.
Heb. vi.

The *immutability* of God they strive unto, by working after one and the same manner. *Hooker.*

God made thee perfect, not *immutable*. *Milton.*

So without least impulse or shadow of fate,
Or aught by me *immutably* foreseen,
They trespass, author to themselves in all
Both what they see and what they chuse.
Id. Paradise Lost.

His love is like his essence, *immutably* eternal.
Boyle.

Thy threat'nings, Lord, as thine, thou mayst revoke;
But if *immutable* and fixed they stand,
Continue still thyself to give the stroke,
And let not foreign foes oppress thy land. *Dryden.*

IMOLA, a populous district of Italy, in the department of Reno. The number of its citizens was, in 1801, reckoned 116,728.

IMOLA, a city of Italy, in the province of Romagna, capital of the above district, anciently Forum Cornelii. By a former division of the Italian republic, it was included in the department of the Amone. It is seated on an island formed by the Santerno; is strongly fortified with walls, turrets, and ditches; and has an ancient castle, with a cathedral and twelve churches. On the 11th of February, 1797, a rebellion was quelled in this town, and the papal army defeated by the French, under Buonaparte, assisted by the legion of Lombardy. The town is a bishop's see, and its streets are neat, containing several buildings worth the attention of the traveller. Imola has produced several men of note, the most distinguished of whom were Giovanni da Imola, professor of jurisprudence at Bologna, and Giovanni Tartagno, his son. Its academy was once of considerable repute, particularly about 1566; and the poetry of Zappi, one of its members, retains a high character. Population 8400. Eighteen miles south-east of Bologna, and forty N. N. E. of Florence.

IMP, *n. s.* & *v. a.* Welsh, *imp*, a shoot, *impio*, to engraft. A son; the offspring; a progeny; a subaltern devil. Imp, to lengthen or enlarge with any thing adscititious: it was originally a term used by falconers, who repair a hawk's wing with adscititious feathers.

Of feeble trees ther comen wretched *impes*.
Chaucer. Prologue to the Monkes Tale.

Such we deny not to be the *imps* and limbs of Satan.
Hooker.

If then we shall shake off our slavish yoke,
Imp out our drooping country's broken wings.
Shakspeare.

A lad of life, an *imp* of fame. *Id. Henry V.*

Help, ye tart satyrists to *imp* my rage
With all the scorpions that should whip this age.
Cleaveland.

New rebellions raise
Their hydra heads, and the false north displays
Her broken league to *imp* her serpent's wings.
Milton.

With cord and canvass from rich Hamburgh sent,
His navy's molted wings he *imps* once more.
Dryden.

New creatures rise,
A moving mass at first and short of thighs;
'Till shooting out with legs, and *imped* with wings,
The grubs proceed to bees with pointed stings. *Id.*

As soon as you can hear his knell,
This god on earth turns d—l in hell;
And, lo! his ministers of state,
Transformed to *imps*, his levee wait. *Swift*

To IMPACT', *v. a.* Lat. *impactus*. To drive close or hard.

They are angular; but of what particular figure is not easy to determine, because of their being *impacted* so thick and confusedly together.
Woodward on Fossils.

To IMPAINT', *v. a.* In and paint. To paint; to decorate with colors. Not in use.

Never did insurrection want
Such water-colors to *impaint* his cause.
Shakspeare.

IMPAIR' *v. a., v. n.* & *n. s.* } Fr. *empirer;*
IMPAIR'MENT, *n. s.* } Lat. *pejor.* To make worse; to diminish; to injure; lessen in quantity, value, or excellence: to be lessened or worn out. Impair, diminution; decrease; not used. Impairment, injury.

Flesh may *impair*, quoth he, but reason can repair.
Faerie Queene.

To change any such law, must needs, with the common sort, *impair* and weaken the force of those grounds whereby all laws are made effectual.
Hooker.

Objects divine
Must needs *impair* and weary human sense.
Milton.

That soon refreshed him wearied, and repaired
What hunger, if aught hunger had *impaired*,
Or thirst. *Milton's Paradise Regained.*

A loadstone, kept in undue position, that is, not lying on the meridian, or with its poles inverted, receives in longer time *impair* in activity and exchange of faces, and is more powerfully preserved by site than dust of steel. *Browne.*

His posterity, at this distance, and after so perpetual *impairment*, cannot but condemn the poverty of Adam's conception, that thought to obscure himself from his Creator in the shade of the garden.
Browne's Vulgar Errours.

Nor was the work *impaired* by storms alone,
But felt the approaches of too warm a sun. *Pope.*

In years he seemed, but not *impaired* by years.
Id.

To IMPALE, in heraldry, is to conjoin two coats of arms pale-wise. Women impale their coats of arms with those of their husbands. See HERALDRY, Plate III.

IMPAL'PABLE, *adj.* Fr. *impalpable.* In and palpable. Not to be perceived by touch.

If beaten into an *impalpable* powder, when poured out, it will emulate a liquor, by reason that the smallness of the parts do make them easy to be put into motion. *Boyle.*

IMPAR'ADISE, *v. a.* Italian, *imparadisare.* To put in a place or state resembling paradise in felicity.

All my souls be
Imparadised in you, in whom alone
I understand, and grow, and see. *Donne.*

Thus these two
Imparadised in one another's arms,
The happier Eden, shall enjoy their fill
Of bliss on bliss. *Milton's Paradise Lost.*

This *imparadised* neighbourhood made Zelmane's soul cleave unto her, both through the ivory case of her body, and the apparel which did overcloud it.
Sidney.

IMPAR'ITY, *n. s.* Lat *impar.* Inequality; disproportion; oddness; indivisibility into equal parts.

Some bodies are hard, some soft: the hardness is caused chiefly by the jejuneness of the spirits, and their *imparity* with the tangible parts. *Bacon.*

What verity is there in that numeral conceit in the lateral division of man, by even and odd? and so by parity or *imparity* of letters in men's names, to determine misfortunes on either side of their bodies?
Browne's Vulgar Errours.

IMPARK', *v. a.* In and park. To enclose with, or for a park; to sever from a common.

IMPART', *v. a.* } Latin *impertire.* To
IMPART'IBLE, *adj.* } grant; to give; to make known by words or tokens; to communicate; to grant as to a partaker. Impartible, communicable: this word is elegant, although used by few writers.

But, when sweets words their ioyning sweet disparted
To th'eare a dainty musique they *imparted*.
Spenser. Britain's Ida.

Gentle lady,
When first I did *impart* my love to you,
I freely told you all the wealth I had
Ran in my veins.
Shakspeare. Merchant of Venice.

As in confession the revealing is for the ease of a man's heart, so secret men come to the knowledge of many things, while men rather discharge than *impart* their minds. *Bacon.*

To give just form to every regiment;
Imparting to each part due strength and 'stablishment. *Fletcher's Purple Island.*

The same body may be conceived to be more or less *impartible* than it is active or heavy. *Digby.*

Thou to me thy thoughts
Wast wont, I mine to thee was wont to *impart*.
Milton.

High state and honours to others *impart*,
But give me your heart. *Dryden.*

Thy form benign, O goddess, wear,
Thy milder influence *impart*;
Thy philosophic train be there
To soften not to wound my heart.
Gray. Ode to Adversity.

IMPARTIAL, *adj.* } Fr. *impartial;* Lat.
IMPARTIAL'ITY, *n. s.* } *in* and *partes.* Equit-
IMPAR'TIALLY, *adv.* } able; free from regard to party; indifferent; disinterested; equal in the distribution of justice; just: impartially, with unbiassed judgment; honestly; justly; without favor or preference of one to another.

Such pardon therefore as I give my folly,
Take to thy wicked deed; which when thou seest
Impartial, self severe, inexorable,
Thou wilt renounce thy seeking.
Milton. Samson Agonistes.

Success I hope, and fate I cannot fear:
Alive or dead, I shall deserve a name;
Jove is *impartial*, and to both the same.
Dryden

Since the Scripture promises eternal happiness and pardon of sin, upon the sole condition of faith and sincere obedience, it is evident, that he only can plead a title to such a pardon, whose conscience *impartially* tells him that he has performed the required condition. *South.*

Nay, I have listened
Impartially to thee—why not to them.
Byron. Sardanapalus.

IMPAS'SABLE, *adj.* In and passable. Not to be passed; not admitting passage; impervious.

There are in America many high and *impassable* mountains, which are very rich. *Raleigh.*

Over this gulf
Impassable, impervious; let us try,
To found a path from hell to that new world.
Milton.

IMPASS'IBLE, *adj.* IMPASSIBIL'ITY, *n. s.* IMPASS'IBLENESS, *n. s.* IMPAS'SIVE, *adj.* IMPA'TIENCE, *n. s.* IMPA'TIENT, *adj.* IMPA'TIENTLY, *adv.* Fr. *impassibilite*; Lat. *in* and *patior*, *impatientia*. Exemption from suffering: insusceptible of injury from external causes: impassive has the same meaning: impatience, rage and fretfulness under suffering; vehemence of temper; eagerness: impatient, vehemently agitated by some painful passion; hot; hasty; ardently desirous.

Impatient is he that wol not be taught.
Chaucer. The Persones Tale.

All the power of his wits has given way to his *impatience*. *Shakspeare. King Lear.*

To be *impatient* at the death of a person, concerning whom it was certain he must die, is to mourn because thy friend was not born an angel.
Taylor's Rule of Holy Living.

He considered one thing so *impatiently*, that he would not admit any thing else to be worth consideration. *Clarendon.*

Yet hard for gods, and too unequal work we find,
Against unequal arms to fight in pain,
Against unpained, *impassive*, from which evil
Ruin must needs ensue. *Milton's Paradise Lost.*

The experiment I resolved to make was upon thought, and not rashness or *impatience*. *Temple.*

The tortured savage turns around,
And flings about his foam, *impatient* of the wound.
Dryden.

She told him what those empty phantoms were,
Forms without bodies, and *impassive* air.
Id. Æneid.

Secure of death, I should contemn thy dart,
Though naked, and *impassible* depart. *Dryden.*

The headstrong beast
Rushes along *impatient* of the course;
Nor hears the rider's call; nor feels the rein.
Rowe's Royal Convert.

The *impatient* man will not give himself time to be informed of the matter that lies before him.
Addison's Spectator.

If the upper soul check what is consented to by the will, in compliance with the flesh, and can then hope that, after a few years of sensuality, that rebellious servant should be eternally cast off, drop into a perpetual *impassible* nothing, take a long progress into a land where all things are forgotten, this would be some colour. *Hammond.*

Fame, *impatient* of extremes, decays
Not more by envy than excess of praise. *Pope.*

Pale suns, unfelt at distance, roll away;
And on the *impassive* ice the lightnings play. *Id.*

How shameless a partiality is it, thus to reserve all the sensualities of this world, and yet cry out for the *impassibleness* of the next? *Decay of Piety.*

IMPASTED, *adj.* In and paste. Concreted as into paste.

Horribly trickt
With blood of fathers, mothers, daughters, sons,
Baked and *impasted* with the parching fires.
Shakspeare.

IMPATIENS, touch-me-not, a genus of the monogamia order, syngenesia class of plants; natural order twenty-fourth, corydales: CAL. diphyllous: COR. pentapetalous and irregular, with a hooded nectarium: CAPS. superior and quinquevalved.

I. balsamina, or balsam, is a native of India. It has a fibrous root, an upright, thick, succulent stalk, branching all around a foot and a half or two feet high; with long, spear-shaped, sawed leaves, the upper ones alternate; and from the joints of the stalk and branches clusters of short foot-stalks, each sustaining one large irregular flower, of different colors in the varieties; flowering from June or July till September. This species requires artificial warmth. The seeds will indeed grow in the full ground, but rarely before May; and more freely then, if covered with a hand-glass, &c. But the plants raised by artificial heat will flower five or six weeks sooner than those raised in the natural ground. The seeds ought therefore always to be sowed on a hot-bed in March or April, and the plants continued therein till June; and, if the frames be deep, they will then be drawn up to the length of two or three feet; after which they may be planted in pots, which must likewise be continued in the hot-bed till the plants have taken fresh root.

I. noli-me-tangere, or common yellow balsamine, is a native of Britain, but is cultivated in many gardens for curiosity. It has a fibrous root, an upright jointed, succulent, stalk, about eighteen inches high, with alternate oval leaves; and, from the axillas of the stalks, long, slender, branching foot-stalks, each sustaining many yellow flowers; succeeded by taper capsules, that burst open, and dart forth their seeds with great velocity, whence its name. It is very hardy, and will grow freely from the seeds in any common border.

IMPAT'RONISE, *v. a.* Fr. *impatroniser*, *in* and patronise. To gain to one's self the power of any seigniory. This word is not usual.

The ambition of the French king was to *impatronize* himself of the dutchy. *Bacon's Henry VII.*

IMPAWN', *v. a.* In and pawn. To impignorate; to pawn; to give as a pledge; to pledge.

Go to the king, and let there be *impawned*
Some surety for a safe return again.
Shakspeare. Henry IV.

Many now in health
Shall drop their blood, in approbation
Of what your reverence shall invite us to;
Therefore take heed how you *impawn* our person,
How you awake our sleeping sword of war.
Shakspeare.

IMPEACH', *v. a.* & *n. s.* IMPEACH'ABLE, *adj.* IMPEACH'ER, *n. s.* IMPEACH'MENT, *n. s.* IMPEDE', *v. a.* IMPED'IMENT, *n. s.* Fr. *empecher*; Lat. *impedio*, *impeto*. To hinder; to accuse by public authority: impeach, hindrance; impediment: impeachable, accusable; chargeable with criminality: impeachment, a public accusation; an obstruction or hindrance, but this latter sense is obsolete: impediment is used for opposition, obstruction, or hindrance: impede, to hinder.

They bring one that was deaf, and had an *impediment* in his speech. *Mark* vii. 32.

Each door he opened without any breach;
There was no bar to stop, nor foe him to *impeach*.
Spenser.

What *impediments* there are to hinder it, and which were the speediest way to remove them.
Hooker.

But for my tears,
The moist *impediments* unto my speech,
I had forestalled this dear and deep rebuke.
Shakspeare.

The king, provoked to it by the queen,
Devised *impeachments* to imprison him.
Id. Richard III.

Why, what an intricate *impeach* is this!
If here you housed him, here he would have been;
If he were mad, he would not plead so coldly.
Shakspeare.

And soon
In order, quit of all *impediment*;
Instant without disturb they took alarm
And onward move embattled.
Milton. Paradise Lost.

The minds of beasts grudge not at their bodies comfort, nor are their senses letted from enjoying their objects: we have the *impediments* of honour, and the torments of conscience. *Sidney.*

Had God omitted by positive laws to give religion to the world, the wisdom of his providence had been *impeachable*. *Grew.*

They were both *impeached* by a house of commons.
Addison.

Great dissentions were kindled between the nobles and commons on account of Coriolanus, whom the latter had *impeached*. *Swift.*

The consequences of Coriolanus's *impeachment* had like to have been fatal to their state. *Id.*

All the forces are mustered to *impede* its passage.
Decay of Piety.

Suspicion is a heavy armour, and
With its own weight *impedes* more than it protects.
Byron.

IMPEARL,′ *v. a.* In and pearl. To form in resemblance of pearls; to decorate as with pearls.

Innumerable as the stars of night,
Or stars of morning, dewdrops, which the sun
Impearls on every leaf, and every flower. *Milton.*

IMPEC'CABLE, *adj.* } Fr. *impeccable, im-*
IMPECCABIL'ITY, *n. s.* } *peccabilité*; Lat. *in* and *pecco*. Exempt from the possibility of sinning: strictly applicable to the deity alone.

That man pretends he never commits any act prohibited by the word of God, and then that were a rare charm to render him *impeccable*, or that is the means of consecrating every sin of his.
Hammond on Fundamentals.

Infallibility and *impeccability* are two of his attributes. *Pope.*

IMPEL,′ *v. a.* } Lat. *impello*. To drive
IMPEL'LENT, *n. s.* } on towards a point; to urge forwards; to press on: impellent, an impulsive power; a power that drives forward.

How such a variety of motions should be regularly managed, in such a wilderness of passages, by mere blind *impellents* and material conveyances, I have not the least conjecture. *Glanville.*

So Mirrah's mind, *impelled* on either side,
Takes every bent, but cannot long abide. *Dryden.*

The surge *impelled* me on a craggy coast. *Pope.*

Propitious gales
Attend thy voyage, and *impel* thy sails.
Id. Odyssey.

Such the perfect hand
That poised *impels* and rules the steady whole.
Thomson.

And was of yor
Patron or tyrant as the changing mood
Of petty power *impelled*, of those who wore
The wreath which Dante's brow alone had worn before. *Byron. Childe Harold.*

IMPEND′ *v. n.* } Latin *impendeo*. To
IMPEN'DENT, *adj.* } hang over; to be at hand;
IMPEN'DENCE, *n. s.* } to press nearly; a state
IMPEN'DING, *part.* } of near approach: in its figurative meaning, generally used in an ill sense.

Good sometimes is not safe to be attempted, by reason of the *impendence* of a greater sensible evil.
Hale.

If the evil feared or *impendent* be a greater sensible evil than the good, it over-rules the appetite to aversation. *Id.*

Dreadful in arms, on Landen's glorious plain
Place Ormond's duke: *impendent* in the air
Let this keen sabre, comet-like appear. *Prior.*

No story I unfold of publick woes,
Nor bear advices of *impending* foes.
Pope's Odyssey.

Destruction sure over all your heads *impends*;
Ulysses comes, and death his steps attends. *Pope.*

The forest deepens round,
And more gigantic still the *impending* trees
Stretch their extravagant arms athwart the gloom.
Armstrong.

Nought
Could urge the prince thy kinsman to require
Thus much from thee, but some *impending* danger.
Byron. Sardanapalus.

IMPENETRABIL'ITY, *n. s.* } Fr. *impe-*
IMPEN'ETRABLE, *adj.* } *netrabilite*;
IMPEN'ETRABLY, *adv.* } Lat. *in* and *penetro*. The quality of not being pierceable or entered by external force: impervious; insusceptible of intellectual impression; not to be reformed or moved; with hardness to a degree incapable of impression; not to be wrought upon by entreaty.

It is the most *impenetrable* cur
That ever kept with men.
—Let him alone;
I'll follow him no more with bootless prayers.
Shakspeare.

Some will never believe a proposition in divinity, if any thing can be said against it: they will be credulous in all affairs of life, but *impenetrable* by a sermon of the gospel. *Taylor.*

Three of adamantine rock,
Impenetrable, impaled with circling fire
Yet unconsumed. *Milton's Paradise Lost.*

Deep into some thick covert would I run,
Impenetrable to the stars or sun. *Dryden.*

All bodies, so far as experience reaches, are either hard, or may be hardened; and we have no other evidence of universal *impenetrability*, besides a large experience, without an experimental exception.
Newton's Opticks.

Blunt the sense, and fit it for a skull
Of solid proof, *impenetrably* dull. *Pope.*

O might I here
In solitude like savage, in some glade
Obscured, where highest woods *impenetrable*
To star or sun-light, spread their umbrage broad
And brown as evening. *Byron.*

IMPEN'ITENCY, *n. s.* IMPEN'ITENCE, *n. s.* IMPEN'ITENT, *adj.* IMPEN'ITENTLY, *adv.* Fr. *impenitence*; Latin *in* privative and *pœnitentia*. Obduracy; want of remorse for crimes; disregard of God's threatenings against sin: negligent of the duty of repentance; without sorrow for evil doings.

Our Lord in anger hath granted some *impenitent* men's request; as, on the other side, the apostle's suit he hath of favour and mercy not granted. *Hooker.*

They died
Impenitent, and left a race behind
Like to themselves. *Milton.*

Where one man ever comes to repent, a thousand end their days in final *impenitence*. *South.*

He will advance from one degree of wickedness and *impenitence* to another, 'till at last he becomes hardened without remorse. *Rogers.*

When the reward of penitents, and punishment of *impenitents*, is once assented to as true, 'tis impossible but the mind of man should wish for the one, and have dislike to the other. *Hammond.*

What crowds of these, *impenitently* bold,
In sounds and jingling syllables grown old,
Still run on poets! *Pope.*

IMPEN'NOUS, *adj.* Latin *in* and *penna*. Wanting wings. This word is convenient, but, I think, not used.

It is generally received an earwigg hath no wings, and is reckoned amongst *impennous* insects; but he that shall, with a needle, put aside the short and sheathy cases on their back, may draw forth two wings, larger than in many flies, *Browne.*

IM'PERATE, *adj.* IMPER'ATIVE, *adj.* IMPER'ATIVELY, *adv.* Fr. *imperatif*; Lat. *imperatus*. Done voluntarily; done by the direction of the mind. Imperative, commanding, expressive of command.

Those natural and involuntary actings are not done by deliberation, yet they are done by the energy of the soul and instrumentality of the spirits, as well as those *imperate* acts, wherein we see the empire of the soul. *Hale.*

The verb is formed in a different manner, to signify the intention of commanding, forbidding, allowing, disallowing, intreating; which likewise, from the principal use of it, is called the *imperative* mood. *Clarke's Latin Grammar.*

The IMPERATIVE is one of the moods of a verb, used when we would command, intreat, or advise. In the Latin and Greek languages this mood has a peculiar termination to distinguish it, doce or doceto, teach; lege or legito, read, &c., and not only so, but the termination varies, according as we address one or more persons, as audi and audite; ακουιτω, ακουιτων, ακουιτωσαν, &c.

IMPERATOR, Latin, i. e. commander, in Roman antiquity, a title of honor conferred on victorious generals by their armies, and afterwards confirmed by the senate. Though originally no more than a military title in the republican armies, yet upon the degeneracy of the Roman republic, and assumption of the supreme power by Cæsar and Augustus, it was used to express the most unlimited despotism, and a rank superior to that of king. Hence the origin of emperor.

IMPERATORIA, masterwort, a genus of the digynia order, and pentandria class of plants: natural order forty-fifth, umbellatæ. The fruit is roundish, compressed in the middle, gibbous, and surrounded with a border; the petals are inflexo-emarginated. There is only one species, viz.

I. ostruthium, a native of the Austrian and Styrian Alps and other mountainous places of Italy. Lightfoot informs us, that he found it in several places on the banks of the Clyde in Scotland; but whether it be indigenous is uncertain. The root is as thick as a man's thumb, running in the ground; it is fleshy, aromatic, and has a strong acrid taste, biting the tongue like pellitory of Spain; the leaves arise immediately from the root; they have long foot-stalks, dividing into three very short ones at the top, each sustaining a trilobate leaf, indented on the border. The foot-stalks are deeply channelled, and, when broken, emit a rank odor. The flower-stalks rise about two feet high, dividing into two or three branches, each terminated by a pretty large umber of white flowers, whose petals are split; these are succeeded by oval compressed seeds, or by parting the roots in autumn. It thrives best in a shady situation. The root has a flower similar to that of angelica, and is esteemed a good sudorific.

IMPERCEP'TIBLE, *adj.* IMPERCEP'TIBLENESS, *n. s.* IMPERCEP'TIBLY, *adv.* Fr. *imperceptible*; Lat. *in* and *percipio*. Not to be discovered or perceived; small; subtle; quick or slow, so as to elude observation: the quality of eluding observation.

Some things are in their nature *imperceptible* by our sense; yea, and the more refined parts of material existence, which, by reason of their subtilty, escape our perception. *Hale.*

Many excellent things there are in nature, which, by reason of their subtilty and *imperceptibleness* to us, are not so much as within any of our faculties to apprehend. *Id.*

In the sudden changes of his subject with almost *imperceptible* connections, the Theban poet is his master. *Dryden.*

Upon reading of a fable we are made to believe we advise ourselves: the moral insinuates itself *imperceptibly*, we are taught by surprize, and become wiser and better unawares. *Addison.*

IMPER'FECT, *adj.* IMPERFEC'TION, *n. s.* IMPER'FECTLY, *adv.* Fr. *imparfait*; Lat. *imperfectus*, from *in* and *perficio*. Not complete; not absolutely finished; frail; not entirely good. Imperfection, is either physical or moral defect; a failure. Imperfectly, not thoroughly finished or rendered complete.

For, certes, Jesu Crist is entirely all good; in him is not *imperfection*; and therefore he forgeveth all parfitly, or elles never a dele. *Chaucer. The Persones Tale.*

Laws, as all other things human, are many times full of *imperfection*; and that which is supposed behoveful unto men, proveth oftentimes most pernicious. *Hooker.*

Something he left *imperfect* in the state,
Which, since his coming forth, is thought of,
Which brought the kingdom so much fear and danger,
That his return was most required. *Shakspeare.*

The middle action, which produceth *imperfect* bodies, is fitly called, by some of the ancients, inquination or inconcoction, which is a kind of putrefaction. *Bacon.*

Opinion is a light, vain, crude, and *imperfect* thing, settled in the imagination; but never arriving at the understanding, there to obtain the tincture of reason. *Ben Jonson.*

A marcor is either *imperfect*, tending to a greater withering, which is curable; or perfect, that is, an entire wasting of the body, excluding all cure. *Harvey on Consumptions.*

His creating hand
Nothing *imperfect* or deficient left
Of all that he created, much less man
Or aught that might his happy state secure,
Secure from outward force. *Milton's Paradise Lost.*

The ancients were *imperfect* in the doctrine of meteors, by their ignorance of gunpowder and fireworks. *Browne.*

The still-born sounds upon the palate hung,
And died *imperfect* on the faltering tongue. *Dryden.*

Imperfections would not be half so much taken notice of, if vanity did not make proclamation of them. *L'Estrange.*

As obscure and *imperfect* ideas often involve our reason, so do dubious words puzzle men. *Locke.*

Should sinking nations summon you away,
Maria's love might justify your stay;
Imperfectly the many vows are paid,
Which for your safety to the gods were made. *Stepney.*

The world is more apt to censure than applaud, and himself fuller of *imperfections* than virtues. *Addison's Spectator.*

That his taste for the true pathetic was *imperfect*, too manifestly appears, from the general tenor of his translations, as well as tragedies. *Beattie.*

Imperfect Tense, in grammar, a tense that denotes some preterite case, or denotes the thing to be at that time present, and not quite finished; as scribebam, I was writing.

IMPER'FORABLE, *adj.* } Lat. *in* and *per-*
Imper'forate, *adj.* } *foro*. Not to be bored or pierced through; without an orifice.

Sometimes children are born *imperforate*; in which case a small puncture, dressed with a tent, effects the cure. *Sharp.*

IMPE'RIAL, *adj.* } Fr. *imperial*; Latin
Impe'rialist, *n s.* } *imperialis*. Royal; marking sovereignty; belonging to an emperor or monarch; commanding.
Impe'rious, *adj.* }
Impe'riously, *adv.* }
Impe'riousness. *n.s.* }

Imperialist, one belonging to an emperor. Imperious, tyrannical; haughty; arrogant; powerful; overbearing. Imperiously, in an insolent or arrogant manner. Imperiousness, the air of command or authority.

If it be your proud will
To show the power of your *imperious* eyes. *Spenser.*

The *imperialists* imputed the cause of so shameful a flight unto the Venetians. *Knolles's History.*

This *imperious* man will work us all
From princes into pages. *Shakspeare. Henry VIII.*

My due from thee is this *imperial* crown,
Which, as immediate from thy place and blood,
Derives itself to me. *Id. Henry IV.*

Who's there, that knocketh so *imperiously*? *Shakspeare.*

The' *imperial* flower his neck with pearl attires;
The lily high, her silver *grogram* rears. *Fletcher's Purple Island.*

Who can abide, that, against their own doctors, six whole books should, by their fatherhoods of Trent, be under pain of a curse *imperiously* obtruded upon God and his church? *Hall.*

On such day
As Heaven's great year brings forth, the' empyreal host
Of angels, by *imperial* summons called,
Innumerable before the' Almighty's throne
Forthwith from all the ends of Heaven appeared,
Under their hierarchs, in order bright. *Milton's Paradise Lost.*

So would he use his *imperiousness*, that we had a delightful fear and awe, which made us loth to lose our hopes. *Sidney.*

He is an *imperious* dictator of the principles of vice, and impatient of all contradiction. *More.*

A man, by a vast and *imperious* mind, and a heart large as the sand upon the sea shore, could command all the knowledge of nature and art. *Tillotson.*

The main body of the marching foe
Against the' *imperial* palace is designed. *Dryden.*

How much I suffered, and how long I strove
Against the' assaults of this *imperious* love! *Id.*

Imperiousness and severity is but an ill way of treating men, who have reason of their own to guide them. *Locke.*

It is not to insult and domineer, to look disdainfully, and revile *imperiously*, that procures an esteem from any one. *South.*

The sage transported at the approaching hour,
Imperiously thrice thundered on the floor! *Garth.*

O death! I stretch my view; what visions rise!
What triumphs! toils *imperial!* arts divine. *Young.*

And beauteous Greece;
And the great queen of earth, *imperial* Rome. *Dyer's Ruins of Rome.*

Italy!
Time, which hath wronged thee with ten thousand rents
Of thine *imperial* garment, shall deny,
And hath denied, to every other sky,
Spirits which soar from ruin. *Byron. Childe Harold.*

What? thus suspected—with the sword slung o'er us
But by a single hair, and that still wavering
To be blown down by his *imperious* breath,
Which spared us—why, I know not. *Id. Sardanapalus.*

Imperial Diet. See Diet.

IMPERIALI (John Baptist), a celebrated physician, of a noble family, born at Vicenza, in 1568. He was professor of philosophy and physic at Padua; and composed several esteemed works in prose and verse, particularly Exercitationes Exoticæ; Venet. 1640; 4to. He died in 1623.

IMPER'ISHABLE, *adj.* Fr. *imperissable*; Lat. *in* and *pereo*. In and perish. Not to be destroyed.

We find this our empyreal form
Incapable of mortal injury,
Imperishable; and, though pierced with wound,
Soon closing, and by native vigour healed. *Milton.*

The high, the mountain majesty of worth
Should be, and shall, survivor of its woe,
And from its immortality look forth

In the sun's face, like yonder Alpine snow,—
Imperishably pure, beyond all things below.
Byron. Childe Harold.

IMPER'SONAL, *adj.* } Fr. *impersonal*; Lat.
IMPER'SONALLY, *adv.* } *impersonalis*. Not varied according to the persons.

Impersonals be declined throughout all moods and tenses: a verb *impersonal* hath no nominative case before it. *Accidence.*

IMPERSONAL VERBS, in Latin grammar, are verbs to which the nominative of any certain person cannot be prefixed; or verbs destitute of the two first and principal persons, as decet, oportet, &c. The impersonal verbs of the active voice end in *t*, and those of the passive in *tur*; they are conjugated through the third person singular of almost all the tenses and moods: they want the imperative, instead of which the present of the subjunctive is used; as pæniteat, pugnetur, &c.

IMPERSUA'SIBLE, *adj.* Lat. *in* and *persuasibilis*. Not to be moved by persuasion.

Every pious person ought to be a Noah, a preacher of righteousness; and if it be his fortune to have as *impersuasible* an auditory, if he cannot avert the deluge, it will yet deliver his own soul, if he cannot benefit other men's. *Decay of Piety.*

IMPERTINENCE, *n. s.* } Fr. *impertinence*;
IMPER'TINENCY, *n. s.* } from Lat. *in* and
IMPER'TINENT, *adj.* & *n. s.* } *pertinens*. That
IMPER'TINENTLY. } which belongs not to the present, or has no present weight; trifling; importunate; meddling: impertinence, folly; intrusion: impertinent, a trifler, or intruder: impertinently, troublesomely; officiously; intrusively.

The law of angels we cannot judge altogether *impertinent* unto the affairs of the church of God.
Hooker.

O, matter and *impertinency* mixt,
Reason and madness!
Shakspeare. King Lear.

Some, though they lead a single life, yet their thoughts do end with themselves, and account future times *impertinences*. *Bacon.*

It will be said I handle an art no way suitable to my employments or fortune, and so stand charged with intrusion and *impertinency*.
Wotton's Architecture.

I have had joy given me as preposterously, and as *impertinently*, as they give it to men who marry where they do not love. *Suckling.*

The contemplation of things that are *impertinent* to us, and do not concern us, are but a more specious idleness. *Tillotson.*

Governours would have enough to do to trouble their heads with the politicks of every meddling officious *impertinent*. *L'Estrange.*

I envy your felicity, delivered from the gilded *impertinences* of life, to enjoy the moments of a solid contentment. *Evelyn.*

Why will any man be so *impertinently* officious as to tell me all this is only fancy? If it is a dream, let me enjoy it. *Addison.*

Nothing is more easy than to represent as *impertinencies* any parts of learning, that have no immediate relation to the happiness or convenience of mankind.
Id.

There are many subtle *impertinencies* learnt in the schools, and many painful trifles, even among the mathematical theorems and problems. *Watts.*

Adieu for him
The dull engagements of the bustling world!
Adieu the sick *impertinence* of praise! *Akenside.*

IMPERTRANSIBIL'ITY, *n. s.* Lat. *in* and *pertranseo*. Impossibility to be passed through.

I willingly declined those many ingenious reasons given by others; as of the *impertransibility* of eternity, and impossibility therein to attain to the present limit of antecedent ages. *Hale.*

IMPER'VIOUS, *adj.* } Lat. *impervius*, from
IMPER'VIOUSNESS, *n. s.* } *in per via*. Impassable; impenetrable; inaccessible; the state of not admitting any passage.

Let the difficulty of passing back
Stay his return, perhaps, over this gulf
Impassable, *impervious*; let us try
To found a path from hell to that new world.
Milton.

We may thence discern of how close a texture glass is, since so very thin a film proved so *impervious* to the air, that it was forced to break the glass to free itself. *Boyle.*

The cause of reflection is not the impinging of light on the solid or *impervious* parts of bodies.
Newton's Opticks.

A great many vessels are, in this state, *impervious* by the fluids. *Arbuthnot.*

From the damp earth *impervious* vapours rise,
Increase the darkness, and involve the skies. *Pope.*

IMPETIG'INOUS, *adj.* From Lat. *impetigo*. Scurfy; covered with small scabs.

IM'PETRABLE, *adj.* } Fr. *impetrer*; Lat.
IM'PETRATE, *v. a.* } *impetro*. Possible to
IM'PETRATION, *n. s.* } be obtained by entreaty: to obtain by solicitation: the act of obtaining by prayer.

The blessed sacrament is the mystery of the death of Christ, and the application of his blood, which was shed for the remission of sins, and is the great means of *impetration*, and the meritorious cause of it.
Taylor.

IMPETUOS'ITY, *n. s.* } Fr. *impetueux*;
IMPET'UOUS, *adj.* } Lat. *impetus*. Vio-
IMPET'UOUSLY, *adv.* } lent; forcible; vehe-
IMPET'UOUSNESS, *n. s.* } ment; fierce; pas-
IM'PETUS, *n. s.* } sionate: fury; vehemence of passion: impetus, violent effort; or violent tendency to any point: applicable to men and things.

I will set upon Aguecheek a notable report of valour, and drive the gentleman into a most hideous opinion of his rage, skill, fury, and *impetuosity*.
Shakspeare. Twelfth Night.

The mind gives not only licence, but incitation to the other passions, to take their freest range, and act with the utmost *impetuosity*. *Decay of Piety.*

I wish all words of rage might vanish in that breath that utters them; that, as they resemble the wind in fury and *impetuousness*, so they might in transientness.
Id.

The whole intrigue was contrived by the duke, and so violently pursued by his spirit and *impetuosity*.
Clarendon.

Down rushed the rain
Impetuous, and continued till the earth
No more was seen. *Milton.*

They view the windings of the hoary Nar;
Through rocks and woods *impetuously* he glides
While froth and foam the fretting surface hides.
Addison.

Tho king, 'tis true, is noble, but *impetuous*. *Rowe.*

Why did not they continue their descent 'till they were continuous to the sun, whither both mutual attraction and *impetus* carried them? *Bentley's Sermons.*

Blind and *impetuous* in its fond pursuits,
Leaves the grey-headed reason far behind.
Thomson.

To check the' *impetuous* all-involving tide
Of human woes, how impotent thy strife!
High o'er thy mounds devouring surges ride,
Nor reck thy baffled toils, or lavished life.
Beattie. Judgment of Paris.

IMPIERCE'ABLE, *adj.* In and pierce. Impenetrable; not to be pierced.

Exceeding rage inflamed the furious beast;
For never felt his *impierceable* breast
So wondrous force from hand of living wight.
Spenser.

IMPI'ETY, *n. s.* } Fr. *impieté;* Lat. *impietas.*
IM'PIOUS, *adj.* } Irreverence towards the
M'PIOUSLY, *adv.* } Supreme Being; an act of wickedness, expressive of irreligion: in this sense it has a plural. Impious, wicked; ungodly; profane.

That Scripture standeth not the church of God in any stead to direct, but may be let pass as needless to be consulted with, we judge it prophane, *impious*, and irreligious to think. *Hooker.*

If they die unprovided, no more is the king guilty of those *impieties* for which they are now visited. *Shakspeare.*

Can Juno such *impieties* approve? *Denham.*

Cease then this *impious* rage. *Milton.*

Then lewd Auchemolus he laid in dust,
Who stained his stepdame's bed with *impious* lust. *Dryden.*

Shame and reproach is generally the portion of the *impious* and irreligious. *South.*

When vice prevails, and *impious* men bear sway,
The post of honour is a private station. *Addison.*

The Roman wit, who *impiously* divides
His hero and his gods to different sides,
I would condemn. *Granville.*

They, *impious*, dared to prey
On herds devoted to the god of day. *Pope.*

We have a melancholy prospect of the state of our religion; such amazing *impieties* can be equalled by nothing, but by those cities consumed of old by fire. *Swift.*

O ye cold-hearted frozen formalists!
On such a theme, 'tis *impious* to be calm. *Young.*

'Twas not enough
By subtle fraud to snatch a single life!
Puny *impiety!* *Porteus's Death.*

Alas! thou sinnest now, my Cain; thy words
Sound *impious* in mine ears. *Byron.*

IMPIG'NORATE, *v. a.* } Lat. *in* and *pignus.* To pawn or pledge: the act of pawning, or putting in pledge.
IMPIGNORA'TION, *n. s.* }

To IMPINGE', *v. n.* Lat. *impingo.* To fall against; to strike against; to clash with.

Things are reserved in the memory by some corporeal exuviæ and material images, which, having *impinged* on the common sense, rebound thence into some vacant cells of the brain. *Glanville.*

The cause of reflection is not the *impinging* of light on the solid or impervious parts of bodies. *Newton's Opticks.*

IMPING'UATE, *v. a.* Lat. *in* and *pinguis.* To fatten; to make fat.

Frictions also do more fill and *impinguate* the body than exercise; for that in frictions the inward parts are at rest. *Bacon.*

IMPLACABIL'ITY, *n. s.* } Lat. *in* and
IMPLA'CABLE, *adj.* } *placabilis.* Not
IMPLA'CABLY, *adv.* } to be pacified; inexorable; malicious: implacability, unappeaseable malice: implacably is used once by Dryden in a kind of mixed sense of a tyrant's love.

His incensement is so *implacable*, that satisfaction can be none but by pangs of death. *Shakspeare.*

I see thou art *implacable*, more deaf
To prayers than winds and seas. *Milton.*

I love,
And 'tis below my greatness to disown it:
Love thee *implacably*, yet hate thee too. *Dryden.*

The French are the most *implacable* and the most dangerous enemies of the British nation. *Addison.*

Vain thought! to hide them from the general scorn
That haunts and dogs them like an injured ghost
Implacable. *Blair's Grave.*

IMPLANT,' *v. a.* } Lat. *in* and *planto.*
IMPLANTA'TION, *n. s.* } To infix; to insert; to place; to engraft; to settle: to set, or sow: the act of setting or planting.

See, Father! what first fruits on earth are sprung
From thy *implanted* grace in man.
Milton. Paradise Lost.

How can you him unworthy then decree,
In whose chief part your worths *implanted* be?
Sidney.

No need of public sanctions this to bind,
Which Nature has *implanted* in the mind. *Dryden.*

God, having endowed man with faculties of knowing, was no more obliged to *implant* those innate notions in his mind, than that, having given him reason, hands, and materials, he should build him bridges. *Locke.*

There grew to the outside of the arytenoides another cartilage, capable of motion by the help of some muscles that were *implanted* in it. *Ray.*

IMPLA'USIBLE, *adj.* In and plausible. Not specious; not likely to seduce or persuade.

Nothing can better improve political school-boys than the art of making plausible or *implausible* harangues against the very opinion for which they resolve to determine. *Swift.*

IM'PLEMENT, *n. s.* } Lat. *impleo.* Some-
IMPLE'TION, *n. s.* } thing that fills up vacancy or supplies wants; tools of manufacture; vessels of a kitchen: impletion, the act of filling, or the state of being full.

Unto life many *implements* are necessary; more, if we seek such a life as hath in it joy, comfort, delight, and pleasure. *Hooker.*

Theophrastus conceiveth, upon a plentiful *impletion*, there may succeed a disruption of the matrix. *Browne.*

Wood hath coined seventeen thousand pounds, and nath his tools and *implements* to coin six times as much. *Swift.*

Proud Esculapius' son
Where are thy boasted *implements* of art
And all thy well crammed magazines of health?
Blair's Grave.

IM'PLEX, *adj.* } Fr. *impliquer;* Lat.
IM'PLICATE, *v. a.* } *implexus, implico.* Intri-
IMPLICA'TION, *n. s.* } cate; entangled: opposed to simple: to embarrass; to involve; to infold and perplex: implication, an inference, not expressed; an involution, or entanglement.

The ingredients of saltpetre do so mutually *impli-te* and hinder each other, that the concrete acts but ry languidly. *Boyle.*

Three principal causes of firmness are the gross-ss, the quiet contact, and the *implication* of the com-nent parts. *Id.*

Though civil causes, according to some men, are of ss moment than criminal, yet the doctors are, by *plication*, of a different opinion. *Ayliffe's Parergon.*

Every poem is either simple or *implex*: it is called mple when there is no change of fortune in it; *implex* hen the fortune of the chief actor changes from bad good, or from good to bad. *Spectator.*

IMPLIC'IT, *adj.* } Fr. *implicite*; Lat. *im-*
IMPLIC'ITLY, *adv.* } *plicitus.* Entangled; en-olded; but this sense is rare: inferred, not ex-ressed; entire; resting upon another; connected ith another over which that which is connected it has no power; trusting without reserve or xamination: implicitly, with unreserved confi-ence or obedience.

There be false peaces or unities, when the peace is rounded but upon an *implicit* ignorance; for all olours will agree in the dark. *Bacon.*

No longer by *implicit* faith we err,
Whilst every man's his own interpreter. *Derham.*

My blushing muse with conscious fear retires,
nd whom they like *implicitly* admires. *Roscommon.*

In the first establishments of speech there was an *nplicit* compact, founded upon common consent, that ach and such words should be signs, whereby they ould express their thoughts one to another. *South.*

We *implicitly* follow in the track in which they lead s, and comfort ourselves with this poor reflection, hat we shall fare as well as those that go before us. *Rogers.*

Learn not to dispute the methods of his providence; ut humbly and *implicitly* to acquiesce in and adore hem. *Atterbury.*

The divine inspection into the affairs of the world oth necessarily follow from the nature and being of od; and he that denies this, doth *implicitly* deny is existence: he may acknowledge what he will with is mouth, but in his heart he hath said there is no od. *Bentley.*

In his woolly fleece
I cling *implicit.* *Pope.*

The humble shrub,
And bush with frizzled hair *implicit.* *Thomson.*

Bliss! sublunary bliss! proud words and vain!
mplicit treason to divine decree! *Young.*

No knife had curbed the rambling sprays,
No hand had wove the *implicit* maze. *Beattie.*

We have the *implicit* order of the Guinta
To await their coming here, and join them in
Their office. *Byron. The Two Foscari.*

IMPLORE', *v. a.* & *n. s.* } Fr. *implorer*;
IMPLO'RER, *n. s.* } Lat. *imploro.* To all upon in supplication; to solicit; to ask or eg: the act of begging or intreaty: implorer, solicitor; a petitioner.

Urged sore
With piercing words and pitiful *implore,*
Him hasty to arise. *Faerie Queene.*

Do not say 'tis superstition, that
I kneel, and then *implore* her blessing.
Shakspeare. Winter's Tale.

Mere *implorers* of unholy suits,
Breathing, like sanctified and pious,
The better to beguile. *Id. Hamlet.*

They ship their oars, and crown with wine
The holy goblet to the powers divine,
Imploring all the gods that reign above.
Pope's Odyssey.

Fain to *implore* the aid of Flattery's screen,
Even from thyself thy loathsome heart to hide.
Beattie. Minstrel.

IMPLY', *v. a.* Fr. *impliquer*; Lat. *implico.* To unfold; to cover; to entangle. Not in use. To involve or comprise as a consequence or concomitant.

His courage stout,
Striving to loose the knot that fast him ties,
Himself in straighter bonds too rash *implies.*
Faerie Queene.

And Phœbus flying so most shameful sight,
His blushing face in foggy cloud *implies.* *Id.*

That it was in use among the Greeks, the word tri-clinium *implieth.* *Browne's Vulgar Errours.*

Bows the strength of brawny arms *imply,*
Emblems of valour, and of victory. *Dryden.*

Where a malicious act is proved, a malicious inten-tion is *implied.* *Sherlock.*

IMPOI'SON, *v. a.* Fr. *empoisonner.* It might be written empoison. To corrupt with poison; to kill with poison; but this is rare.

One doth not know
How much an ill word doth *impoison* liking.
Shakspeare.

A man by his own arms *impoisoned,*
And with his charity slain. *Id.*

IMPO'LARILY, *adv.* In and polar. Not according to the direction of the poles. Little used.

Being *impolarily* adjoined into a more vigorous loadstone, it will, in a short time, exchange its poles. *Browne.*

IMPOL'ITICALLY, *adv.* } In and politic.
IMPOL'ITICLY, *adv.* } Imprudent; in-
IMPOL'ITICAL, *adj.* } discreet; void of
IMPOL'ITIC, *adj.* } art or forecast.

He that exhorteth to beware of an enemy's policy, doth not give counsel to be *impolitick*; but rather to use all prudent foresight and circumspection, lest our simplicity be overreached by cunning slights. *Hooker.*

IMPON'DEROUS, *adj.* In and ponderous. Void of perceptible weight.

It produces visible and real effects by *imponderous* and invisible emissions. *Browne's Vulgar Errours.*

IMPOROS'ITY, *n. s.* } In and porous.
IMPO'ROUS, *adj.* } Absence of interstices; compactness: close of texture; completely solid.

The porosity or *imporosity* betwixt the tangible parts, and the greatness or smallness of the pores. *Bacon.*

It has its earthly and salinous parts so exactly resolved, that its body is left *imporous*, and not discreted by atomical terminations. *Browne's Vulgar Errours.*

If atoms should descend plump down with equal velocity, being all perfectly solid and *imporous*, they would never the one overtake the other. *Ray on the Creation.*

IMPOR'T, *v. a.* & *n. s.* } Fr. *importer*; Lat.
IMPOR'TABLE, *adj.* } *importo.* To carry
IMPOR'TANCE, *n. s.* } into any country
IMPOR'TANT, *adj.* } from abroad; to im-
IMPOR'TATION, *n. s.* } ply; to produce a
IMPOR'TER, *n. s.* } consequence; to be
IMPOR'TLESS, *adj.* } of moment, weight

or consequence: import and importance, moment; tendency; consequence; importunity; but this is only used by Shakspeare. Any thing imported from abroad is called an import: important, of weight or consequence: importation, the act of bringing from abroad: importer, the agent by whom imports are made: importless, trifling; of no moment. Importable is accented by Spenser on the first syllable, and signifies insupportable; not to be endured.

God for his manace him so sore smote,
* * * * * *
* * * * * *
Thatte his peines weren *importable*.
Chaucer. The Monkes Tale.

Both at once him charge on either side,
With hideous strokes and *importable* power,
That forced him his ground to traverse wide,
And wisely watch to ward that deadly stour.
Faerie Queene.

He fiercely at him flew,
And with *important* outrage him assailed;
Who soon prepared to field, his sword forth drew,
And him with equal valour countervailed. *Id.*

Himself not only comprehended all our necessities, but in such sort also framed every petition as might most naturally serve for many; and doth, though not always require, yet always *import* a multitude of speakers together. *Hooker.*

The name of discipline *importeth* not as they would fain have it construed; but the self same thing it signifieth, which the name of doctrine doth. *Id.*

Something he left imperfect in the state,
Which since his coming forth is thought of, which
Imports the kingdom so much fear and danger,
That his return was most required. *Shakspeare.*

Maria writ
The letter at Sir Toby's great *importance*;
In recompence whereof he hath married her.
Id.

Great France
My mourning and *important* tears hath pitied. *Id.*

What occasion of *import*
Hath all so long detained you from your wife?
Id.

It had been pity you should have been put together with so mortal a purpose, as then each bore, upon *importance* of so slight a nature. *Id.*

We less expect
That matter needless, of *importless* burthen,
Divide thy lips. *Id.*

Her length of sickness, with what else more serious
Importeth thee to know, this bears. *Id.*

A notable passion of wonder appeared in them; but the wisest beholder, that knew no more but seeing, could not say if the *importance* were joy or sorrow.
Id. Winter's Tale.

This question we now asked, *imported*, as that we thought this land a land of magicians. *Bacon.*

Let the heat be such as may keep the metal perpetually molten; for that above all *importeth* to the work. *Id.*

Number in armies *importeth* not much, where the people is of weak courage. *Id.*

The king's reasonable profit should not be neglected upon *importation* and exportation. *Id.*

This superadds treachery to the crime: 'tis the falsifying the most *important* trust. *Decay of Piety.*

It may *import* us in this calm to hearken more than we have done to the storms that are now raising abroad. *Taylor.*

This to attain, whether heaven move, or earth,
Imports not, if thou reckon right. *Milton.*

O then, what interest shall I make
To save my last *important* stake,
When the most just have cause to quake?
Roscommon.

Add to the former observations made about vegetables a third of the same *import* made in mineral substances. *Boyle.*

If I endure it, what *imports* it you? *Dryden.*

Some business of *import* that triumph wears
You seem to go with. *Dryden and Lee's Oedipus.*

The great *important* end that God designs religion for, the government of mankind, sufficiently shews the necessity of its being rooted deep in the heart, and put beyond the danger of being torn up by any ordinary violence. *South.*

These mines fill the country with greater numbers of people than it would be able to bear, without the *importation* of corn from foreign parts.
Addison.

The emperor has forbidden the *importation* of their manufactures into any part of the empire.
Id. on Italy.

When there is any dispute, the judge ought to appoint the sum according to the eloquence and ability of the advocate, and in proportion to the *import* of the cause. *Ayliffe.*

Examine how the fashionable practice of the world can be reconciled to the *important* doctrine of our religion. *Rogers.*

For Elis I would sail with utmost speed,
T' *import* twelve mares, which there luxurious feed.
Pope.

Thy own *importance* know,
Nor bound thy narrow views to things below. *Id.*

It is impossible to limit the quantity that shall be brought in, especially if the *importers* of it have so sure a market as the Exchequer. *Swift.*

Of what seems
A trifle, a mere nothing by itself,
In some nice situations turns the scale
Of Fate, and rules the most *important* actions.
Thomson.

Joy is an *import*; joy is an exchange;
Joy flies monopolists; it calls for two:
Rich fruit! Heaven planted! never plucked by one.
Young.

It is of *importance* to observe, that, whatever is easy and agreeable to the organs of speech, always sounds grateful to the ear. *Blair's Lectures.*

Drink and be mad then, 'tis your country bids;
Gloriously drunk obey the' *important* call:
Her cause demands the assistance of your throats,
Ye all can swallow, and she asks no more. *Cowper.*

Now shall this rule be allowed to every science, and not to the most *important* of all sciences—the science of life and manners? *Beattie.*

The good old gentleman had been detained
By winds and waves, and some *important* captures;
And, in the hope of more at sea remained,
Although a squall or two had damped his raptures.
Byron. Don Juan.

IMPOR'TUNATE, *adj.* IMPOR'TUNATENESS, *n. s.* IMPOR'TUNATELY, *adv.* IMPORTUNE', *v. a.* & *adj.* IMPORTUNE'LY, *adv.* IMPORTU'NITY, *n. s.* Fr. *importuner*; Latin *importunus*. Unseasonable solicitations; incessant petition. Importune, to teaze; harass; or molest. Importune, constantly recurring; troublesome; vexatious; unseasonable; coming at a wrong time. Importunely, troublesomely; incessantly. Importunity, incessant solicitation.

And for he n'ill be *importune*
Unto no wight, ne onerous,
Nor of hire godesse covetous.
Chaucer. Romaunt of the Rose.

And the' armies of their creatures all, and some
Do serve to them, and with *importune* might
War against us the vassals of their will. *Spenser.*

But the sage wizard telles (as she has redd)
That it *importunes* death and doleful diery hedd.
Id. Faerie Queene.

If fortuned, whilest she stifly strove,
And the wide sea *importuned* long space
With shrilling shriekes Proteus abrode did rove,
Along the fiery waves driving his finny drove. *Id.*

The palmer bent his ear unto the noise,
To weet who called so *importunely*:
Again he heard a more efforced voice,
That bade him come in haste. *Id.*

Overcome with the *importunity* of his wife, a woman of a haughty spirit, he altered his former purpose. *Knolles.*

Against all sense you do *importune* her. *Shakspeare.*

I was in debt to my *importunate* business, but he would not hear my excuse. *Id.*

Henry, king of England, needed not to have bestowed such great sums, nor so to have busied himself with *importune* and incessant labour, to compass my death and ruin, if I had been a feigned person.
Bacon's Henry VII.

If he espied any lewd gaiety in his fellow-servants, his master should straightways know it, and not rest free from *importuning*, until the fellow had put away his fault. *Carew.*

Their pertinacity is such, that when you drive them out of one form, they assume another; and are so *importunately* troublesome, as makes many think it impossible to be freed from them. *Duppa.*

The constitutions that the apostles made concerning deacons and widows, are, with much *importunity*, but very *importunely* urged by the disciplinarians.
Sanderson.

Thrice I deluded her, and turned to sport
Her *importunity*. *Milton's Agonistes.*

No fair to thine
Equivalent, or second! which compelled
Me thus, though *importune* perhaps, to come
And gaze and worship thee. *Milton.*

The same airs which some entertain with most delightful transports to others are *importune*.
Glanville's Scepsis.

The bloom of beauty other years demands,
Nor will be gathered by such withered hands;
You *importune* it with a false desire. *Dryden.*

Every one hath experimented this troublesome intrusion of some frisking ideas, which thus *importune* the understanding, and hinder it from being employed.
Locke.

A rule restrains the most *importunate* appetites of our nature. *Rogers.*

We have been obliged to hire troops from several princes of the empire, whose ministers and residents here perpetually *importuned* the court with unreasonable demands. *Swift.*

IMPOSE', *v. a.* & *n. s.*
IMPOSE'ABLE, *adj.*
IMPO'SER, *n. s.*
IMPOSI'TION, *n. s.*
IM'POST, *n. s.*
IM'POSTS, *n. s.*
IMPOS'TOR, *n. s.*
IMPOS'TURE, *n. s.*

Fr. *imposer, imposition, imposte, imposteur.* Lat. *in* and *pono.* Imposition, to lay on as a burden; a penalty: to enjoin as a duty; to fix on, or impute to; to obtrude fallaciously; to deceive, when used with on: among printers, to put the pages on the stone, and fit on the chase in order to carry the forms to press. Impose, a command or injunction. Imposeable, to be laid as obligatory on any one. Imposer, one who enjoins. Imposition, the act of laying any thing on another; of annexing; injunction; constraint; oppression; cheat; imposture; a supernumerary exercise enjoined on scholars as a punishment. Impost, a tax; a toll; a custom paid: in architecture, that part of a pillar, in vaults and arches, on which the weight of the whole building lieth. Impostor, one who cheats by a fictitious character. Imposture, a fraud, cheat, or deception, committed by giving to persons or things a false character.

It shall not be lawful to *impose* toll upon them.
Ezra vii.

Yet greatly did the Beast repine at those
Straunge hands, whose like till then he never bore,
Ne ever any durst till then *impose*.
Spenser's Faerie Queene.

There was a thorough way made by the sword for the *imposing* of the laws upon them. *Id. on Ireland.*

What good or evil is there under the sun, what action correspondent or repugnant unto the law which God hath *imposed* upon his creatures, but in or upon it God doth work, according to the law which himself hath eternally purposed to keep. *Hooker.*

According to your ladyship's *impose*
I am thus early come. *Shakspeare.*

If a son do fall into a lewd action, the imputation, by your rule, should be *imposed* upon his father. *Id.*

The first *imposition* of names was grounded, among all nations, upon future good hope conceived of children. *Camden.*

Taxes and *imposts* upon merchants do seldom good to the king's revenue; for that that he wins in the hundred, he loseth in the shire. *Bacon.*

From *imposition* of strict laws, to free
Acceptance of large grace; from servile fear
To filial; works of law, to works of faith. *Milton.*

This cannot be allowed, except we impute that unto the first cause which we *impose* not on the second; or, what we deny unto nature, we impute unto nativity itself. *Browne.*

The universities' sufferings might be manifested to all nations, and the *imposers* of these oaths might repent. *Walton.*

Thou on the deep *imposest* nobler laws,
And by that justice hast removed the cause. *Waller.*

The *imposition* of the name is grounded only upon the predominancy of that element, whose name is ascribed to it. *Boyle.*

Physicians and philosophers have suffered themselves to be so far *imposed upon* as to publish chymical experiments which they never tried. *Id.*

Christianity hath hardly *imposed* any other laws upon us, but what are enacted in our natures, or are agreeable to the prime and fundamental laws of it.
Tillotson.

To tyrants others have their country sold,
Imposing foreign lords for foreign gold.
Dryden's Æneid.

Impose but your commands,
This hour shall bring you twenty thousand hands.
Dryden.

It was neither *imposed* on me, nor so much as the subject given me by any man. *Id.*

Our poet thinks not fit
To *impose* upon you what he writes for wit. *Id.*

The constraint of receiving and holding opinions by authority was rightly called *imposition*. *Locke.*

He that thinks the name centaur stands for some

real being, *imposes on* himself, and mistakes words for things. *Id.*

We know how successful the late usurper was, while his army believed him real in his zeal against kingship; but when they found out the *imposture*, upon his aspiring to the same himself, he was presently deserted, and never able to crown his usurped greatness with that title. *South.*

Shame and pain, poverty and sickness, yea death and hell itself, are but the trophies of those fatal conquests got by that grand *impostor*, the devil, over the deluded sons of men. *Id.*

They were not simply *imposeable* on any particular man, farther than he was a member of some church. *Hammond.*

The second part of confirmation is the prayer or benediction of the bishop, made more solemn by the *imposition* of hands. *Id.*

On impious realms and barbarous kings *impose*
Thy plagues, and curse them with such ills as those. *Pope.*

A greater load has been laid on us than we have been able to bear, and the grossest *impositions* have been submitted to, in order to forward the dangerous designs of a faction. *Swift.*

Let it not be made, contrary to its own nature, the occasion of strife, a narrow spirit, and unreasonable *impositions* on the mind and practice. *Watts.*

Form new legends,
And fill the world with follies and *impostures*. *Irene.*

——— for she was one
Fit for the model of a statuary,
A race of mere *impostors*, when all's done.
Byron. Don Juan.

I see the colour comes
Back to your cheek: Heaven send you strength to bear
What more may be *imposed*! *Id. The Two Foscari.*

Imposition of Hands, a religious ceremony, by which a bishop lays his hand or hands on the head of a person, in ordination, confirmation, or in uttering a blessing. This practice is also frequently observed by dissenters at the ordination of their ministers, when all the ministers present place their hands on the head of him whom they are ordaining, while one of them prays for a blessing on him and on his future labors. It is also used by some dissenting churches on the the reception of each member, and as a mode of invoking the blessing and Spirit of God, grounded on Heb. vi. 2. They are not, however, agreed as to the propriety of this ceremony; nor do they consider it as an essential part of ordination. Imposition of hands was a Jewish ceremony, introduced not by any divine authority, but by custom; it being the practice among those people, whenever they prayed to God, for any person to lay their hands on his head. Our Saviour observed the same custom, both when he conferred his blessing on children, and when he cured the sick; adding prayer to the ceremony. The apostles likewise laid hands on those upon whom they bestowed the Holy Ghost. The Jewish priests observed the same custom when any one was received into their body. And the apostles themselves underwent the imposition of hands afresh when they entered upon any new undertaking. In the ancient church, imposition of hands was even practised on persons when they married, which custom the Abyssinians still observe.

Impos'sible, *adj.* } Fr. *impossible*; Lat.
Impossibil'ity, *n. s.* } *impossibilis*. Not to be done or attained; impracticable; the state of being not feasible; that which is beyond our power.

With men this is *impossible*; but with God all things are possible. *Mat.* xix. 26.

It was *impossible* that the state should continue quiet. 2 *Mac.*

Of hir delite, or joies, one of the lest
Were *impossible* to my wit to saie.
Chaucer. Troilus and Creseide.

For, trusteth wel, it is *impossible*
That any clerk wol speken good of wives,
(But—if it be of holy seintes lives)
Ne of none other woman never the mo.
Id. Prologue to the Wif of Bathes Tale.

Though men do, without offence, wish daily that the affairs, which with evil success are past, might have fallen out much better; yet to pray that they may have been any other than they are, this being a manifest *impossibility* in itself, the rules of religion do not permit. *Hooker.*

Admit all these *impossibilities* and great absurdities to be possible and convenient. *Whitgifte.*

Let the mutinous winds
Strike the proud cedars 'gainst the fiery sun,
Murdering *impossibility*, to make
What cannot be, slight work. *Shakspeare.*

Difficult it is, but not *impossible*. *Chillingworth.*

Impossibilities! oh no, there's none,
Could I bring thy heart captive home. *Cowley.*

Simple Philoclea, it is the *impossibility* that doth torment me; for unlawful desires are punished after the effect of enjoying, but *impossible* desires in the desire itself. *Sidney.*

It is *impossible* the mind should be stopped any where in its progress in this space, how far soever it extends its thoughts. *Locke.*

We cannot believe it *impossible* to God to make a creature with more ways to convey into the understanding the notice of corporeal things than five. *Id.*

Those who assert the *impossibility* of space existing without matter, must make body infinite. *Id.*

I my thoughts deceive
With hope of things *impossible* to find. *Walsh.*

They confound difficulty with *impossibility*. *South.*

When we see a man with like passions and weakness with ourselves going before us in the paths of duty, it confutes all lazy pretences of *impossibility*. *Rogers.*

'Twere *impossible* for any enterprise to be lawful, if that which should legitimate it is subsequent to it. *Decay of Piety.*

Is it not recommended to those who study to excel in any art or science, that they form themselves after the most perfect models, even although it be morally *impossible* for them ever to attain the perfection of these models? *Beattie.*

Impossibility is either physical or moral. Moral impossibility is when any thing, in its own nature, is possible, but yet is attended with such difficulties, as that, all things considered, it appears impossible. Thus it is morally impossible that a man should throw the same number with three dice 100 times successively. Physical impossibility is that which is contrary to the law of nature, and which, therefore, cannot by any means or method within our conception possibly be accomplished.

Impost, in law, is particularly applied to that tax which the crown receives for merchandises imported into any port or haven.

IMPOSTHUMATE, *v. n.* & IMPOSTHUMA'TION, *n. s.* [*v. a.* IMPOST'HUME, *n. s.* This seems to have been formed by corruption from impostem, as South writes it; and impostem to have been written erroneously for *apostem*, Gr. *ἀπόστημα*, an abscess.—Johnson. These are old medicinal words now out of use. To form an abscess or cyst, containing purulent matter: the act of forming an abscess, or the state in which it is formed.

Now rotten diseases, ruptures, catarrhs, and bladders full of *imposthumes*, make preposterous discoveries. *Shakspeare.*

He that maketh the wound bleed inwards, endangereth malign ulcers and pernicious *imposthumations*. *Bacon's Essays.*

Humours of tongues *imposthumed* purged with shame are mended. *Fletcher. The Purple Island.*

Fumes cannot transude through the bag of an *imposthume*. *Harvey.*

An error in the judgment is like an *impostem* in the head, which is always noisome, and frequently mortal. *South.*

The bruise *imposthumated*, and afterwards turned to a stinking ulcer, which made every body shy to come near her. *Arbuthnot.*

They would not fly that surgeon, whose lancet threatens none but the *imposthumated* parts. *Decay of Piety.*

IM'POTENCE, *n. s.* IM'POTENCY, *n. s.* IM'POTENT, *adj.* IM'POTENTLY, *adv.* Fr. *impotent;* Lat. *impotens; in* and *potens.* Weak; feeble; disabled by nature or disease in body or mind; without power of restraint; without power of propagation. Impotently, powerlessly; feebly.

In those porches lay a great multitude of *impotent* folk, of blind, halt, and withered. *John* v. 3.

There sat a certain man, *impotent* in his feet, being a cripple from his mother's womb, who never had walked. *Acts* xiv.

But *impotence* with her owne wilfull hands
One of Maleger's cursed darts did take,
So ryved her trembling hart, and wicked end did make. *Spenser's Faerie Queene.*

We that are strong must bear the imbecility of the *impotent*, and not please ourselves. *Hooker.*

I have learned that fearful commenting
Is leden servitor to dull delay;
Delay leads *impotent* and pale-faced beggary. *Shakspeare.*

Yet wealth is *impotent*
To gain dominion, or to keep it gained. *Milton.*

Will he, so wise, let loose at once his ire,
Belike through *impotence*, or unaware,
To give his enemies their wish, and end
Them in his anger, whom his anger saves
To punish endless? *Id.*

The *impotent* poor might be relieved, and the idle forced to labour. *Temple.*

With jealous eyes at distance she had seen,
Whispering with Jove, the silver-footed queen;
Then *impotent* of tongue, her silence broke,
Thus turbulent in rattling tone she spoke. *Dryden.*

Yet all combined,
Your beauty and my *impotence* of mind. *Id.*

He told beau Prim, who is thought *impotent*, that his mistress would not have him, because he is a sloven, and committed a rape. *Tatler.*

Although in dreadful whirls he hung,
High on the broken wave,
I knew thou wert not slow to hear,
Nor *impotent* to save. *Addison's Spectator.*

God is a friend and a father, whose care supplies our wants, and defends our *impotence*, and from whose compassion in Christ we hope for eternal glory hereafter. *Rogers.*

Weakness, or the *impotence* of exercising animal motion, attends fevers. *Arbuthnot.*

This is not a restraint or *impotency*, but the royal prerogative of the most absolute king of kings; that he wills to do nothing but what he can; and that he can do nothing which is repugnant to his divine goodness. *Bentley.*

Dulness with obscenity must prove
As hateful sure, as *impotence* in love. *Pope.*

To a mind resolved and wise
There is an *impotence* in misery
Which makes me smile, when all its shafts are in me. *Young's Revenge.*

IMPOTENCE, in moral agency. Divines and philosophers distinguish two sorts of impotency; natural and moral. The first is a want of some physical principle, necessary to an action; or where a being is absolutely defective, or not free and at liberty to act; the second imports a want of will, and sometimes only a great difficulty; as a strong habit to the contrary, a violent passion, &c.

IMPOTENCE is a canonical disability, to avoid marriage in the spiritual court. The marriage is not void ab initio, but voidable only by sentence of separation during the life of the parties.

IMPOUND', *v. a.* To enclose as in a pound; to confine or shut up in a penfold.

England
Hath taken and *impounded* as a stray
The king. *Shakspeare. Henry V.*

The great care was rather how to *impound* the rebels, that none of them might escape, than that any doubt was made to vanquish them. *Bacon.*

Seeing him wander about, I took him up for a stray, and *impounded* him, with intention to restore him to the right owner. *Dryden.*

IMPOW'ER. See EMPOWER.

IMPRAC'TICABLE, *adj.* IMPRAC'TICABLENESS, *n. s.* Fr. *impracticable; in* and practicable; Gr. *πραγμα.* Not to be performed; untractable; unmanageable; stubborn: an impossibility.

And yet this tough *impracticable* heart
Is governed by a dainty-fingered girl. *Rowe's Jane Shore.*

Had there not been still remaining bodies, the legitimate offsprings of the antediluvian earth, 'twould have been an extravagant and *impracticable* undertaking to have gone about to determine any thing concerning it. *Woodward.*

To preach up the necessity of that which our experience tells us is utterly *impracticable*, were to affright mankind with the terrible prospect of universal damnation. *Rogers.*

I do not know a greater mark of an able minister than that of rightly adapting the several faculties of men, nor is any thing more to be lamented than the *impracticableness* of doing this. *Swift.*

IM'PRECATE, *v. a.* IMPRECA'TION, *n. s.* IM'PRECATORY, *adj.* Fr. *imprecation;* Lat. *imprecor, imprecatio.* To call for a curse, or any evil, on one's self or others: an imprecation is a prayer, always used in a bad sense; a wish for evil.

My mother shall the horrid furies raise
With *imprecations*. *Chapman's Odyssey.*

Sir John Hotham, uncursed by any *imprecation* of mine, paid his own and his eldest son's heads. *King.*

With *imprecations* thus he filled the air,
And angry Neptune heard the unrighteous prayer. *Pope.*

No light, save yon faint gleam, which shews me walls
Which never echoed but to sorrow's sounds,
The sigh of long imprisonment, the step
Of feet on which the iron clanked, the groan
Of death, the *imprecation* of despair.
Byron. The Two Foscari.

IMPREGN,' *v. a.* IMPREG'NATE, *v. a.* & *adj.* IMPREGNA'TION, *n. s.* } French, *impregnable*; Lat. *in, præ*, and old Lat. *geno*. To fill with any matter or quality; to fill with young; to make pregnant or prolific: impregnation, the act of making prolific; that with which any thing is impregnated; saturation; impregnate, impregnated.

They ought to refer matters unto counsellors, which is the first begetting or *impregnation*; but when they are elaborate in the womb of their counsel, and grow ripe to be brought forth, then they take the matter back into their own hands. *Bacon.*

In her ears the sound
Yet rung of his persuasive words, *impregned*
With reason, to her seeming. *Milton.*

Hermaphrodites, although they include the parts of both sexes, cannot *impregnate* themselves. *Browne.*

With native earth their blood the monsters mixed;
The blood, endued with animating heat,
Did in the *impregnate* earth new sons beget. *Dryden.*

What could implant in the body such peculiar *impregnations*, as should have such power? *Derham.*

Christianity is of so prolific a nature, so apt to *impregnate* the hearts and lives of its proselytes, that it is hard to imagine that any branch should want a due fertility. *Decay of Piety.*

The unfruitful rock itself, *impregned* by thee,
Forms lucid stones. *Thomson.*

That man is of a temper too severe:
Hard, but as lofty as the rock, and free
From all the taints of common earth—while I
Am softer clay, *impregnated* with flowers.
Byron. Sardanapalus.

IMPREG'NABLE, *adj.* IMPREG'NABLY, *adv.* } Fr. *imprenable*; Lat. *non-prehendus*. Not to be stormed or taken; unshaken; unmoved; invincible: impregnably, defended in such manner as to defy external force.

A castle strongly seated on a high rock, joineth by an isthmus to the land, and is *impregnably* fortified. *Sandys.*

Hast thou not him, and all
Which he calls his, inclosed with a wall
Of strength *impregnable?* *Id.*

Let us be backed with God, and with the seas,
Which he hath given for fence *impregnable*,
And with their helps alone defend ourselves.
Shakspeare.

There the capitol thou see'st,
Above the rest lifting his stately head
On the Tarpeian rock, her citadel
Impregnable. *Milton.*

Two giants kept themselves in a castle, seated upon the top of a rock, *impregnable*, because there was no coming to it but by one narrow path, where one man's force was able to keep down an army. *Sidney.*

The man's affection remains wholly unconcerned and *impregnable*; just like a rock, which, being plied continually by the waves, still throws them back again, but is not at all moved. *South.*

IMPREJU'DICATE, *adj.* Lat. *in præ* and *judico*. Unprejudiced; not prepossessed; impartial.

The solid reason of one man with *imprejudicate* apprehensions, begets as firm a belief as the authority or aggregated testimony of many hundreds. *Browne.*

IMPREPARA'TION, *n. s.* In and preparation. Unpreparedness; want of preparation.

Impreparation and unreadiness when they find in us, they turn it to the soothing up of themselves. *Hooker.*

IMPRESS, *v. a.* & *n. s.* IMPRES'SION, *n. s.* IMPRES'SIBLE, *adj.* IMPRES'SURE, *n. s.* } Lat. *impressum*. To print; stamp; fix deep; mark; to force into service; now generally written press: impress is a mark made by pressure; effect of one substance on another; mark of distinction; device; seizure: impression, act of pressing; effect of pressure; image in the mind; efficacious agency or influence; effect of a military attack; an edition of a work: impressible, that may be impressed; soft; tender: impressure, the mark, dent, or impression.

Eke other sain, that through *impressions*,
As if a wight hath fast a thing in minde,
That thereof cometh soche avisions:
And other sain, as thei in bokes finde,
That after times of the yere, by kinde,
Men dreme. *Chaucer. Troilus and Creseide.*

And of hire loke, in him there gan to quicken
So grete desire and suche affection,
That in his hertes bottom, gan to sticken
Of her his fixe and depe *impressioun*. *Id.*

And with meeke service and much suit did lay
Continuall siege unto her gentle hart;
Which, being whylome launcht with lovely dart,
More eath was new *impression* to receive
However she her paynd with womanish art
To hide her wound that none might it perceive.
Spenser. Faerie Queene.

But nothing might relent her hasty flight;
So deepe the deadly feare of that foule swaine
Was eart *impressed* in her gentle spright. *Id.*

So foul and ugly, that exceeding fear
Their visages *imprest*, when they approached near
Spenser.

Lean but upon a rush,
The cicatrice and capable *impressure*
Thy palm some moments keeps. *Shakspeare.*

Ajax was here the voluntary, and you as under an *impress*. *Id.*

Why such *impress* of shipwrights, whose sore task
Does not divide the Sunday from the week? *Id.*

Your ships are not well manned;
Your mariners are muleteers, reapers, people
Ingrossed by swift *impress*.
Id. Antony and Cleopatra.

His age has charms in it, his title more,
To pluck the common bosoms on his side,
And turn our *imprest* launces in our eyes,
Which do command them. *Id. King Lear.*

Like to a chaos, or unlicked bear-whelp,
That carries no *impression* like the dam.
Shakspeare.

This weak *impress* of love is as a figure
Trenched in ice, which with an hour's heat
Dissolves to water.
Id. Two Gentlemen of Verona.

Macbeth shall never vanquished be, until
Great Birnam-wood to Dunsinane's high hill
Shall come against him.
—That will never be:
Who can *impress* the forest, bid the tree
Unfix his earth-bound root? *Id. Macbeth.*

To be distracted with many opinions, makes men to be of the last *impression*, and full of change.
Bacon.

His spear a spit, a pot-lid broad his shield,
Whose smoky plain a chalked *impresse* filled;
A bag sure sealed: his word, much better than spilled. *Fletcher. The Purple Island.*

When God from earth formed Adam in the East,
He his own image on the clay *imprest*. *Denham.*

Ormond should contribute all he could for the making those levies of men, and for *impressing* of ships.
Clarendon.

The king had made him high sheriff of Sussex, that he might the better make *impression* upon that county.
Id.

To describe emblazoned shields,
Impresses quaint, caparisons, and steeds,
Bases, and tinsels, trappings. *Milton.*

For ten *impressions*, which his works have had in so many years, at present a hundred books are scarcely purchased once a twelvemonth. *Dryden.*

The conquering chief his foot *imprest*
On the strong neck of that destructive beast. *Id.*

Sensation is such an *impression* or motion, made in some part of the body, as produces some perception in the understanding. *Locke.*

God, surveying the works of the creation, leaves us this general *impress* or character upon them, that they were exceeding good. *South.*

They having taken the *impresses* of the inside of these shells with that exquisite niceness, as to express even the finest lineaments of them. *Woodward.*

Were the officers of religion stript of all the external decencies, they would not make a due *impression* on the mind. *Atterbury.*

We take care to *improve* in our frugality and diligence; virtues which become us, particularly in times of war. *Id.*

Universal gravitation is above all mechanism, and proceeds from a divine energy and *impression*.
Bentley.

The false representations of the kingdom's enemies had made some *impression* in the mind of the successor. *Swift.*

We should dwell upon the arguments, and *impress* the motives of persuasion upon our own hearts, 'till we feel the force of them. *Watts.*

While passions glow, the heart like heated steel
Takes each *impression*, and is worked at pleasure.
Young.

All vastness produces the *impression* of sublimity. It is to be remarked, however, that space, extended in length, makes not so strong an *impression* as height or depth. *Blair's Lectures.*

That has a noble sound; but 'tis a sound,
A music most *impressive*, but too transient:
The mind is much but is not all.
Byron. The Two Foscari.

It shows
The *impression* of his former instances;
If they were from his heart, he may be thankful;
If not 'twill punish his hypocrisy. *Byron.*

Impressing of Seamen. The power of impressing seamen for the sea-service by the king's commission, has been a matter of great dispute, and submitted to with great reluctance. Sir Michael Foster attempts to prove, that the practice of impressing, and granting powers to the admiralty for that purpose, is of very ancient date, and has been uniformly continued by a regular series of precedents to the present time: whence he concludes it to be part of the common law. The difficulty arises hence, that no statute has expressly declared this power to be in the crown, though many of them strongly imply it. The stat. 2 Ric. II., c. 4., speaks of mariners being arrested and retained for the king's service, as of a thing well known, and practised without dispute; and provides a remedy against their running away. By a later statute, if any waterman, who uses the river Thames, shall hide himself during the execution of any commission of pressing for the king's service, he is liable to heavy penalties. By another (5 Eliz. c. 5) no fisherman shall be taken by the queen's commission to serve as a mariner; but the commission shall be first brought to two justices of the peace, inhabiting near the sea coast where the mariners are to be taken, to the intent that the justices may choose out and return such a number of able-bodied men, as in the commission are contained, to serve her majesty. And by others, especial protections are allowed to seamen, in particular circumstances, to prevent them from being impressed. Ferrymen are also said to be privileged from being impressed at common law. All which do most evidently imply a power of impressing to reside somewhere; and if any where, it must, from the spirit of our constitution, as well as from the frequent mention of the king's commission, reside in the crown alone. This method of manning the navy can be considered as only defensible from public necessity, to which all private considerations must give way. The following persons are exempted from being impressed: apprentices for three years; the master, mate, and carpenter, and one man for every 100 tons of vessels employed in the coal trade; all under eighteen years of age and above fifty-five; foreigners in merchant-ships and privateers; landmen betaking themselves to sea for two years; seamen in the Greenland fishery, and harpooners employed during the interval of the fishing season in the coal trade, and giving security to go to the fishing next season. In cases of threatened or actual invasion of a colony, or other unforeseen necessity, commanders of ships of war there may, with consent of the governor and council of the colony, press seamen, to make up their usual complement. Such seamen to be discharged, if they require it, when the service is performed. Captains refusing their discharge to pay the penalty of £50.

Impression is applied to the species of objects which are supposed to make some mark on the senses, the mind, and the memory. The Peripatetics assert, that bodies emit species resembling them, which are conveyed to the common sensorium, and they are rendered intelligible by the active intellect; and, when thus spiritualised, are called expressions, or express species, as being expressed from others.

IMPRIMATUR, a Latin verb, signifying,

Let it be printed, much used on English books printed in the sixteenth and seventeenth centuries, and introducing copies of warrants for their publication, signed by the lord chancellor or other public officer: or when

Some learned decree [would say] 'Tis right,'
And *imprimatur* ushered it to light.

The pope still exercises an authority of this kind on bulls circulated amongst catholics. See INDEX.

IMPRINT', *v. a.* Fr. *imprimer*. To mark on any substance; to fix on the mind and memory.

There is a kind of conveying of effectual and *imprinting* passages, amongst compliments, which is of singular use. *Bacon.*

One of the same seal, *imprinted* upon pieces of wax of different colours. *Holder's Elements of Speech.*

We have al. hose ideas in our understandings which we can make the objects of our thoughts, without the help of those sensible qualities which first *imprinted* them. *Locke.*

Retention is the power to revive again in our minds those ideas, which, after *imprinting*, have disappeared. *Id.*

By familliar acquaintance he has got the ideas of those two different things distinctly *imprinted* on his mind. *Id.*

When we set before our eyes a round globe, the idea *imprinted* in our mind is of a flat circle, variously shadowed. *Id.*

Having surveyed the image of God in the soul of man, we are not to omit those characters of majesty that God *imprinted* upon the body. *South.*

She amidst his spacious meadows flows;
Inclines her urn upon his fattened lands,
And sees his numerous herds *imprint* her sands.
Prior.

IMPRIS'ON, *v. a.* } Fr. *emprisonner*. To
IMPRIS'ONMENT, *n. s.* } shut up; to confine; to keep from liberty: confinement; clausure.

He *imprisoned* was in chains remediless;
For that Hippolytus' rent corse he did redress.
Spenser.

His sinews waxen weak and raw
Through long *imprisonment* and hard constraint.
Id.

Now we are in the street, he first of all,
Improvidently proud, creeps to the wall;
And so *imprisoned* and hemmed in by me,
Sells for a little state his liberty. *Donne.*

At length the flame breaks from the' *imprisoning* cold
With horrid noise, tearing the limber mould;
While down, in liquid tears, the broken vapours rolled. *Fletcher's Purple Island.*

The prince who saw his long *imprisonment*
Now end in never ending liberty;
To meet the victim from his castle went. *Id.*

Which shall I first bewail,
Thy bondage or lost sight?
Thou art become, O worst *imprisonment!*
The dungeon of thyself. *Milton's Agonistes.*

Try to *imprison* the resistless wind;
So swift is guilt, so hard to be confined.
Dryden.

From retentive cage
When sullen Philomel escapes, her notes
She varies, and of past *imprisonment*
Sweetly complains. *Phillips.*

Count Serini, still close prisoner in this castle, lost his senses by his long *imprisonment* and afflictions. *Addison.*

It is not improbable, that all the virtual heat in the juices of vegetables, metals, and minerals, may be owing to the action of the *imprisoned* rays. *Cheyne.*

If a man *imprisons* himself in his closet, and employs reason to find out the nature of the corporeal world, without experiments, he will frame a scheme of chimeras. *Watts.*

It is well if they don't fix the brand of heresy on the man who is leading them out of their long *imprisonment*, and loosing the fetters of their souls. *Id. on the Mind.*

Both the same to me: the after
Freedom as is the first *imprisonment*.
Byron. The Two Foscari.

IMPRISONMENT, in law. No person is to be imprisoned but as the law directs, either by the command or order of a court of record, or by lawful warrant; or the king's process, on which one may be lawfully detained. Where the law gives power to imprison, in such case it is justifiable, provided he that does it in pursuance of a statute, exactly pursues the statute in the manner of doing it; for otherwise it will be deemed false imprisonment, and of consequence is unjustifiable. Every warrant for commitment for imprisoning a person, ought to run, 'till delivered by due course of law,' and not 'until farther order;' which has been held illegal: and thus it also is, where one is imprisoned on a warrant not mentioning any cause for which he is committed.

Every confinement of the person is an imprisonment, whether it be in a common prison or in a private house, or in the stocks, or even by forcibly detaining one in the public streets. Unlawful, or false imprisonment, consists in such confinement or detention without sufficient authority: which authority may arise either from some process from the courts of justice; or from some warrant from a legal power to commit, under his hand and seal, and expressing the cause of such commitment; or from some other special cause warranted, for the necessity of the thing, either by common law or act of parliament; such as the arresting of a felon by a private person without warrant, the impressing of mariners for the public service, or the apprehending of waggoners for misbehaviour in the public highways. False imprisonment also may arise by executing a lawful warrant or process at an unlawful time, as on a Sunday; or in a place privileged from arrests, as in the verge of the king's court. The remedy is of two sorts; the one removing the injury, the other making satisfaction for it. The satisfactory remedy for this injury of false imprisonment, is by an action of trespass vi et armis, usually called an action of false imprisonment; which is generally, and almost unavoidably, accompanied with a charge of assault and battery also; and therein the party shall recover damages for the injuries he has received; and also the defendant is, as for all other injuries committed with force, vi et armis, liable to pay a fine to the king for the violation of the public peace.

IMPROBABIL'ITY, *n. s.* } Fr. *improbable*;
IMPROB'ABLE, *adj.* } Lat. *in* and *probo*.
IMPROB'ABLY, *adv.* } That which is un-
IM'PROBATE, *v. a.* } likely, incredible,
IMPROBA'TION, *n. s.* } or difficult to be

proved: in a manner not approved. Not to approve, improbate; act of disallowing, improbation; which words are not commonly used.

Aristotle tells us, if a drop of wine be put into ten thousand measures of water, the wine, being overpowered, will be turned into water: he speaks very *improbably*. *Boyle.*

As to the *improbabilities* of a spirit appearing, I boldly answer him, that a heroic poet is not tied to the bare representation of what is true, or exceeding probable. *Dryden.*

This account of party-patches will appear *improbable* to those who live at a distance from the fashionable world. *Addison.*

The difficulty and the *improbability* of attempting this successfully is great. *Hammond.*

It warns the reader to expect nothing but truth, and consequently every appearance of fiction in the sequel must produce a bad effect, and bear the mark of *improbability*. *Beattie.*

IMPROB'ITY, *n. s.* Lat. *improbitas, improbus.* Want of honesty; dishonesty; baseness.

He was perhaps excommunicable, yea, and cast out for notorious *improbity*. *Hooker.*

We balance the *improbity* of the one with the *improbity* of the other. *L'Estrange.*

IMPROLIF'ICATE, *v. a.* In and prolific. To impregnate; to fecundate. A word not used.

A difficulty in eggs is how the sperm of the cock *improlificates*, and makes the oval conception fruitful. *Browne.*

IMPROP'ER, *adj.* } Fr. *impropre;* Lat. *im-*
IMPROP'ERLY, *adv.* } *proprius.* Not well adapt-
IMPROPRI'ETY, *n. s.* } ed; unqualified; unfit; inaccurate; wrong: incongruously; out of order or place.

They assuring me of their assistance in correcting my fault where I spoke *improperly*, I was encouraged. *Dryden.*

He disappeared, was rarified;
For 'tis *improper* speech to say he died:
He was exhaled. *Id.*

Improperly we measure life by breath:
Such do not truly live who merit death.
Id. Juvenal.

As every science requires a peculiar genius, so likewise there is a genius peculiarly *improper* for every one. *Burnet.*

Many gross *improprieties*, however authorised by practice, ought to be discarded. *Swift.*

I have heard private tutors complain, that they were obliged to have recourse to flattery or bribery to engage the attention of their pupil; and I need not observe how *improper* it is to set the example of such practices before children. *Beattie.*

IMPRO'PRIATE, *v. a.* } Lat. *in* and *pro-*
IMPROPRIA'TION, *n. s.* } *prius.* To convert
IMPRO'PRIATOR, *n. s.* } to private use: the putting of the possessions of the church in lay hands, is called impropriation; and impropriator is a layman that has such possession.

For the pardon of the rest, the king thought it not fit it should pass by parliament; the better, being matter of grace, to *impropriate* the thanks to himself. *Bacon's Henry VII.*

Having an *impropriation* in his estate, he took a course to dispose of it for the augmentation of the vicarage. *Spelman.*

Mrs. Gulston, being possessed of the *impropriate* parsonage of Bardwell in Suffolk, did procure from the king leave to annex the same to the vicarage. *Id.*

Where the vicar leases his glebe, the tenant must pay the great tythes to the rector or *impropriator*. *Ayliffe's Parergon.*

An *impropriation* is properly so called when the church land is in the hands of a layman; and an appropriation is when it is in the hands of a bishop, college, or religious house, though sometimes these terms are confounded. *Id.*

IMPROS'PEROUS, *adj.* } In and prosper-
IMPROS'PEROUSLY, *adv.* } ous. Unhappy; unfortunate; unsuccessful.

This experiment has been but very *improsperously* attempted. *Boyle.*

Seven revolting years are wholly run,
Since the *improsperous* voyage we begun.
Dryden.

This method is in the design probable, how *improsperous* soever the wickedness of men hath rendered the success of it. *Hammond.*

Our pride seduces us at once into the guilt of bold, and punishment of *improsperous* rebels. *Decay of Piety.*

IMPROV'ABLE, *adj.* }
IMPROV'ABLENESS, *n. s.* }
IMPROV'ABLY, *adv.* }
IMPROVE', *v. n.* & *v. a.* } Fr. *improuver;* Lat. *in* and *probus*, quasi probum facere.—Skinner. To approach, or advance any thing or being, nearer to perfection; to make attainment in goodness: improvable, capable of being made better: improvably, in a manner that admits of amelioration: improvement, melioration; alteration for the better; progress; instruction; edification: improver, any person or thing that conduces to this progress. There is an old meaning to improve, viz. to disprove; but this is obsolete.
IMPROVE'MENT, *n. s.* }
IMPROV'ER, *n. s.* }

Though the prophet Jeremy was unjustly accused, yet doth that *improve* any thing that I have said? *Whitgifte.*

I love not to *improve* the honour of the living by impairing that of the dead. *Denham.*

They were the greatest *improvers* of those qualifications with which courts used to be adorned. *Clarendon.*

Man is accommodated with moral principles, *improvable* by the exercise of his faculties. *Hale's Origin of Mankind.*

Adventures in knowledge are laudable, and the essays of weaker heads afford *improvable* hints unto better. *Browne.*

They have it by tradition from their mothers
Which they *improve* each day, and grow more exquisite! *Otway's Atheist.*

Some virtues tend to the preservation of health, and others to the *improvement* and security of estates. *Tillotson.*

The first started ideas have been examined, and many effectually confuted by the late *improvers* of this way. *Locke.*

Animals are not *improvable* beyond their proper genius: a dog will never learn to mew, nor a cat to bark. *Grew.*

I look upon your city as the best place of *improvement*; from the school we go to the university, but from the universities to London. *South.*

There is a design of publishing a history of architecture, with its several *improvements* and decays. *Addison.*

The parts of Sinon, Camilla, and some few others, are *improvements on* the Greek poet. *Id.*

I have a fine spread of *improvable* lands, and am already planting woods and draining marshes. *Id. Spectator*

We take care to *improve* in our frugality and diligence; virtues which become us, particularly in times of war. *Atterbury.*

Homer is like a skilful *improver*, who places a beautiful statue so as to answer several vistas. *Pope.*

Heaven seems *improved* with a superior ray,
And the bright arch reflects a double day. *Id.*

We have stock enough, and that too of so *improvable* a nature, that it is capable of infinite advancement. *Decay of Piety.*

Virtue, our present peace, our future prize,
Man's unprecarious natural estate
Improveable at will, in virtue lies
Its tenure sure; its income is divine. *Young.*

The few that pray at all pray oft amiss;
And seeking grace to' *improve* the prize they hold
Would urge a wiser suit, than asking more.
Cowper.

For this was all thy caution?
For this thy painful labours at the glass,
To' *improve* those charms, and keep them in repair,
For which the spoiler thanks thee not?
Blair's Grave.

Who can tell what happy, what glorious effects might be produced, were an equal proportion of industry applied to the regulations of the passions and the strengthening and *improving* the reasonable powers. *Beattie.*

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. Childe Harold.

I am not prepared to sacrifice or to hazard the fruits of centuries of experience, of centuries of struggles, and of more than one century of liberty as perfect as ever blessed any country upon the earth, for visionary schemes of ideal perfectibility, or doubtful experiments, even of possible *improvement.* *Canning.*

IMPROVI'DED, *adj.* IMPROV'IDENCE, *n. s.* IMPROV'IDENT, *adj.* IMPROV'IDENTLY, *adv.* IMPROVIS'ION, *n. s.* MPROVISATO'RE, *n. s.* IMPROVIS'ATRICE, *n. s.* Fr. *imprevu*; Lat. *improvisus.* Unforeseen; unexpected: improvidence, want of caution; want of forethought: improvident, wanting care to provide: improvidently, without care or forethought; improvisatore and improvisatrice, extemporaneous composers, or speakers, in prose or poetry.

She suborned hath
This crafty messenger with letters vain,
To work new woe, and *improvided* scath,
By breaking off the band betwixt us twain.
Spenser.

Improvident soldiers, had your watch been good,
This sudden mischief never could have fallen.
Shakspeare.

Now we are in the street, he first of all,
Improvidently proud, creeps to the wall;
And so imprisoned and hemmed in by me,
Sells for a little state his liberty. *Donne.*

When men well have fed, the blood being warm,
Then are they most *improvident* of harm. *Daniel.*

I shall conclude this digression, and return to the time when that brisk and *improvident* resolution was taken. *Clarendon.*

Men would escape floods by running up to mountains; and, though some might perish through *improvidence*, many would escape. *Hale.*

This were an *improvident* revenge in the young ones, whereby they must destroy themselves. *Browne.*

Her *improvision* would be justly accusable. *Id.*

The *improvidence* of my neighbour must not make me inhuman. *L'Estrange.*

Of this I'm sure at least there's no servility
In mine irregularity of chime,
Which rings what's uppermost of new or hoary,
Just as I feel the *improvisatore.*
Byron, Don Juan.

IMPRU'DENCE, *n. s.* IMPRU'DENT, *adj.* Fr. *imprudence*; Lat. *in* and *prudens.* Want of prudence; indiscretion; negligence: inattention to interest.

There is no such *imprudent* person as he that neglects God and his soul. *Tillotson.*

IM'PUDENCE, *n. s.* IM'PUDENCY, *n. s.* IM'PUDENT, *adj.* IM'PUDENTLY, *adv.* French, *impudence*; Latin, *impudentia*, and *pudens.* Immodesty; shamelessness: unchaste; rude; saucy.

Impuden' is he that, for his pride, hath no shame of his sinnes. *Chaucer. The Persones Tale.*

At once assail
With open mouths, and *impudently* rail. *Sandys.*

That when the haughty Titanesse beheld,
All were she fraught with pride and *impudence*;
Yet with the sight thereof was almost queld.
Spenser. Faerie Queene.

I ne'er heard yet
That any of these bolder vices wanted
Less *impudence* to gainsay what they did,
Than to perform it first.
Shakspeare. Winter's Tale.

It is not a confident brow, nor the throng of words that come with such more than *impudent* sawciness from you, can thrust me from a level consideration. *Id. Henry IV.*

Why should soft Fabius *impudently* bear
Names gained by conquest in the Gallic war?
Why lays he claim to Hercules his strain,
Yet dares be base, effeminate, and vain? *Dryden.*

When we behold an angel, not to fear,
Is to be *impudent.* *Id. Spanish Fryar.*

IMPUGN,' *v. a.* IMPUGN'ER, *n. s.* Fr. *impugner*; Lat. *impugno.* To attack or assault by law or argument.

Of a strange nature is the suit you follow;
Yet in such rule, that the Venetian law
Cannot *impugn* you.
Shakspeare. Merchant of Venice.

St. Hierom reporteth, that he saw one of these in his time; but the truth hereof I will not rashly *impugn*, or over boldly affirm. *Peacham on Drawing.*

I cannot think myself engaged to discourse of lots; as to their nature, use, and allowableness; and that not only in matters of moment and business, but also of recreation, which is *impugned* by some, though better defended by others. *South.*

IMPU'ISSANCE, *n. s.* Fr. Impotence; inability; weakness; feebleness.

As he would not trust Ferdinando and Maximilian for supports of war, so the *impuissance* of the one, and the double proceeding of the other, lay fair for him for occasions to accept of peace. *Bacon.*

IM'PULSE, *n. s.* IMPUL'SION, *n. s.* IMPUL'SIVE, *adj.* Fr. *impulsion*: Lat. *impulsus*, from *in* and *pello.* Communicated force; the effect of one body acting upon another; influence acting on the mind; idea impressed: impulsion, the agency of body in motion upon body;

nfluence acting on the mind: impulsive, having he power of impulse.

The motion in the minute parts of any solid body asseth without sound; far that sound that is heard ometimes is produced only by the breaking of the air, nd not by the *impulsion* of the air. *Bacon.*

To the *impulsion* there is requisite the force of the ody that moveth, and the resistance of the body that moved; and if the body be too great it yieldeth oo little; and if it be too small it resisteth too little. *Id. Natural History.*

Nature and duty bind him to obedience;
But, those being placed in a lower sphere,
His fierce ambition, like the highest mover,
Has hurried with a strong *impulsive* motion
Against their proper course. *Denham's Sophy.*

But thou didst plead
Divine *impulsion*, prompting how thou mightest
Find some occasion to infest our foes.
Milton's Agonistes.

These were my natural *impulses* for the undertaking; it there was an accidental motive, which was full as rcible. *Dryden.*

Mean time, by Jove's *impulse*, Mezentius armed, icceeded Turnus. *Id.*

Moses saw the bush burn without being consumed, id heard a voice out of it: this was something beides finding an *impulse* upon his mind to go to Phaoh, that he might bring his brethren out of Egypt. *Locke.*

odies produce ideas in us manifestly by *impulse*. *Id.*

What is the fountain, or *impulsive* cause, of this prention of sin? It is perfectly free grace. *South.*

If these little *impulses* set the great wheels of devon on work, the largeness and height of that shall t at all be prejudiced by the smallness of its occaon. *Id.*

Like two great rocks against the raging tide,
Unmoved the two united chiefs abide,
Sustain the' *impulse*, and receive the war. *Prior.*

Poor men! poor papers! we and they
Do some *impulsive* force obey,
And are but played with, do not play. *Id.*

Bodies, from the *impulse* of a fluid, can only gravie in proportion to their surfaces, and not according their quantity of matter, which is contrary to expence. *Cheyne.*

But they were not aware that there are things
hich make revenge a virtue by reflection,
d not an *impulse* of mere anger.
Byron. Doge of Venice.

The *impulse* once given may be too impetuous to be trolled, and, intending only to change the guidance the machine, they may hurry it and themselves to etrievable destruction. *Canning.*

IMPU'NITY, *n.s.* Fr. *impunté*; Lat. *impunitas*. Freedom from punishment; exemption m punishment.

n the condition of subjects they will gladly conie, as long as they may be protected and justly erned, without oppression on the one side or *imity* on the other. *Davies.*

A general *impunity* would confirm them; for the gar will never believe that there is a crime where y see no penalty. *Addison.*

Men, potent in the commonwealth, will employ r ill-gotten influence towards procuring *impunity*, xtorting undue favours, for themselves or depents. *Atterbury.*

IMPURE', *adj.* IMPURE'LY, *adv.* IMPURE'NESS, *n.s.* IMPU'RITY, *n.s.* Fr. *impurité*; Lat. *impuritas*. From *in* and *purus*. Want of sanctity, holiness, or chastity; feculent admixture: defiled with guilt: whatever is contrary to sanctity or purity, either in persons or things.

He daily did apply himselfe to donne
All dewfull service, voide of thoughts *impure*
Ne any paines ne perill did he shonne.
Spenser. Faerie Queene.

If black scandal, or foul-faced reproach,
Attend the sequel of your imposition,
Your meer enforcement shall acquittance me
From all the *impure* blots and stains thereof.
Shakspeare.

No more can *impure* man retain and move
In that pure region of a worthy love,
Than earthly substance can unforced aspire,
And leave his nature to converse with fire.
Donne.

Hypocrites austerely talk,
Condemning as *impure* what God has made
Pure, and commands to some, leaves free to all.
Milton.

One could not devise a more proper hell for an *impure* spirit, than that which Plato has touched upon. *Addison.*

Foul *impurities* reigned among the monkish clergy. *Atterbury.*

Cleanse the alimentary duct by vomiting, and clysters, the *impurities* of which will be carried into the blood. *Arbuthnot.*

IMPURITY, in the law of Moses, is any legal defilement. Of these there were several sorts. Some were voluntary, as the touching a dead body, or any animal that died of itself, or any creature that was esteemed unclean; or the touching things holy, by one who was not clean, or was not a priest; the touching one who had a leprosy, or who was polluted by a dead carcase, &c. Sometimes these impurities were involuntary; as when any one inadvertently touched bones, or a sepulchre, or any thing polluted; or fell into such diseases as pollute, as the leprosy, &c. The beds, clothes, and moveables which had touched any thing unclean, contracted also a kind of impurity, and, in some cases, communicated it to others. These legal pollutions were generally removed by bathing, and lasted no longer than the evening. The persons polluted immersed themselves in water, and either had their clothes on when they did so, or washed their clothes separately. Other pollutions continued seven days, as that which was contracted by touching a dead body. That of women in their monthly courses lasted till this was over with them; that of women after child-birth lasted forty days after the birth of a boy, and fifty after that of a girl. Others lasted till the person was cured. Many of these pollutions were expiated by sacrifices; and others by water mixed with the ashes of a red heifer, sacrificed on the great day of expiation. When the leper was cured he went to the temple, and offered two birds, one of which was killed, and the other set at liberty. He who had touched a dead body, or had been present at a funeral, was to be purified with the water of expiation, upon pain of death. A woman after child-birth offered a turtle and a lamb for her expiation; or, if poor, two turtles, or two young pigeons. Those impurities, which are accurately described in the law of Moses, were only figures of those

more important impurities, the sins and iniquities committed against God or our fellow creatures. The saints and prophets of the Old Testament were sensible of this; and our Saviour has strongly inculcated, that, not outward and corporeal pollutions, but such inward pollutions as the violations of justice, truth, and charity, defile the soul, and render it polluted in the sight of God.

To IMPU'RPLE, *v. a.* Fr. *empourprer*. From purple. To make red; to color as with purple.

Now in loose garlands, thick thrown off the bright
Pavement, that like a sea of jasper shone,
Impurpled with celestial roses smiled. *Milton.*

IMPU'TABLE, *adj.* } Fr. *imputer;* Latin
IMPU'TABLENESS, *n. s.* } *imputo.* Chargeable
IMPUTA'TION, *n. s.* } upon any one; that of
IMPU'TATIVE, *adj.* } which one may be
IMPUTE', *v. a.* } accused: imputable-
IMPU'TER, *n. s.* } ness, the quality of being imputable: imputation, attribution of any thing, but generally of ill; censure; reproach; hint: impute, to charge upon or accuse; sometimes to attribute good; to reckon to one what is not strictly his own.

It was *imputed* to him for righteousness.
Romans iv. 22.

Whatsoever happens they also the least feel that scourge of vulgar *imputation*, which notwithstanding they deserve. *Hooker.*

Trust to me, Ulysses;
Our *imputation* shall be oddly poised
In this wild action.
Shakspeare. Troilus and Cressida.

If a son that is sent by his father about merchandise do fall into some lewd action, the *imputation* of his wickedness, by your rule, should be imposed upon his father. *Shakspeare.*

Antonio is a good man.
—Have you heard any *imputation* to the contrary?
—No, no; my meaning is to have you understand me that he is sufficient. *Id. Merchant of Venice.*

If I had a suit to master Shallow, I would humour his men with the *imputation* of being near their master. *Shakspeare.*

Men in their innovations should follow the example of time, which innovateth but quietly, and by degrees scarce to be perceived; for otherwise whatsoever is new and unlooked for, even mends some, and impairs others; and he that is holpen takes it for a fortune, and thanks the time; and he that is hurt for a wrong, *imputeth* it to the author. *Bacon's Essays.*

Thy merit
Imputed shall absolve them who renounce
Their own both righteous and unrighteous deeds.
Milton.

To use intellections and volitions in the infinite essence, as an hypothesis is allowable, but a rigorous *imputation* is derogatory to him, and arrogant in us. *Glanville's Scepsis.*

I made it by your persuasion, to satisfy those who *imputed* it to folly. *Temple.*

Impute your dangers to our ignorance. *Dryden.*

I have formerly said that I could distinguish your writings from those of any others: 'tis now time to clear myself from any *imputation* of self-conceit on that subject. *Id.*

This obscurity cannot be *imputed* to want of language in so great a master of style. *Locke.*

'Tis necessary to the *imputableness* of an action, that it be avoidable. *Norris.*

That first sort of foolishness is *imputable* to them. *South.*

Let us be careful to guard ourselves against these groundless *imputations* of our enemies, and to rise above them. *Addison.*

If the wife departs from her husband, through any default of his, as on the account of cruelty, then he shall be compelled to allow her alimony; for the law deems her to be a dutiful wife as long as the fault lies at his door, and she is in no wise *imputable*. *Ayliffe.*

Neither do I reflect upon the memory of his late majesty, whom I entirely acquit of any *imputation* upon this matter. *Swift.*

I have read a book *imputed* to lord Bathurst, called a dissertation on parties. *Id.*

Nor you, ye proud, *impute* to these the fault,
If memory o'er their tomb no trophies raise,
Where thro' the long-drawn aisle and fretted vault,
The pealing anthem swells the note of praise.
Gray's Elegy.

IN, *prep.* Lat. *in.* Noting the place where any thing is present; not without.

In school of love are all things taught we see;
There learned this maid of arms the ireful guise.
Fairfax.

Is this place here not sufficient strong
To guard us *in?* *Daniel's Civil War.*

And what they pleased to do with the young khan
In heaven, I know not, nor pretend to guess.
Byron.

Noting the state or thing present at any time.

In Armorike, that called is Bretaigne,
Ther was a knight, that loved and did his peine
To serve a ladie *in* his beste wise.
Chaucer. The Frankeleines Tale.

The other is only by error and misconceit named the ordinance of Jesus Christ: no one proof is yet brought forth, whereby it may clearly appear to be so *in* very deed. *Hooker.*

Like one of two contending in a prize,
That thinks he hath done well *in* people's eyes.
Shakspeare.

Sir Edmund Courtney, and the haughty prelate,
With many more confederates, are *in* arms. *Id.*

Danger before, and *in*, and after the act,
You needs must grant is great.
Daniel's Civil War.

However it be *in* knowledge, I may truly say it is of no use at all *in* probabilities; for the assent there, being to be determined by the preponderancy, after a due weighing of all the proofs on both sides, nothing is so unfit to assist the mind *in* that as syllogism. *Locke.*

God hath made our eternal and temporal interests, *in* most cases, very consistent. *Smalridge's Sermons.*

None was so little *in* their friendships, or so much *in* that of those whom they had most abused. *Dunciad.*

Noting the time.

When we would consider eternity a parte ante, what do we but, beginning from ourselves and the present time we are *in*, repeat *in* our minds the ideas of years or ages past? *Locke.*

Noting power.

To feed men's souls, quoth he, is not *in* man.
Hubberd's Tale.

Noting proportion.

Let usury *in* general be reduced to five *in* the hundred, and let that rate be proclaimed to be free and current. *Bacon.*

I cannot but lament the common course, which, at least, nine *in* ten of those who enter into the ministry are obliged to enter. *Swift.*

According to.

In all likelihood I brought all my limbs out of the bed, which, 'tis probable, he has not done off the breach. *Collier.*

Concerning.

I only consider what he, who is allowed to have carried this argument farthest, has said *in* it. *Locke.*

For the sake of. A solemn phrase.

Now, *in* the names of all the gods at once,
Upon what meat does this our Cæsar feed,
That he is grown so great?
Shakspeare. Julius Cæsar.

In the name of the people,
And *in* the power of us the tribunes, we
Banish him our city. *Id. Coriolanus.*

Now, *in* the name of honour, Sir, I beg you
That I may see your father's death revenged.
Dryden.

Noting cause.

King Henry, be thy title right or wrong,
Lord Clifford vows to fight *in* thy defence.
Shakspeare.

In that. Because.

Some things they do *in that* they are men; *in that* they are wise men, and christian men, some things; some things *in that* they are men misled, and blinded with error. *Hooker.*

He cannot brook such disgrace well, as he shall run into; *in that* it is a thing of his own search.
Shakspeare.

In as much. Since; seeing that.

Those things are done voluntarily by us, which other creatures do naturally, *in as much* as we might stay our doing of them if we would. *Hooker.*

IN, *adv.*

Within some place; not out.

I fear me, you'll be *in* 'till then. *Shakspeare.*

Now painter, shew us *in* the blocks and dye
The counsellors of all this villany. *Marvell.*

How infamous is the false, fraudulent, and unconscionable person: especially if he be arrived at that consummate and robust degree of falsehood as to play *in* and out, and shew tricks with oaths, the sacredest bonds which the conscience of man can be bound with. *South.*

Engaged to any affair.

We know the worst can come; 'tis thought upon:
We cannot shift being *in*, we must go on. *Daniel.*

These pragmatical flies value themselves for being *in* at every thing, and are found at last to be just good for nothing. *L'Estrange.*

Placed in some state.

Poor rogues talk of court news,
Who loses and who wins; who's *in*, who's out.
Shakspeare.

Must never patriot then declaim at gin,
Unless, good man, he has been fairly *in*? *Pope.*

Noting immediate entrance.

Go to thy fellows; bid them cover the table, serve *in* the meat, and we will come *in* to dinner.
Shakspeare.

He's too big to go *in* there: what shall I do?
—Let me see't; I'll *in*, I'll *in*: follow your friend's advice.
I'll *in*. *Id. Merry Wives of Windsor.*

Into any place.

Next fill the hole with its own earth again,
And trample with thy feet, and tread it *in*.
Dryden.

Is it not more eligible to come *in* with a smooth gale, than to be tossed at sea with a storm? *Collier.*

In the said cavity lies loose the shell of some sort of bivalve larger than could be introduced *in* at those holes. *Woodward.*

Close; home.

The posture of left-handed fencers is so different from that of the right handed, that you run upon their swords if you push forward; and they are *in* with you, if you offer to fall back without keeping your guard. *Tatler.*

In has commonly in composition a negative or privative sense, as in the Latin; so active denotes that which acts, inactive that which does not act. In before *r* is changed into *r*; as irregular: before *l* into *l*; as illative: and into *m* before some other consonants, as, improbable.

INA, in biography, one of the most illustrious princes in the Saxon heptarchy, succeeded to the throne of Wessex in 689, and began his reign by endeavouring to extend his dominions by force of arms. He invaded Kent, but was induced, by a large subsidy, to desist from his enterprise. He soon after obtained possession of Cornwall and Somersetshire, which he annexed to his kingdom, treating the vanquished with a degree of humanity but little practised by the Saxon conquerors. By his code of laws he is placed at the head of the Saxon kings as a legislator; and, though disturbed by occasional insurrections at home, his long reign of thirty-seven years may be regarded as one of the most prosperous of the heptarchy. In the decline of life he made a pilgrimage to Rome, and, after his return, retired to a cloister where he died.

INABIL'ITY, *n. s.* *In* and ability. Impuissance; impotence; want of power.

If no natural nor casual *inability* cross their desires, they, always delighting to inure themselves with actions most beneficial to others, cannot but gather great experience, and through experience the more wisdom.
Hooker.

Neither ignorance nor *inability* can be pretended: and what plea can we offer to divine justice to prevent condemnation? *Rogers.*

INAB'STINENCE, *n. s.* In and abstinence. Intemperance; want of power to abstain; prevalence of appetite.

Diseases dire; of which a monstrous crew
Before thee shall appear, that thou may'st know
What misery the *inabstinence* of Eve
Shall bring on man. *Milton.*

INACCES'SIBLE, *adj.* Fr. *inaccessible*; *in* and accessible. Not to be reached; not to be approached.

Whate'er you are,
That in this desert *inaccessible*,
Under the shade of melancholy boughs,
Lose and neglect the creeping hours of time.
Shakspeare.

Many other hidden parts of nature, even of a far lower form, are *inaccessible* to us. *Hale.*

And by proof we feel
Our power sufficient to disturb his heaven,
And with perpetual inroads to alarm,
Though *inaccessible*, his fatal throne:
Which, if not victory, is yet revenge.
Milton. Paradise Lost.

There shall we see the ends and uses of these things, which here were either too subtile for us to penetrate, or too remote and *inaccessible* for us to come to any distant view of. *Ray.*

This part, which is so noble, is not altogether *inaccessible*; and that an easy way may be found to it, 'tis to consider nature and to copy her. *Dryden.*

Ye, to whom the tops
Of mountains *inaccessible* are haunts,
And earth's and ocean's caves familiar things—
I call upon you. *Byron. Manfred.*

INAC'CURACY, *n. s.* } *In* and accurate.
INAC'CURATE, *adj.* } Want of exactness; not accurate; used sometimes of persons, but more frequently of performances.

A sentiment which is expressed in accurate language, and in a period, clearly, neatly, and well arranged, always makes a stronger impression on the mind, than one that is expressed *inaccurately*, or in a feeble or embarassed manner. *Murray.*

INAC'TION, *n. s.* } Fr. *inaction*; Lat. *in*
INAC'TIVE, *adj.* } and *ago*. Cessation from
INAC'TIVELY, *adv.* } or forbearance of labor;
INACTIV'ITY, *n. s.* } not busy; idle; indolent; sluggish: without motion; in a state of rest; sluggishness.

In seasons of perfect freedom, mark how your son spends his time; whether he *inactively* loiters it away, when left to his own inclination. *Locke.*

A doctrine which manifestly tends to discourage the endeavours of men, to introduce a lazy *inactivity*, and neglect of the ordinary means of grace. *Rogers.*

The times and amusements past are not more like a dream to me, than those which are present: I lie in a refreshing kind of *inaction*. *Pope.*

Virtue, concealed within our breast,
Is *inactivity* at best. *Swift.*

INAD'EQUATE, *adj.* } Lat. *in* and *adæ-*
INAD'EQUATELY, *adv.* } *quo*. Not equal to the purpose; defective; falling below the proportion; not completely.

These pores they may either exactly fill, or but *inadequately*. *Boyle.*

Remorse for vice
Not paid, or paid *inadequate* in price,
What farther means can reason now direct? *Dryden.*

Inadequate ideas are such, which are but a partial or incomplete representation of these archetypes to which they are referred. *Locke.*

INADVER'TENCE, *n. s.* } Fr. *inadvertence*;
INADVER'TENCY, *n. s.* } Lat. *in* and *adver-*
INADVER'TENT, *adj.* } *tens*. Careless-
INADVER'TENTLY, *adv.* } ness; negligence; act or effect of inattention.

From an habitual heedless *inadvertency*, men are so intent upon the presen that they mind nothing else. *L'Estrange.*

There is a difference between them, as between *inadvertency* and deliberation, between surprise and set purpose. *South.*

The productions of a great genius, with many lapses and *inadvertencies*, are infinitely preferable to the works of an inferior kind of author, which are scrupulously exact. *Addison.*

Aristotle mentions Telegonus as the son of Circe and Ulysses, who afterwards slew his father with the bone of a fish *inadvertently*. *Broome.*

Worthy persons, if *inadvertently* drawn into a deviation, will endeavour instantly to recover their lost ground. *Clarissa.*

An *inadvertent* step may crush the snail
That crawls at evening in the public path,
But he that has humanity, forewarned,
Will tread aside and let the reptile live. *Cowper.*

INA'LIENABLE, *adj.* *In* and alienable. That cannot be alienated, or granted to another.

INAL'IMENTAL, *adj.* *In* and alimental. Affording no nourishment.

Dulcoration importeth a degree to nourishment; and the making of things *inalimental* to become alimental, may be an experiment of great profit for making new victual. *Bacon.*

INAMIS'SIBLE, *adj.* Fr. *inammissible*; Lat. *in* and *amissum*. Not to be lost.

These advantages are *inamissible*. *Hammond.*

INANE', *adj.* } Fr. *inanimé*, *inani-*
INAN'IMATE, *v. a.* & *adj.* } *tion*; Lat. *inanis*, *in-*
INAN'IMATED, *adj.* } *animatus*. Empty;
INANI'TION, *n. s.* } void; either in body
INAN'ITY, *n. s.* } or mind; want of fulness in the vessels of the animal: inanimate, void of life; without animation; to animate or quicken; not now used in this sense: inanity, emptiness; void of space: inanition, deficiency in the vessels of any animal body.

The spirits of animate bodies are all in some degree kindled; but *inanimate* bodies have spirits no whit inflamed. *Bacon.*

There's a kind of world remaining still,
Though she which did *inanimate* and fill
The world be gone; yet in this last long night
Her ghost doth walk, that is, a glimmering light. *Donne.*

This opinion excludes all such *inanity*, and admits no vacuities but so little ones as no body whatever can come to, but will be bigger than they, and must touch the corporal parts which those vacuities divide. *Digby on Bodies.*

The golden goddess, present at the prayer,
Well knew he meant the' *inanimated* fair,
And gave the sign of granting. *Dryden.*

We sometimes speak of place in the great *inane*, beyond the confines of the world. *Locke.*

Weakness which attends fevers proceeds from too great fulness in the beginning, and too great *inanition* in the latter end of the disease. *Arbuthnot on Diet.*

All the ideas of sensible qualities are not inherent in the *inanimate* bodies; but are the effects of their motion upon our nerves. *Bentley.*

Both require the constant influence of a principle different from that which governs the *inanimated* part of the universe. *Cheyne.*

From roofs when Verrio's colours fall,
And leave *inanimate* the naked wall,
Still in thy song should vanquished France appear. *Pope.*

Could it be pride?
Or modesty, or absence, or *inanity*?
Byron. Don Juan.

INAP'PETENCY, *n. s.* Lat. *in* and *appetentia*. Want of appetite.

INAP'PLICABLE, *adj.* } Lat. *in* and *applico*.
INAPPLICABIL'ITY, *n. s.* } Not adapted to a
INAPPLICA'TION, *n. s.* } particular use; unfit for the purpose:- inapplication, indolence or negligence.

INAR'ABLE, *adj.* Lat. *in* and *aro*. Incapable of tillage.

INARCHING, in gardening. See GRAFTING.

INARTIC'ULATE, *adj.* } Fr. *inarticulé*;
INARTIC'ULATELY, *adv.* } Lat. *in* and *articu-*
INARTIC'ULATENESS, *n. s.* } *lus*. Indistinct utterance; confusion of sounds; want of clearness in pronunciation.

Observe what *inarticulate* sounds resemble any of the particular letters.

Wilkins's Mathematical Magic.

By the harmony of words we elevate the mind to a sense of devotion; as our solemn musick, which is *inarticulate* poesy, doth in churches. *Dryden.*

INARTIFIC'IAL, *adj.* } Lat. *in, artem, facio.*
INARTIFIC'IALLY, *adv.* } Contrary to, or without art; natural.

This lofty humour is clumsily and *inartificially* managed, when it is effected by those of a self-denying profession. *Collier.*

I have ranked this among the effects; and it may be thought *inartificial* to make it the cause also.

Decay of Piety.

INATTEN'TION, *n. s.* } Fr. *inattention;*
INATTEN'TIVE, *adj.* } Lat. *in, attentus.*
INATTEN'TIVELY, *adv.* } Disregard; neglect; heedlessness: without care: in an indifferent manner.

Persons keep out of the reach of the reproofs of the ministry, or hear with such *inattention* or contempt as renders them of little effect. *Rogers.*

We see a strange *inattention* to this most important prospect. *Id.*

Novel lays attract our ravished ears;
But old, the mind with *inattention* hears. *Pope.*

If we indulge the frequent roving of passions, we shall procure an unsteady and *inattentive* habit.

Watts.

What prodigies can power divine perform
More grand than it produces year by year,
And all in sight of *inattentive* man? *Cowper.*

INAU'DIBLE, *adj.* In and audible. Not to be heard; void of sound.

Let's take the instant by the forward top;
For we are old, and on our quickest decrees
The' *inaudible* and noiseless foot of time
Steals, ere we can effect them. *Shakspeare.*

INAU'GURATE, *v. a.* } Lat. *inauguro.* To
INAUGURA'TION, *n. s.* } consecrate, or invest with a new office by solemn rites; to begin with good omens.

The royal olive was solemnly sworn, at his *inauguration*, to observe these things inviolable. *Howel.*

At his regal *inauguration* his old father resigned the kingdom to him. *Browne's Vulgar Errours.*

And after the manner which the Roman Catholic church before time hath observed in anointing and *inaugurating* kings, we will anoint and *inaugurate* him.

Milton. Prose Works.

Those beginnings of years were propitious to him, as if kings did chuse remarkable days to *inaugurate* their favours, that they may appear acts as well of the time as of the will. *Wotton.*

INAURATION, *n. s.* Lat. *inauro.* The art of gilding or covering with gold.

The Romans had the art of gilding after our manner; but some sort of their *inauration*, or gilding, must have been much dearer than ours.

Arbuthnot on Coins.

INAUSPI'CIOUS, *adj.* In and auspicious. Ill-omened; unlucky; unfortunate.

Oh here
I will set up my everlasting rest;
And shake the yoke of *inauspicious* stars
From this world-wearied flesh. *Shakspeare.*

Though Heaven's *inauspicious* eye
Lay black on love's nativity,
Her eye a strong appeal can give;
Beauty, smiles, and love shall live.

Crashaw.

The stars feel not the diseases their *inauspicious* influence produces. *Boyle.*

With *inauspicious* love a wretched swain
Pursued the fairest nymph of all the plain;
She plunged him hopeless in a deep despair.

Dryden.

INBE'ING, *n. s.* In and being. Inherence; inseparableness.

When we say the bowl is round, the boy is witty, these are proper or inherent modes; for they have a sort of *inbeing* in the substance itself, and do not arise from the addition of any other substance to it.

Watts.

IN'BORN, *adj.* In and born. Innate; implanted by nature.

Led by sense of good,
Inborn to all, I sought my needful food.

Dryden.

All passions being *inborn* within us, we are almost equally judges of them. *Id.*

Some Carolina, to Heaven's dictates true,
Thy *inborn* worth with conscious eyes shall see
And slight the imperial diadem for thee.

Addison.

Monarch of the climes,
And those who dwell in them; for, near or far,
Our *inborn* spirits have a tint of thee,
Even as our outward aspects;—thou dost rise,
And shine, and set in glory, Fare thee well!

Byron. Manfred.

INBRE'ATHED, *adj.* In and breathe. Inspired; infused by inspiration.

Blest pair of Syrens, pledges of Heaven's joy,
Sphere-born harmonious sisters Voice and Verse,
Wed your divine sounds, and mixt power employ,
Dead things with *inbreathed* sense, able to pierce.

Milton.

I'NBRED, *adj.* In and bred. Produced within; hatched or generated within.

My *inbred* enemy
Forth issued. *Milton's Paradise Lost.*

A man thinks better of his children than they deserve; but there is an impulse of tenderness, and there must be some esteem for the setting of that *inbred* affection at work. *L'Estrange.*

But he unmoved contemns their idle threat;
And *inbred* worth doth boasting valour slight!

Dryden.

INCA, or YNCA, an appellation anciently given by the native Peruvians to the kings of that country, and the princes of their blood. Pedro de Cieca, in his Chronicles of Peru, gives the origin of the incas: that country had been for a long time the theatre of all sorts of crimes, war, and dissensions, till at last two brothers appeared, one of whom was called Mango Capac, of whom the Peruvians relate many wonders. He built the city of Cusco, made laws, established order and harmony by his wise regulations; and he and his descendants took the name of inca, which signifies king or great lord. These incas became so powerful, that they rendered themselves masters of all the country from Chili to Quito, and from the Maul on the south to the Augasmago on the north, these two rivers forming the bounds of their empire, which extended above 1300 leagues in length. This they enjoyed till the divisions

between Huascar and Atabalipa; at which time the Spaniards made themselves masters of the country, and destroyed the empire of the incas in 1533.

INCAGE', *v. a.* In and cage. To coop up; to shut up; to confine in a cage, or any narrow space.

And yet *incaged* in so small a verge,
Thy waste is no whit lesser than thy lord's.
Shakspeare.

It made my imprisonment a pleasure,
Ay, such a pleasure as *incaged* birds
Conceive. *Id. Henry VI.*

INCALES'CENCE, *n. s.* } Latin *incalesco.*
INCALES'CENCY. } The state of growing warm, warmth; incipient heat.

Averroes restrained his hilarity, making no more thereof than Seneca commendeth, and was allowable in Cato; that is, a sober *incalescence*, and regulated estuation from wine. *Browne.*

The oil preserves the ends of the bones from *incalescency*, which they, being solid bodies, would necessarily contract from a swift motion. *Ray.*

INCANTA'TION, *n. s.* } Fr. *incantation;*
INCAN'TATORY, *adj.* } Lat. *incanto.* A charm uttered by singing; enchantment: incantatory, dealing by enchantment; magical.

My antient *incantations* are too weak,
And hell too strong. *Shakspeare. Henry VI.*

By Adam's heakening to his wife, mankind, by that her *incantation*, became the subject of labour, sorrow, and death. *Raleigh.*

The great wonders of witches, their carrying in the air, and transforming themselves into other bodies, as reported to be wrought, not by *incantations* or ceremonies, but by anointing themselves all over, move a man to think that these fables are the effects of imagination; for ointments, if laid on any thing thick, by stopping of the pores, shut in the vapours, and send them to the head extremely.
Bacon's Natural History.

The name of a city being discovered unto their enemies, their penates and patronal gods might be called forth by charms and *incantations.* *Browne.*

Fortune-tellers, jugglers, geomancers, and the like *incantatory* impostors, daily delude them. *Id.*

The nuptial rites his outrage strait attends;
The dower desired is his transfigured friends:
The *incantation* backward she repeats,
Inverts her rod, and what she did, defeats.
Garth.

The commands which our religion hath imposed on its followers are not like the absurd ceremonies of pagan idolatry, that might look like *incantations* and magick, but had no tendency to make mankind the happier. *Bentley.*

INCAN'TON, *v. a.* In and canton. To unite to or into a canton or separate community.

When the cantons of Bern and Zurich proposed the incorporating Geneva in the cantons, the Roman Catholics, fearing the protestant interest, proposed the *incantoning* of Constance as a counterpoise.
Addison on Italy.

INCAPABIL'ITY, *n. s.*
INCA'PABLENESS, *n. s.*
INCA'PABLE, *adj.*
INCAPA'CIOUS, *adj.*
INCAPA'CIOUSNESS, *n. s.*
INC'APACITATE, *v. a.*
INC'APACITY, *n. s.*
} Fr. *incapable, incapacité;* Lat. *in* and *capax.* Want of power or want of room; unable to comprehend, learn, or understand: inability either in law or fact; in body or mind: in conversation, a man is said to be incapable of falsehood: incapacious, narrow; not containing sufficient space: incapacitate, to make weak; to disable or disqualify: incapacity, a state of inability either corporeal or mental.

Incapable and shallow innocents!
You cannot guess who caused your father's death.
Shakspeare.

Is not your father grown *incapable*
Of reasonable affairs? Is he not stupid
With age? *Id. Winter's Tale.*

You have nothing to urge but a kind of *incapability* in yourself to the service. *Suckling.*

Wilmot, when he saw Goring put in the command, thought himself *incapable* of reparation. *Clarendon.*

Since now we find this our empyreal form
Incapable of mortal injury.
Milton's Paradise Lost.

It chiefly proceedeth from natural *incapacity*, and genial indisposition. *Browne's Vulgar Errours.*

Souls that are made little and *incapacious*, cannot enlarge their thoughts to take in any great compass of times or things. *Burnet.*

Admonition he imputes either to envy, or else ignorance and *incapacity* of estimating his worth.
Government of the Tongue.

The inactivity of the soul is its *incapacity* to be moved with any thing common. *Arbuthnot.*

Monstrosity could not *incapacitate* from marriage. *Id.*

Their lands are almost entirely taken from them, and they are rendered *incapable* of purchasing any more. *Swift.*

Nothing of consequence should be left to be done in the last *incapacitating* hours of life. *Claris.*

Is it true, as Rousseau asserts, that this language [French], on account of the incessant monotony of the pronunciation, is *incapable* of harmony. *Beattie.*

INCARCERA'TION, *n. s.* } Lat. *incarcero.*
INCAR'CERATE, *v. a.* } To imprison; confine.

Contagion may be propagated by bodies, that easily *incarcerate* the infected air; as woollen clothes.
Harvey.

INCARN', *v. a.* & *v. n.*
INCAR'NADINE, *v. a.*
INCAR'NATE, *v. a.* & *adj.*
INCARNA'TION, *n. s.*
INCAR'NATIVE, *n. s.*
} Fr. *incarné;* Ital. *incarnadino;* Lat. *in* and *carne.* To cover with flesh; to breed flesh: incarnadine, to dye red: incarnate, to clothe with flesh; to embody: incarnation, the act of assuming a body; the state of breeding flesh: incarnative, a medicine promotive of granulation.

For thee, through wicked entencion,
The yere of the *incarnacion*,
A thousande and two hundred yere
Five and fifte, ferther ne nere
Broughten a boke with sorie grace
To yeven ensample in common place.
Chaucer. Romaunt of the Rose.

Undoubtedly even the nature of God itself, in the person of the son, is *incarnate*, and hath taken to itself flesh. *Hooker.*

We must beware we exclude not the nature of God from *incarnation*, and so make the son of God *incarnate* not to be very God. *Id.*

Will all great Neptune's ocean wash this blood
Clean from my hand? No, this my hand will rather
The multitudinous sea *incarnadine*,
Making the green one red. *Shakspeare. Macbeth.*

A most wise sufficient means of redemption and salvation, by the satisfactory death and obedience of the *incarnate* son of God, Jesus Christ, God blessed for ever. *Sanderson.*

Upon the Annunciation, or our Lady-day, meditate on the *incarnation* of our blessed Saviour.
Taylor's Guide to Devotion.

I, who erst contended
With gods to sit the highest, am now constrained
Into a beast, and mix with bestial slime,
This essence to *incarnate* and imbrute. *Milton.*

The slough came off, and the ulcer happily *incarned.*
Wiseman.

The flesh will soon arise in that cut of the bone, make exfoliation of what is necessary, and *incarn* it.
Id.

The pulsation under the cicatrix proceeded from the too lax *incarnation* of the wound. *Id.*

I deterged the abscess, and *incarned* by the common *incarnative.* *Id. Surgery.*

But he's possest,
Incarnate with a thousand imps. *Swift.*

They,
Like to *incarnate* Molochs, feed on ours
Until 'tis time to give them to the tombs,
Which they have made so populous. *Byron.*

INCARNATION, in theology, signifies the act whereby the Son of God assumed the human nature; or the mystery by which Jesus Christ, the eternal Word, was made man to accomplish the work of our salvation. The era first used among Christians, whence they numbered their years, is the time of the incarnation, that is, of Christ's conception. This era was first established by Dionysius Exiguus, about the beginning of the sixth century, till which time the era of Dioclesian had been in use. Some time after this it was considered that the years of a man's life were not numbered from the time of his conception, but from that of his birth; which occasioned them to postpone the beginning of this era for a year, retaining the cycle of Dionysius entire in every thing else. See CHRONOLOGY. At Rome they reckon the years from the birth of Christ on the 25th of December, which custom has obtained from the year 1431. In several other countries they also reckon from the incarnation, but differ as to the day of the incarnation, fixing it, after the primitive manner, not to the day of the birth, but conception of our Saviour. The Florentines retain the day of the birth, and begin their year from Christmas.

INCASE', *v. a.* In and case. To cover; to inclose; to inwrap.

Rich plates of gold the folding doors *incase,*
The pillars silver. *Pope's Odyssey.*

INCAU'TIOUS, *adj.* } Lat. *in* and *cautus.*
INCAU'TIOUSLY, *adv.* } Unwary; negligent; heedless; indiscreet.

His rhetorical expressions may easily captivate any *incautious* reader. *Keill against Burnet.*

A species of palsy invades such as *incautiously* expose themselves to the morning air. *Arbuthnot.*

INCEN'DIARY, *n. s.*
IN'CENSE, *n. s., v. a.* & *v. n.*
INCEN'SEMENT, *n. s.*
INCEN'SION, *n. s.*
INCEN'SOR, *n. s.*
IN'CENSORY, *n. s.*
INCEN'TIVE, *n. s.* & *adj.*
} Fr. *incendiaire, encens;* Latin, *inceado, incendiarius, incensum.* One who sets houses or towns on fire; one who inflames factions, or promotes quarrels: incense also has a literal and figurative meaning: perfumes exhaled by fire, in honor of deity: to perfume; to enkindle to rage; to inflame with anger; to make furious; to exasperate: incensement, rage or fury (an old word): incension, (also out of use), the act of kindling; the state of being on fire: incensor, an inflamer of passions: incensory, the vessel in which incense is burnt and offered, more commonly called a censer: incentive, that which kindles or provokes; incitement; motive; used either as a spur to good or ill: exerting; encouraging.

Upon such sacrifices, my Cordelia,
The gods themselves throw *incense.*
Shakspeare. King Lear.

The world, too saucy with the gods,
Incenses them to send destruction.
Id. Julius Cæsar.

If 'gainst yourself you be *incensed,* we'll put you,
Like one that means his proper harm, in manacles.
Shakspeare.

He is attended with a desp'rate train;
And what they may *incense* him to, being apt
To have his ear abused, wisdom bids fear. *Id.*

Tractable obedience is a slave
To each *incensed* will. *Id. Henry VIII.*

His *incensement* at this moment is so implacable, that satisfaction can be none but by pangs of death.
Id.

Senna loseth its windiness by decoction, and subtile or windy spirits are taken off by *incension* or evaporation. *Bacon.*

Many priests were impetuous and importunate *incensors* of the rage. *Hayward.*

Their unreasonable severity was not the least *incentive,* that blew up into those flames the sparks of discontent. *King Charles.*

Nor could any order be obtained impartially to examine impudent *incendiaries.* *Id.*

Foul idolatries, and other faults,
Heaped to the popular sum, will so *incense*
God as to leave them. *Milton's Paradise Lost.*

Congruity of opinions, to our natural constitution, is one great *incentive* to their reception.
Glanville's Scepsis.

How could my pious son thy power *incense?*
Or what, alas! is vanquished Troy's offence?
Dryden.

Incendiaries of figure and distinction, who are the inventors and publishers of gross falsehoods, cannot be regarded but with the utmost detestation.
Addison.

It encourages speculative persons, with all the *incentives* of place, profit, and preferment. *Id.*

Numa the rites of strict religion knew;
On every altar laid the *incense* due. *Prior.*

Competency is the most *incentive* to industry: too little makes men desperate, and too much careless.
Decay of Piety.

His pure thoughts were borne,
Like fumes of sacred *incense,* o'er the clouds,
And wafted thence, on angels' wings, through ways
Of light, to the bright source of all. *Congreve.*

Even the wisdom of God hath not suggested more pressing motives, more powerful *incentives* to charity, than these, that we shall be judged by it at the last dreadful day. *Atterbury.*

Several cities of Greece drove them out as *incendiaries,* and pests of commonweals. *Bentley.*

The breezy call of *incense*-breathing morn,
The swallow twittering from her straw-built shed,

The cock's shrill clarion, or the echoing horn,
No more shall rouse them from their lonely bed,
Gray's Elegy.

Vainly his *incense* soars, his victim bleeds;
Poor child of Doubt and Death, whose hope is built on reeds. *Byron. Childe Harold.*

INCENDIARY, in law. A bare attempt to set fire to another's dwelling-house, or out-houses, barn, or stable, unless it absolutely burns, does not fall within the description of incendit et combussit. But the burning and consuming of any part is sufficient; though the fire be afterwards extinguished. It must also be a malicious burning; otherwise it is only a trespass. This crime is called arson. Among the ancients incendiaries were burnt. The punishment of arson was death by the ancient Saxon laws and Gothic constitutions; and, in the reign of Edward I., incendiaries were burnt to death. The stat. 8 Hen. VI., c. 6, made the wilful burning of houses, under special circumstances, high treason; but it was reduced to felony by the general acts of Edward VI. and Mary I. This offence was denied the benefit of clergy by 21 Hen. VIII. c. 1, which statute was repealed by 1 Edw. VI. c. 12; and arson was held to be ousted of clergy, with respect to the principal, by inference from the stat. 4 and 5 P. & M. c. 4, which expressly denied it to the accessory; though now it is expressly denied to the principal also, by 9 Geo. I. c. 22. See ARSON.

INCENSE, or FRANKINCENSE, a dry resinous rich perfume, with which the Pagans and Roman Catholics perfume their temples, altars, &c. The word comes from the Latin incensum q. d. burnt. The burning of incense made part of the daily service of the ancient Jewish church. The priests drew lots to know who should offer it: the destined person took a large silver dish, in which was a censer full of incense; and, being accompanied by another priest carrying some live coals from the altar, went into the temple. There, in order to give notice to the people, they struck upon an instrument of brass placed between the temple and the altar; and, being returned to the altar, he who brought the fire left it there, and went away. Then the offerer of the incense waited till the burning of the holocaust; immediately upon which he set fire to the incense. The quantity of incense offered each day was half a pound in the morning, and as much at night. One reason of this continual burning of incense might be, that the effluvia of the multitude of victims continually offered up might have inspired the worshippers rather with disgust and aversion, than awe and reverence, had it not been overpowered by the fragrance of those perfumes.

INCEP'TION, *n. s.* } Lat. *inceptio, inceptivus.*
INCEP'TIVE, *adj.* } The beginning: one who
INCEP'TOR, *n. s.* } is in his rudiments.

The *inception* of putrefaction hath in it a maturation. *Bacon.*

An *inceptive* and desitive proposition, as, the fogs vanish as the sun rises; but the fogs have not yet begun to vanish, therefore the sun is not yet risen. *Locke.*

INCEPTIVE, a word used by Dr. Willis to express such moments, or first principles, which, though of no magnitude themselves, are yet capable of producing such as are. Thus a point has no magnitude itself, but is inceptive of a line which it produces by its motion. So a line, though it have no breadth, is yet inceptive of breadth; that is, it is capable, by its motion, of producing a surface which has breadth, &c.

INCER'TITUDE, *n. s.* Fr. *incertitude*; Lat. *incertitudo.* Uncertainty; doubtfulness.

INCES'SANT, *adj.* } Lat. *in* and *cessans.*
INCES'SANTLY, *adv.* } Unceasing; without intermission; continual; uninterrupted.

Mercie shall I purchase by *incessant* crying;
The mercies of our Lorde, er, shall I syng.
Chaucer. The Remedie of Love.

Both his hands most filthy feculent,
Above the water were on high extent,
And fained to wash themselves *incessantly.*
Faerie Queene.

The *incessant* weeping of my wife,
Forced me to seek delays. *Shakspeare.*

Who reads
Incessantly, and to his reading brings not
A spirit and judgment equal or superior.
Milton.

If by prayer
Incessant I could hope to change the will
Of him who all things can, I would not cease
To weary him with my assiduous cries. *Id.*

The Christians, who carried their religion through so many persecutions, were *incessantly* comforting one another with the example and history of our Saviour and his apostles. *Addison.*

In form, a herald of the king she flies
From peer to peer, and thus *incessant* cries.
Pope.

The sun has lost his rage; his downward orb
Shoots nothing now but animating warmth
And vital lustre, that, with various ray,
Lights up the clouds, those beauteous robes of heaven,
Incessant, rolled into romantic shapes
The dream of waking fancy. *Thomson.*

IN'CEST, *n. s.* } Fr. *inceste*; Lat. *incestum.*
INCEST'UOUS, *adj.* } Unnatural and criminal connexion of
INCEST'UOUSLY, *adv.* } persons within prohibited degrees of affinity: incestuous, guilty of unnatural cohabitation: incestuously, in an unnatural manner.

Is't not a kind of *incest* to take life
From thine own sister's shame? *Shakspeare.*

Hide me, thou bloody hand,
Thou perjure, thou simular of virtue,
That art *incestuous.* *Id. King Lear.*

If weakness may excuse,
What murderer, what traitor, parricide,
Incestuous, sacrilegious, but may plead it?
Milton. Paradise Lost.

When boys shall take their sisters for their mate,
And practise *incest* between seven and eight.
Marvel.

Macareus and Canace, son and daughter to Æolus, god of the winds, loved each other *incestuously.*
Dryden.

Ere you reach to this *incestuous* love,
You must divine and human rights remove.
Id.

He who entered in the first act, a young man like Pericles, prince of Tyre, must not be in danger in the fifth act of committing *incest* with his daughter.
Id. Dufresnoy.

We may easily guess with what impatience the world would have heard an *incestuous* Herod discoursing of chastity. *South.*

INCEST, by the rules of the church, was formerly most absurdly extended even to the seventh degree; but it is now restricted to the third or fourth. Most nations look on incest with horror, Persia and Egypt excepted. In the history of the ancient kings of those countries we meet with instances of brothers marrying their sisters, because they thought it too mean to join in alliance with their own subjects, and still more so to marry into any foreign family. Vortigern, king of South Britain, equalled or rather exceeded them in wickedness, by marrying his own daughter. The late queen of Portugal was married to her uncle, and the prince of Brasil, the son of that incestuous marriage, was wedded to his aunt. But they had dispensations for these marriages from his holiness!

INCEST, SPIRITUAL, is an ideal crime committed between persons who have a spiritual alliance by means of baptism or confirmation. This ridiculous fancy was made use of, as an instrument of great tyranny, in times when the power of the pope was unlimited, even queens being sometimes divorced upon this pretence.

INCEST, SPIRITUAL, is also understood of a vicar, or other beneficiary, who enjoys both the mother and daughter; that is, holds two benefices, one whereof depends upon the collation of the other. Such spiritual incest renders both the one and the other of these benefices vacant.

INCH, *n. s.*, *v. a.*, & *v. n.* } Sax. ince; Lat.
INCHED', *adj.* } *uncia*. A measure
IN'CHIPIN, *n. s.* } of length supposed
INCH'MEAT, *n. s.* } equal to three grains

barley laid end to end: the twelfth part of a foot; a proverbial name for a small quantity; a nice point of time: inch, to drive by inches; to give sparingly: inched, containing inches in length or breadth: inchipin, some of the inside of deer: inchmeal, a piece an inch long.

Beldame, I think, we watched you at an *inch*.
Shakspeare.

The plebeians have got your fellow tribune;
They'll give him death by *inches*. *Id. Coriolanus.*

Poor Tom, proud of heart to ride on a bay trotting horse over four *inched* bridges. *Id. King Lear.*

All the' infections that the sun sucks up
From bogs, fens, flats, on Prospero fall, and make him
inchmeal a disease! *Id. Tempest.*

As in lasting, so in length is man,
Contracted to an *inch*, who was a span. *Donne.*

A foot is the sixth part of the stature of a man, a span one eighth of it, and a thumb's breadth or *inch* seventy-second. *Holder on Time.*

Valiant they say, but very popular;
He gets too far into the soldiers graces,
And *inches* out my master. *Dryden's Cleomenes.*

Is it so desirable a condition to consume by *inches*, lose one's blood by drops? *Collier.*

The sun should never miss, in all his race,
Of time one minute, or one *inch* of space.
Blackmore.

The commons were growing by degrees into power property, gaining ground upon the patricians *inch* by *inch*. *Swift.*

Life's little stage is a small eminence,
Inch-high the grave above.
Young's Night Thoughts.

INCH, an island considered part of the county of Donegal, Ireland. It is in the bay called Lough Swilly, and contains about 2000 acres of fertile land. It was formerly the chief resort of the Lough Swilly herring fishery: but this has now declined. It is six miles north-west from Londonderry.

INCHBALD (Mrs. Elizabeth), was the daughter of Mr. J. Simpson, a farmer of Stanningfield, in Suffolk, where she was born in the year 1756. She came to London on the death of her father, and when only sixteen years of age, with a view to obtain a theatrical engagement; where attracting the attention of Mr. Inchbald, then a performer of some note, they married, and she accompanied her husband on several professional tours. After his death she made her debut October 3rd, 1780, at Covent Garden, as Bellario in the play of Philaster. Here she continued about eight years, and from those personal attractions which she retained to a late period, united with considerable natural talents, she was very popular. Retiring from the stage, in 1789, she devoted herself to those literary labors for which she is equally known. Her works consist of A Mogul Tale, a farce, 1784; I'll tell you what, a comedy; Appearance is against them, and the Widow's Vow, farces, 1786; The Child of Nature, a dramatic piece; The Midnight Hour, a farce; Such Things are, a play, 1788; The Married Man, a comedy, 1789; Next door Neighbours, a comedy; and, A Simple Story, a novel, in four 12mo. vols. in 1791: Every one has his Fault, a comedy, 1793; Wedding Day, a comedy, 1794; Nature and Art, a novel, in two vols. 12mo., 1796; Wives as they were, and Maids as they are, a comedy, 1797; Lover's Vows; a play from the German of Kotzebue, 1798; Wise Man of the East, a comedy, 1799; and to Marry and not to Marry, 1805. She also edited the British Theatre, with biographical and critical remarks, in 25 vols. 12mo., during the period from 1806 to 1809; a similar collection of popular farces, in seven vols. 12mo., and The Modern Theatre, in ten vols. 1809. She died at Kensington, August 1st, 1821, in her sixty-sixth year, having preserved throughout life an unblemished reputation.

INCH-COLM, or Columba, the isle of Columba; an island in the frith of Forth, famous for its monastery. This monastery was founded in 1123, by Alexander I., on the following occasion: In passing the frith of Forth he was overtaken with a violent storm, which drove him to this island, where he met with the most hospitable reception from a poor hermit, then residing here in the chapel of St. Columba, who, for the three days that the king continued there tempest bound, entertained him with the milk of his cow, and a few shell-fish. The king, from the sense of the danger he had escaped, and in gratitude to the saint to whom he attributed his safety, vowed some token of respect; and accordingly founded here a monastery of Augustines, and dedicated it to St. Columba. Allan de Mortimer lord Aberdour, who attended Edward III. in his Scottish expedition, bestowed half of those lands on the monks of this island for the privilege of a family burial place in their church. The buildings made in consequence of the piety of Alexander were very considerable. There are still to be seen a large square tower belonging to the church, the

ruins of the church, and of several other buildings. The wealth of this place in the time of Edward III. proved so strong a temptation to his fleet, then lying in the Forth, that the English landed, and spared not even the furniture more immediately consecrated to divine worship. But, in a storm which instantly followed, many of them perished; those who escaped vowed to make ample recompense to the injured saint. The tempest ceased; and they made the promised atonement. The Danish monument, figured by Sir Robert Sibbald, lies on the south-east side of the building on a rising ground. It is of a rigid form, and the surface ornamented with scale-like figures. At each end is the representation of a human head.

INCH-EFFRAY, Gael. i. e. the isle of masses, an ancient abbey of Perthshire, now in ruins, seated on a rising ground, formerly surrounded by the water of the Po, and belonging to the earl of Kinnoul. It was endowed with many privileges by David I. and Alexander III. Mauritius, abbot of Inch-Effray, was at the battle of Bannockburn. The property of this ancient abbey, and six or seven acres of ground adjacent, constitute lord Kinnoul patron of twelve parishes that were formerly attached to it.

INCH-GARVIE, a small island in the frith of Forth, near Queensferry. It was anciently fortified, and after the alarm occasioned by the appearance of Paul Jones and his squadron in the frith in 1779, its fortifications were repaired, and four iron guns, twenty pounders, mounted upon them, and furnished with 100 rounds of ammunition each. An artillery man resides upon it, to take care of the stores.

INCH-KEITH, a small island in the frith of Forth, half way between Leith and Kinghorn. Its name was derived from the gallant Keith, who so greatly signalised himself by his valor in 1010, in the battle of Barry, in Angus, against the Danes; after which he received in reward the barony of Keith in Lothian, and this little isle. In 1549 the English fleet, sent by Edward VI. to assist the lords of the congregation against the queen dowager, landed, and began to fortify this island, of the importance of which they grew sensible, after their neglect of securing the port of Leith so lately in their power. They left here five companies to cover the workmen under the command of Cotterel; but their operations were soon interrupted by M. Desse, general of the French auxiliaries, who took the place, after a gallant defence on the part of the English. The Scots kept possession for some years; but at last the fortifications were destroyed by act of parliament, to prevent it from being of any use to the former.

IN'CHOATE, *v. a.* & *adj.*
INCHOA'TION, *n. s.*
INCHO'ATIVE, *adj.*
Latin, *inchoo*. To begin or undertake: the commencement of any work.

It discerneth of four kinds of causes; forces, frauds, crimes various of stellionate, and the *inchoations* or middle acts towards crimes capital, not actually perpetrated. *Bacon.*

It is neither a substance perfect, nor a substance *inchoate*, or in the way of perfection. *Raleigh's History.*

The setting on foot some of those arts in those parts would be looked upon as the first *inchoation* of them, which yet would be but their reviving. *Hale's Origin of Mankind.*

INCHOFEN, or INCHOFER (Melchior, a learned Jesuit, born at Vienna in 1584. After studying the law, he joined the Jesuits in 1607. He taught philosophy and mathematics at Messina, and published The Blessed Virgin Mary's Letter to the people of Messina proved to be genuine: folio, 1630. This work excited great disturbances. Complaints were preferred against him before the congregation of the Index at Rome, on account of this publication. He immediately repaired to the city, vindicated himself, and was allowed to reprint his work, with a small alteration in the title. He wrote several other works, particularly a satire on the Jesuits: and died at Milan, in 1648.

INCIDE, *v. a.*
IN'CIDENCE, *n. s.*
IN'CIDENCY, *n. s.*
IN'CIDENT, *adj.* & *n. s.*
INCIDEN'TAL, *adj.*
INCIDEN'TALLY, *adv.*
IN'CIDENTLY, *adv.*
Lat. *incido*, to cut; *incido*, to fall; Fr. *incidence*. To cut: incident, casually: incidental, accidental; casual; unexpected; apt to happen: incidental, not intended; not necessary to the chief purpose: incidently, occasionally; by the bye.

As the ordinary course of common affairs is disposed of by general laws, so likewise men's rarer *incident* necessities and utilities should be with special equity considered. *Hooker.*

In mirrours there is the like angle of *incidence*, from the object of the glass, and from the glass to the eye. *Bacon.*

It was *incidently* moved amongst the judges what should be done for the king himself, who was attainted; but resolved that the crown takes away defects. *Id. Henry VII.*

His wisdom will fall into it as an *incident* to the point of lawfulness. *Id. Holy War.*

These general rules are but occasionally and *incidentally* mentioned in Scripture, rather to manifest unto us a former, than to lay upon us a new obligation. *Sanderson.*

The satisfaction you received from those *incidental* discourses which we have wandered into. *Milton.*

I treat either purposely or *incidentally* of colors. *Boyle.*

No person, no *incident* in the play, but must be of use to carry on the main design. *Dryden.*

He enjoys his happy state most when he communicates it, and receives a more vigorous joy from the reflexion than from the direct *incidency* of his happiness. *Norris.*

Constancy is such a firmness of friendship as overlooks all those failures of kindness, that through passion, *incident* to human nature, a man may be guilty of. *South.*

The direction with which one body strikes upon another, and the angle made by that line, and the plane struck upon, is called the angle of *incidence*. In the occursions of two moving bodies, their *incidence* is said to be perpendicular or oblique, as their directions or lines of motion make a straight line or an oblique angle at the point of contact. *Quincy.*

I would note in children not only their articulate answers, but likewise smiles and frowns upon *incident* occasions. *Wotton.*

In equal *incidences* there is a considerable inequality of refractions, whether it be that some of the *in-*

cident rays are refracted more and others less constantly, or one and the same ray is by refraction disturbed. *Newton's Opticks.*

The permanent whiteness argues, that in like *incidences* of the rays there is no such separation of the emerging rays. *Newton.*

By some, religious duties scarce appear to be regarded at all, and by others only as an *incidental* business, to be done when they have nothing else to do. *Rogers.*

The menses are promoted by all saponaceous substances, which *incide* the mucus in the first passages. *Arbuthnot.*

In a complex proposition the predicate or subject is sometimes made complex by the pronouns who, which, whose, whom, &c., which make another proposition: as, every man, who is pious, shall be saved. Here the whole proposition is called the primary or chief, and the additional proposition is called an *incidental* proposition. *Watts.*

To one who has read the second book of Virgil, Voltaire's Massacre of St. Bartholomew will appear very trifling. It is uninteresting and void of *incident*; the horrors of it arise upon reflection. *Beattie.*

INCIDENT, in a poem, is an episode, or particular action joined to the principal action, or depending on it. The poet ought always to make choice of such incidents as are susceptible of ornament suitable to the nature of his poem. A variety of incidents well conducted is the beauty of an heroic poem, which ought always to take in a certain number of incidents to suspend the catastrophe that would otherwise break out too soon.

INCIDENT, in law, is a thing appertaining to, or following another, that is more worthy or principal. A court baron is inseparably incident to a manor; and a court of pie-poudre to a fair.

INCIDENT DILIGENCE, in Scots law, a warrant granted by a lord ordinary in the court of session, for citing witnesses to prove any point, or for the production of any writing necessary for preparing the cause for a final determination, or before it goes to a general proof.

INCIN'ERATE, *v. a.* } Fr. *incineration;*
INCINERA'TION, *n. s.* } Lat. *in* and *cineres.*
To burn to ashes: the act of consuming by fire to ashes.

By baking, without melting, the heat indurateth, then maketh fragile; lastly, it doth *incinerate* and calcinate. *Bacon.*

Fire burneth wood, making it first luminous, then black and brittle, and lastly broken and *incinerate.* *Id.*

These dregs are soon *incinerated* and calcined into such salts which produce coughs. *Harvey on Consumptions.*

I observed in the fixt salt of urine, brought by depuration to be very white, a taste not unlike common salt, and very differing from the caustick lixiviate taste of other salts made by *incineration.* *Boyle.*

INCIRCUMSPECTION, *n. s.* In and circumspection. Want of caution; want of heed.

An unexpected way of delusion, whereby he more easily led away the *incircumspection* of their belief. *Browne.*

INCISED', *adj.* } Fr. *inciser;* Lat. *incisus.*
INCIS'ION, *n. s.* } A cut; any wound made
INCI'SIVE, *adj.* } by a cutting instrument:
INCI'SOR, *n. s.* } a surgical term; division
INCI'SURE, *n. s.* } of viscosities by medicine:
incisive, having the quality of cutting or dividing: incisor, a cutter; the teeth in the fore part of the mouth: incisure, a cut; an aperture.

Let us make *incision* for your love,
To prove whose blood is reddest, his or mine.
Shakspeare.

God help thee, shallow man: God make *incision* in thee, thou art raw. *Id. As You Like It.*

Abstersion is a scouring off, or *incision* of viscous humours, and making them fluid, and cutting between them and the part; as in nitrous water, which scoureth linen. *Bacon.*

The colour of many corpuscles will cohere by being precipitated together, and be destroyed by the effusion of very piercing and *incisive* liquors. *Boyle.*

The reception of one is as different from the admission of the other, as when the earth falls open under the *incisions* of the plough, and when it gapes to drink in the dew of heaven, or the refreshments of a shower. *South.*

I brought the *incised* lips together. *Wiseman.*

A small *incision* knife is more handy than a larger for opening the bag. *Sharp's Surgery.*

In some creatures it is wide, in some narrow, in some with a deep *incisure* up into the head, for the better catching and holding of prey, and comminuting of hard food. *Derham.*

INCITA'TION, *n. s.* } Lat. *incito, incitatio.*
INCITE', *v. a.* } Incitement; incentive;
INCITE'MENT, *n. s.* } motive; impulse; the act of inciting; the power of inciting; to stir up; to animate; to urge on: incitement, motive; impulse; cause of action.

A marvel it were, if a man of great capacity, having such *incitements* to make him desirous of all furtherances unto his cause, could espy in the whole scripture of God nothing which might breed at the least a probable opinion of likelihood, that divine authority was the same way inclinable. *Hooker.*

How many now in health
Shall drop their blood, in approbation
Of what your reverence shall *incite* us to?
Shakspear.

No blown ambition doth our arms *incite;*
But love, dear love, and our aged father's right.
Id.

Antiochus, when he *incited* Prusias to join in war, set before him the greatness of the Romans, comparing it to a fire, that took and spread from kingdom to kingdom. *Bacon.*

Hartlib seems sent hither by some good providence, to be the occasion and *incitement* of great good to this island. *Milton.*

What if the sun
Be centre to the world, and other stars,
By his attractive virtue and their own
Incited, dance about him various rounds.
Id. Paradise Lost.

Dr. Ridley defines magnetical attraction to be a natural *incitation* and disposition conforming unto contiguity, an union of one magnetical body unto another. *Browne's Vulgar Errours.*

The multitude of objects do proportionably multiply both the possibilities and *incitations.* *Government of the Tongue.*

If thou must reform the stubborn times,
From the long records of distant age
Derive *incitements* to renew thy rage.
Pope's Statius.

Nature and common reason, in all difficulties, where prudence or courage are required, do rather *incite* us to fly for assistance to a single person than a multitude. *Swift.*

The mind gives not only licence, but *incitation* to the other passions to act with the utmost impetuosity. *Decay of Piety.*

INCIV'IL, *adj.* } Fr. *incivil*; Lat. *in* and
INCIVIL'ITY, *n. s.* } *civis*. Want of courtesy: rude; unpolished.

Abstain from dissolute laughter, uncomely jests, loud talking and jeering, which, in civil account, are called indecencies and *incivilities*. *Taylor.*

He does offend against that reverence which is due to the common apprehensions of mankind, whether true or not, which is the greatest *incivility*. *Tillotson.*

Swell, curled waves, high as Jove's roof;
Your *incivility* doth shew,
That innocence is tempest proof.
L'Estrange. Old Song.

INCLEDON (Benjamin Charles), a late eminent vocalist, was born at St. Keveram, in Cornwall, in 1764, his father being a member of the faculty. The fine tones of his voice, and his early taste for music, induced his parents to article him to the celebrated Jackson of Exeter cathedral until he had attained his fifteenth year. He then took an opportunity to quit Exeter abruptly, and entered as a common sailor on board the Formidable, a ninety-eight gun ship, commanded by captain Cleland. He remained in the navy about five years; where his vocal abilities attracting the notice of his officers, especially of lord Mulgrave (then captain Phipps), and admirals Pigott and Hervey, he was advised to try his fortune on the stage; and they gave him letters of recommendation to both Sheridan and Colman. He, however, made his first appearance before an audience in Collins's Southampton Company, in 1783, as Alphonso, in the Castle of Andalusia. At Bath, the following year, he was introduced to the acquaintance of Rauzzini, who gave him the great benefit of his instructions. October, 1790, he first appeared in London, at Covent Garden theatre, and played with great success the character of Dermot, in O'Keefe's farce of the Poor Soldier. Justice was now amply awarded him by the public; and a high degree of popularity attended him, till the infirmities of his advancing years, and an irregular mode of life, compelled him to retire. His voice, a rich tenor of extraordinary power and sweetness, embraced a compass of about fourteen notes in the natural, and ten notes in falsetto; his intonation also was singularly correct. The better sort of the old English ballad was his forte, of which Stevens's Storm, and Gay's Black-eyed Susan, were amongst his best specimens. Shield wrote many airs expressly for him. He died at Worcester 11th of February, 1826, and was buried at Hampstead.

INCLEM'ENCY, *n. s.* } Lat. *in* and *clemens*.
INCLEM'ENT, *adj.* } Unmerciful; cruel; severe; rough; unpitying: it is used more frequently of things than men.

Teach us further by what means to shun
The' *inclement* seasons, rain, ice, hail, and snow.
Milton.

And, though by tempests of the prize bereft,
In heaven's *inclemency* some ease we find:
Our foes we vanquished by our valour left.
Dryden.

I stand
Naked, defenceless, on a foreign land:
Propitious to my wants, a vest supply
To guard the wretched from the' *inclement* sky.
Pope.

INCLI'NABLE, *adj.* }
INCLINA'TION, *n. s.* }
INCLI'NATORY, *adj.* } Lat. *inclino, inclinabilis*; Gr. κλινη. Having a propension of
INCLI'NATORILY, *adv.* } will; favorably disposed; willing; tending by disposition: with *to*. Inclination, tendency towards any point; natural aptness; propension of mind; disposition or desire; love; affection; regard; disposition: used with *to*, for the tendency of the magnetic needle to east or west. In pharmacy, the act by which a clear liquor is poured off from some fæces or sediment by only stooping the vessel, which is also called decantation. Inclinatory, and inclinatorily, obliquely; with inclination to one side or the other: incline, to tend; to lean; to give tendency or direction to any place or state; to attend; to bend; to incurvate.
INCLINE', *v. n.* & *v. a.* }

Their hearts *inclined to* follow Abimelech.
Judges.

Her house *inclineth unto* death, and her paths unto the dead. *Proverbs* ii. 18.

A marvel it were, if a man of capacity could espy in the whole scripture nothing which might breed a probable opinion that divine authority was the same way *inclinable*. *Hooker.*

The gall and bitterness of certain men's writings, who spared him little, made him, for their sakes, the less *inclinable to* that truth which he himself should have honored. *Id.*

Doth his majesty
Incline to it, or no?
—He seems indifferent:
Or rather swaying more upon our part.
Shakspeare.

Bid him
Report the features of Octavia, her years,
Her *inclination*. *Id. Antony and Cleopatra.*

The king was wonderfully disquieted, when he found that the prince was totally alienated from all thoughts of, or *inclination to*, the marriage. *Clarendon.*

The timely dew of sleep,
Now falling with soft slumberous weight, *inclines*
Our eye-lids. *Milton.*

But that from us aught should ascend to heaven
So prevalent, as to concern the mind
Of God high-blest, or to *incline* his will,
Hard to belief may seem, yet this will prayer. *Id.*

Desire,
Inclinable now grown *to* touch or taste,
Solicited her longing eye. *Id.*

Whether they be refrigerated *inclinatorily*, or somewhat equinoxially, that is, toward the eastern or western points, they discover some verticity. *Browne's Vulgar Errours.*

If that *inclinatory* virtue be destroyed by a touch from the contrary pole, that end which before was elevated will then decline. *Id.*

We have had few knowing painters, because of the little *inclination* which princes have *for* painting. *Dryden.*

With due respect my body I *inclined*,
As to some being of superior kind. *Id.*

A mere *inclination to* a thing is not properly a willing of that thing; and yet, in matters of duty, men frequently reckon it for such: for otherwise how should

they so often plead and rest in the honest and well *inclined* disposition of their minds, when they are justly charged with an actual non-performance of the law? *South.*

The two rays, being equally refracted, have the same *inclination to* one another after refraction which they had before; that is, the *inclination* of half a degree answering to the sun's diameter. *Newton.*

If such a crust naturally fell, then it was more likely and *inclinable to* fall this thousand years than the last; but if the crust was always gradually nearer and nearer to falling, that plainly evinces that it had not endured eternally. *Bentley.*

With him went Doubt, staggering with steps unsure;
That every way and neither way *inclined.*
Fletcher's Purple Island.

Still to this place
My heart *inclines*, still hither turn my eyes;
Hither my feet unbidden find their way. *Rowe.*

Though most of the thick woods are grubbed up since the promontory has been cultivated, there are still many spots of it which show the natural *inclination* of the soil leans that way. *Addison.*

Thus far both armies to Belinda yield;
Now to the baron fate *inclines* the field. *Pope.*

A towering structure to the palace joined;
To this his steps the thoughtful prince *inclined.* *Id*

Her very smile was haughty, though so sweet
Her very nod was not an *inclination*;
There was a self-will even in her small feet,
As though they were quite conscious of her station.
Byron. Don Juan.

INCLIP', *v. a.* In and clip. To grasp; to enclose; to surround.

Whate'er the ocean pales, or sky *inclips*,
Is thine, if thou wilt ha't.
Shakspeare. Antony and Cleopatra.

INCLOIS'TER, *v. a.* In and cloister. To shut up in a cloister

INCLOUD,' *v. a.* In and cloud. To darken; to obscure.

In their thick breaths,
Rank of gross diet, shall we be *inclouded*,
And forced to drink their vapour. *Shakspeare.*

INCLUDE,' *v. a.* } Lat. *includo*; Fr. *in-*
INCLU'SIVE, *adj.* } *clusif.* To enclose or
INCLU'SIVELY, *adv.* } shut in; to comprise, comprehend, or contain in the sum or number: inclusively is the thing mentioned reckoned into the account.

O, would that the *inclusive* verge
Of golden metal, that must round my brow,
Were red-hot steel, to sear me to the brain!
Shakspeare.

This desire being recommended to her majesty, it liked her to *include* the same within one intire lease. *Bacon.*

Thus much shall serve for the several periods or growth of the common law, until the time of Edward I. *inclusively.* *Hale.*

For now and since first break of dawn, the Fiend
Mere serpent in appearance forth was come,
And on his quest, where likeliest he might find
The only two of mankind, but in them
The whole *included* race his purposed prey.
Milton's Paradise Lost.

All articulation is made within the mouth, from the throat to the lips *inclusively*; and is differenced partly by the organs used in it, and partly by the manner and degree of articulating. *Holder.*

The marvellous fable *includes* whatever is supernatural, and especially the machines of the gods. *Pope.*

Instead of enquiring whether he be a man of virtue, the question is only whether he be a whig or a tory; under which terms all good and ill qualities are *included.* *Swift.*

I'll search where every virtue dwells.
From courts *inclusive* down to cells. *Id.*

INCOAG'ULABLE, *adj.* In and coagulable. Incapable of concretion.

INCOEXIS'TENCE, *n. s.* In and coexistence. The quality of not existing together; non-association of existence. An unusual word.

Another more incurable part of ignorance, which sets us more remote from a certain knowledge of the coexistence or *incoexistence* of different ideas in the same subject, is, that there is no discoverable connexion between any secondary quality and those primary qualities it depends on. *Locke.*

INCOG', *adv.* } Lat. *incognitus.* A state
INCOG'NITO, *adv.* } of concealment; unknown; in private.

But if you'r rough, and use him like a dog,
Depend upon it, he'll remain *incog.* *Addison.*

'Twas long ago
Some gods came down *incognito.* *Prior.*

INCOG'ITANCY, *n. s.* } Lat. *incogitantia.*
INCOG'ITATIVE, *adj.* } *In* and *cogito.* Want of thought; wanting the power of thought.

Next to the stupid and meerly vegetable state of *incogitancy*, we may rank partial and piece-meal consideration. *Decay of Piety.*

One man's fancies are laws to succeeders, who afterwards misname all unobsequiousness to their *incogitancy* presumption. *Boyle.*

Purely material beings, as clippings of our beards, and sensible, thinking, perceiving beings, such as we find ourselves, we will call cogitative and *incogitative* beings. *Locke.*

INCOHE'RENCE, *n. s.* } Lat. *in* and *co-*
INCOHE'RENCY, *n. s.* } *hæro.* Want o
INCOHE'RENT, *adj.* } cohesion; loose-
INCOHE'RENTLY, *adv.* } ness of material parts; want of connexion; incongruity; want of dependence of one part upon another: incoherent, loose; inconsistent; inconsequential.

If plaister be beaten into an impalpable powder, when poured out it will emulate a liquor, by reason that the smallness and *incoherence* of the parts do both make them easy to be put into motion, and makes the pores they intercept so small, that they interrupt not the unity or continuity of the mass. *Boyle.*

I find that laying the intermediate ideas naked, in their due order, shows the *incoherence* of the argumentations better than syllogisms. *Locke.*

Incoherences in matter, and suppositions without proofs, put handsomely together, are apt to pass for strong reason. *Id.*

We have instances of perception whilst we are asleep, and retain the memory of them; but how extravagant and *incoherent* are they, and how little conformable to the perfection of a rational being! *Id.*

Had the strata of stone become solid, but the matter whereof they consist continued lax and *incoherent*, they had consequently been as pervious as those of marle or gravel. *Woodward.*

The character of Eurylochus is the imitation of a person confounded with fears, speaking irrationally and *incoherently.* *Broome.*

INCOLU'MITY, *n. s.* Lat. *incolumitas.* Safety; security. A word very little in use.

The parliament is necessary to assert and preserve the national rights of a people, with the *incolumity* and welfare of a country *Howel.*

INCOMBUSTIBILITY, *n. s.* } Latin *in-*
INCOMBUS'TIBLE, *adj.* } *combustus.*
INCOMBUS'TIBLENESS, *n. s.* } The quality of resisting fire so that it cannot consume: incombustible, not to be consumed by fire.

It agrees in this common quality ascribed unto both, of being *incombustible*, and not consumable by fire. *Wilkins.*

The stone in the Appennines is remarkable for its shining quality, and the amianthus for its *incombustibility*. *Ray.*

INCOMBUSTIBLE CLOTH. See ASBESTOS. M. Magellan informs us that the Romans enclosed dead bodies in cloth of this kind. In 1756 or 1757 he tells us, that he saw in the Vatican a large piece of asbestos cloth, found in a stone tomb, with the ashes of a Roman, as appeared by the epitaph. The under-librarian, to show that it was incombustible, lighted a candle, and let some drops of wax fall on the cloth, which he set on fire with a candle in his presence, without any detriment to the cloth. Its texture was coarse, but much softer than he could have expected.

IN'COME, *n. s.* In and come. Revenue; produce of any thing.

No fields afford
So large an *income* to the village lord. *Dryden.*

Thou who repinest at the plenty of thy neighbour, and the greatness of his *incomes*, consider what are frequently the dismal consequences of all this. *South.*

St. Gaul has scarce any lands belonging to it, and little or no *income* but what arises from its trade; the great support of this little state is its linen manufacture. *Addison on Italy.*

Notwithstanding the large *incomes* annexed to some few of her preferments, this church hath in the whole little to subsist on. *Atterbury.*

None can say that this was not good advice,
The only mischief was, it came too late;
Of all experience 'tis the usual price;
A sort of *income* tax, laid on by fate.
Byron. Don Juan.

INCOMMENSURABILITY, *n. s.* } Latin,
INCOMMEN'SURABLE, *adj.* } *in, con,*
INCOMMEN'SURATE, *adj.* } *mensura.* The state of one thing with respect to another, when they cannot be compared by any common measure: not to be reduced to any measure common to both; not to be measured together, such as that the proportion of one to the other can be told.

The diagonal line and side of a quadrate, which, to our apprehension, are *incommensurate*, are yet commensurable to the infinite comprehension of the divine intellect. *More.*

As all other measures of time are reducible to these three; so we labour to reduce these three, though strictly of themselves *incommensurate* to one another, for civil use, measuring the greater by the less. *Holder on Time.*

If the year comprehend days, it is but as any greater space of time may be said to comprehend a less, though the less space be *incommensurate* to the greater. *Id.*

Our disputations about vacuum or space, *incommensurable* quantities, the infinite divisibility of matter, and eternal duration, will lead us to see the weakness of our nature. *Watts.*

INCOMMENSURABLE, in geometry, is used where two lines, when compared to each other, have no common measure, how small soever, that will exactly measure them both. And, in general, two quantities are said to be incommensurable when no third quantity can be found that is an aliquot part of both.

INCOMMENSURABLE NUMBERS are such as have no common divisor that will divide them both equally.

INCOM'MODATE, *v. a.* } Lat. *incommo-*
INCOMMODE', *v. a.* } *dus.* To be in-
INCOMMO'DIOUS, *adj.* } convenient to;
INCOMMO'DIOUSLY, *adv.* } to embarrass;
INCOMMO'DIOUSNESS, *n. s.* } to hinder: in-
INCOMMOD'ITY, *n. s.* } commodious, vexatious without much mischief: incommodity, trouble; inconvenience.

Declare your opinion, what *incommodity* you have conceived to be in the common law, which I would have thought most free from all such dislike. *Spenser's State of Ireland.*

Things of general benefit, for in this world what is so perfect that no inconvenience doth ever follow it? may by some accident be *incommodious* to a few. *Hooker.*

If iron can be incorporated with flint or stone, without over great charge, or other *incommodity*, the cheapness doth make the compound stuff profitable. *Bacon.*

A gnat, planted upon the horn of a bull, begged the bull's pardon; but rather than *incommode* ye, says he, I'll remove. *L'Estrange.*

Men's intentions in speaking are to be understood, without frequent explanations and *incommodious* interruptions. *Locke.*

Diseases, disorders, and the *incommodiousness* of external nature, are inconsistent with happiness. *Burnet.*

By considering the region and the winds, one might so cast the rooms, which shall most need fire, that he should little fear the *incommodity* of smoak. *Wotton's Architecture.*

Although they sometimes molest and *incommode* the inhabitants, yet the agent, whereby both the one and the other is effected, is of that indispensable necessity to the earth and to mankind, that they could not subsist without it. *Woodward.*

INCOMMUNICABILITY, *n. s.* } Latin, *in*
INCOMMU'NICABLE, *adj.* } privative,
INCOMMU'NICABLY, *adv.* } and *com-*
INCOMMU'NICATING, *adj.* } *munico.* Not impartible; not to be made the property of more than one; not to be expressed, uttered, or told: incommunicating, having no intercourse.

They cannot ask more than I can give, may I but reserve to myself the *incommunicable* jewel of my conscience. *King Charles.*

To annihilate is both in reason, and by the consent of divines, as *incommunicably* the effect of a power divine, and above nature, as is creation itself. *Hakewill on Providence.*

The judgments and administrations of common justice are preserved from that confusion that would ensue, if the administration was by several *incommunicating* hands, or by provincial establishments. *Hale's Common Law.*

Light without darkness is the *incommunicable* claim of him that dwells in light inaccessible. *Glanville.*

It was agreed on both sides, that there was one supreme excellency, which was *incommunicable* to any creature. *Stillingfleet.*

Neither did he treat them with these peculiarities of favor to the extraordinary discoveries of the gospel only, but also of those *incommunicable* revelations of the divine love, in reference to their own personal interest in it. *South.*

INCOMPACT, *adj.* } *In* and compacted. Not
INCOMPAC'TED, *adj.* } joined; not cohering.

Salt, say they, is the basis of solidity and permanency in compound bodies, without which the other four elements might be variously blended, but would remain *incompacted*. *Boyle.*

INCOM'PARABLE, *adj.* } Lat. *in*, *com-*
INCOM'PARABLY, *adv.* } *paro*, and *comparabilis*. Excellent beyond compare, or competition; done in a manner beyond all praise.

A founder it had, whom I think *incomparably* the wisest man that ever the French church did enjoy, since the hour it enjoyed him. *Hooker.*

A most *incomparable* man, breathed as it were
To an untirable and continuate goodness.
Shakspeare.

Her words do shew her wit *incomparable*. *Id.*

Now this mask
Was cried *incomparable*, and the ensuing night
Made it a fool and beggar. *Id. Henry VIII.*

My heart would not suffer me to omit any occasion, whereby I might make the *incomparable* Pamela see how much extraordinary devotion I bore to her service. *Sidney.*

If I could leave this argument of your *incomparable* beauty, I might turn to one which would equally oppress me with its greatness. *Dryden.*

Self-preservation will oblige a man voluntarily to undergo any less evil, to secure himself but from the probability of an evil *incomparably* greater. *South.*

There are the heads of Antoninus Pius, the Faustinas, and Marcus Aurelius, all *incomparably* well cut. *Addison on Italy.*

INCOMPAS'SIONATE, *adj.* *In* and compassionate. Void of pity; void of tenderness.

INCOMPATIBIL'ITY, *n. s.* } Lat. *in* and
INCOMPAT'IBLE, *adj.* } *competo*, pro-
INCOMPAT'IBLY, *adv.* } perly *incompetibility*. Inconsistent with something else; such as cannot subsist or cannot be possessed together with something else: it is followed by *with*, sometimes with *to*; a state or manner which is inconsistent with something else.

Fortune and love have ever been so *incompatible*, that it is no wonder, madam, if, having had so much of the one for you, I have ever found so little of the other for myself. *Suckling.*

The reason of the stress rests not upon the *incompetibility* of excess of one infinitude above another either in intension or extension; but the *incompetibility* of any multitude to be infinite. *Hale.*

The repugnancy of infinitude is equally *incompetible* to continued or successive motion, and depends upon the incompossibility of things successive with infinitude. *Id.*

We know those colours which have a friendship with each other, and those which are *incompatible*, by mixing together those colours of which we would make trial. *Dryden.*

Sense I have proved to be *incompatible* with mere bodies, even those of the most compound and elaborate textures. *Bentley.*

May not the outward expressions of love in many good Christians be greater to some other object than to God? Or is this *incompetible* with the sincerity of the love of God. *Hammond.*

INCOM'PETENCY, *n. s.* } Fr. *incompe-*
INCOM'PETENT, *adj.* } *tence*; Lat. *in*
INCOM'PETENTLY, *adv.* } and *competo*. Inability; want of qualification: not suitable; inadequate. In the civil law it denotes a defect of right to do any thing.

Richard III. had a resolution, out of hatred to his brethren, to disable their issues, upon false and *incompetent* pretexts, the one of attainder, the other of illegitimation. *Bacon.*

Our not being able to discern the motion of a shadow of a dial-plate, or that of the index upon a clock, ought to make us sensible of the *incompetency* of our eyes to discern some motions of natural bodies incomparably slower than these. *Boyle.*

I thank you for the commission you have given me: how I have acquitted myself of it must be left to the opinion of the world, in spight of any protestation which I can enter against the present age, as *incompetent* or corrupt judges. *Dryden.*

Laymen, with equal advantages of parts, are not the most *incompetent* judges of sacred things. *Id.*

Every speck does not blind a man, nor does every infirmity make one unable to discern, or *incompetent* to reprove, the grosser faults of others. *Government of the Tongue.*

An equal attraction on all sides of all matter is just equal to no attraction at all; and by this means all the motion in the universe must proceed from external impulse alone, which is an *incompetent* cause for the formation of a world. *Bentley.*

INCOMPLETE, *adj.* } Lat. *in* and *com-*
INCOMPLETE'NESS, *n. s.* } *pletus*. These words denote an imperfect unfinished state.

It pleaseth him in mercy to account himself *incomplete*, and maimed without us. *Hooker.*

The *incompleteness* of our seraphick lover's happiness, in his fruitions, proceeds not from their want of satisfactoriness, but of an intire possession. *Boyle.*

In *incomplete* ideas we are apt to impose on ourselves, and wrangle with others, especially where they have particular and familiar names. *Locke.*

INCOMPLI'ANCE, *n. s.* Untractableness; obstinacy; refusal of compliance.

Self-conceit produces peevishness and *incompliance* of humour in things lawful and indifferent. *Tillotson.*

Consider the vast disproportion between the worst inconveniences that can attend our *incompliance* with men, and the eternal displeasure of an offended God. *Rogers.*

INCOMPOSED, *adj.* *In* and composed. Disturbed; discomposed; disordered. Not much used.

Somewhat *incomposed* they are in their trimming, and extraordinary tender of their young ones. *Howel.*

Thus Satan; and him the Anarch old,
With faltering speech and visage *incomposed*,
Answered. I know thee stranger who thou art.
Milton. Paradise Lost.

INCOMPOSSIBIL'ITY, *n. s.* } Latin, *in*,
INCOMPOS'SIBLE, *adj.* } *con*, *possum*. Quality of being not possible but by the negation or destruction of something: inconsistency with something.

Though the repugnancy of infinitude be equally incompetible to continued or successive motion, and depends upon the *incompossibility* of the very nature of things successive or extensive with infinitude, yet that *incompossibility* is more conspicuous in discrete quantity, that ariseth from individuals already actually distinguished. *Hale's Origin of Mankind.*

INCOMPREHENSIBIL'ITY, *n.s.* } Fr. *incomprehensibilité*;
INCOMPREHEN'SIBLE, *adj.* } Lat. *in*, *con*, *prehendo*.
INCOMPREHEN'SIBLENESS, *n. s.* } That which cannot be taken hold of or conceived in the mind: an old sense of these words, now out of use was, not to be contained: in this sense incomprehensible is used by Hooker.
INCOMPREHEN'SIBLY, *adv.* }

Presence every where is the sequel of an infinite and *incomprehensible* substance; for what can be every where but that which can no where be comprehended? *Hooker.*

How *incomprehensibly* glorious is the light that is in thee, since one glimpse of this created light, gave so lively a glory to all thy workmanship! *Bp. Hall.*

Stars that seem to roll
Spaces *incomprehensible*. *Milton.*

And last of all that unutterable *incomprehensible* mystery of two natures united into one person, and again of one and the same nature diffused into a triple personality. *South's Sermons.*

I conclude that for any one to deny or reject the mysteries of our religion as impossible, because of the *incomprehensibleness* of them, is upon all true principles, both of divinity and philosophy, utterly inconsequent and irrational. *Id.*

The laws of vegetation and propagation are the arbitrary pleasure of God, and may vary in manners *incomprehensible* to our imaginations. *Bentley.*

His precepts tend to the improving and perfecting the most valuable part of us, and annexing *incomprehensible* rewards as an eternal weight of glory. *Hammond.*

I might argue from God's *incomprehensibleness*: if we could believe nothing but what we have ideas of, it would be impossible for us to believe God is *incomprehensible*. *Watts.*

INCOMPRESS'IBLE, *adj.* } Lat. *in*, *con*, *pressus*.
INCOMPRESSIBIL'ITY, *n. s.* } Not capable of being compressed into less space.

Hardness is the reason why water is *incompressible*, when the air lodged in it is exhausted. *Cheyne.*

INCONCUR'RING, *adj.* Lat. *in*, *con*, *curro*. Not concurring.

They derive effects not only from *inconcurring* causes, but things devoid of efficiency. *Browne.*

INCONCEAL'ABLE, *adj.* Lat. *in con celo*. Not to be hid; not to be kept secret.

The *inconcealable* imperfections of ourselves will hourly prompt us our corruption, and loudly tell us we are sons of earth. *Browne.*

INCONCEIV'ABLE, *adj.* } Latin, *in* and *conceptus*. Not to be conceived:
INCONCEIV'ABLY, *adv.* }
INCONCEP'TIBLE, *adj.* }

in a manner or degree beyond human comprehension: inconceptible is obsolete, it has a similar meaning.

It is *inconceptible* how any such man, that hath stood the shock of an eternal duration without corruption, should after be corrupted. *Hale.*

It is *inconceivable* to me, that a spiritual substance should represent an extended figure. *Locke.*

Does that man take a rational course to preserve himself, who refuses the endurance of those lesser troubles, to secure himself from a condition *inconceivably* more miserable? *South.*

How two ethers can be diffused through all space, one of which acts upon the other, and by consequence is reacted upon, without retarding, shattering, dispersing, and confounding one another's motions, is *inconceivable*. *Newton's Opticks.*

Such are Christ's promises, divine *inconceivable* promises: a bliss to be enjoyed to all eternity, and that by way of return for a weak obedience of some few years. *Hammond.*

They fall into a contrary extreme, and would persuade us, that the attributes of God are all alike *inconceivable* to us as they are in themselves, and can be known no way except by analogy. *Bolingbroke.*

INCONCLU'DENT, *adj.* } Lat. *in* and *concludo*. Inferring no consequence; not inforcing any determination of the mind: to reason inconclusively is without any such evidence as determines the understanding: inconclusiveness, want of rational cogency.
INCONCLU'SIVE, *adj.* }
INCONCLU'SIVELY, *adv.* }
INCONCLU'SIVENESS, *n. s.* }

A man, unskilful in syllogism, at first hearing, could perceive the weakness and *inconclusiveness* of a long, artificial, and plausible discourse, wherewith some others, better skilled in syllogism, have been misled. *Locke.*

The depositions of witnesses themselves, as being false, various, contrariant, single, *inconcludent*. *Ayliffe's Parergon.*

INCONCOCT', *adj.* } Lat. *in* and *concoctus*. Unripened; immature; not fully digested: these words are nearly useless.
INCONCOCT'ED, *adj.* }
INCONCOC'TION, *n. s.* }

The middle action, which produceth such imperfect bodies, is fitly called inquination, or *inconcoction*, which is a kind of putrefaction. *Bacon's Natural History.*

While the body, to be converted and altered, is too strong for the efficient that should convert it, it is all that while crude and *inconcoct*; and the process is to be called cruidity and *inconcoction*. *Bacon.*

I understand, remember, and reason better in my riper years, than when I was a child, and had my organical parts less digested and *inconcocted*. *Hale.*

INCON'DITE, *adj.* Lat. *inconditus*. Irregular; rude; unpolished.

Now sportive youth
Carol *incondite* rhimes with suiting notes,
And quaver inharmonious. *Phillips.*

INCONDIT'IONAL, *adj.* } Lat. *in* and *conditio*. Without exception, limitation, or stipulation; not restrained by conditions; absolute.
INCONDI'TIONATE, *adj.* }

From that which is but true in a qualified sense, an *inconditional* and absolute verity is inferred. *Browne.*

They ascribe to God, in relation to every man, an eternal, unchangeable, and *inconditionate* decree of election or reprobation. *Boyle.*

INCONFOR'MITY, *n. s.* Lat. *in*, *cum*, *forma*. In and conformity. Incompliance with the practice of others.

We have thought their opinion to be, that utter *inconformity* with the church of Rome was not an extremity whereunto we should be drawn for a time, but the very mediocrity itself, wherein they meant we should ever continue. *Hooker.*

INCONFU'SION, *n. s.* Lat. *in* and *confusus*. In and confusion. Distinctness. Not used.

The cause of the confusion in sounds, and the *inconfusion* in species visible, is, for that the sight worketh in right lines, and so there can be no coincidence in the eye; but sounds that move in oblique and

arcuate lines, must need sencounter and disturb the one the other. *Bacon.*

INCON'GRUENCE, *n. s.* Fr. *incongruité*; INCONGRU'ITY, *n. s.* Ital. *incongruità*; INCON'GRUOUS, *adj.* Latin *incongruo*. INCON'GRUOUSLY, *adv.* Want of adaptation: incongruity, unsuitableness; absurdity; want of agreement with something else; want of symmetry; not fitting to the kind or occasion.

This werke who so shal se, or yrede,
Of *incongruite* doe me not impeche.
Chaucer. Remedie of Love.

She, whom after what form soe'er we see,
Is discord and rude *incongruity*;
She, she is dead, she's dead. *Donne.*

Humidity is but relative, and depends upon the congruity or *incongruence* of the component particles of the liquor to the pores of the bodies it touches. *Boyle.*

The fathers make use of this acknowledgment of the *incongruity* of images to the Deity, from thence to prove the *incongruity* of the worship of them. *Stillingfleet.*

Wiser heathens condemned the worship of God as *incongruous* to a divine nature, and a disparagement to the deity. *Id.*

To avoid absurdities and *incongruities*, is the same law established for both arts: the painter is not to paint a cloud at the bottom of a picture, nor the poet to place what is proper to the end in the beginning of a poem. *Dryden.*

INCONNEX'EDLY, *adv.* In and connex. Lat. *in* and *connecto*, to bind together. Without any connexion or dependence. Little used.

Others ascribed hereto, as a cause, what perhaps but casually or *inconnexedly* succeeds. *Browne.*

INCON'SCIONABLE, *adj.* In and conscionable. Lat. *in* and *conscius*. Void of the sense of good and evil; without influence of conscience. Not used.

So *inconscionable* are these common people, and so little feeling have they of God, or their own souls' good. *Spenser.*

INCON'SEQUENCE, *n. s.* Lat. *in* and INCON'SEQUENT, *adj.* *consequor*; Fr. *inconsequence*. Want of just inference in reasoning; without suitable conclusions.

The ground he assumes is unsound, and his illation from thence deduced *inconsequent*. *Hakewill.*

Men rest not in false apprehensions without absurd and *inconsequent* deductions from fallacious foundations, and misapprehended mediums, erecting conclusions no way inferrible from their premises. *Browne's Vulgar Errours.*

This he bestows the name of many fallacies upon; and runs on with shewing the *inconsequence* of it, as though he did in earnest believe it were an impertinent answer. *Stillingfleet.*

And yet as absurd, as fallacious, and *inconsequent* as this way of discoursing is, it is one of the chief foundations of the doctrine of merit, and consequently of the religion of too great a part of the world. *South's Sermons.*

INCONSID'ERABLE, *adj.* Latin *in* and INCONSID'ERABLENESS, *n. s.* *consideratio*. INCONSID'ERATE, *adj.* Unworthy of INCONSID'ERATELY, *adv.* notice; trifling; INCONSID'ERATENESS, *n. s.* of little value; INCONSIDERA'TION, *n. s* small in importance: inconsiderate, from *inconsideratus*, careless; inadvertent; inattentive: want of thought; negligence; inattention: used both of persons and things.

The king, transported with just wrath, *inconsiderately* fighting and precipitating the charge, before his whole numbers came up, was slain in the pursuit. *Bacon.*

When thy *inconsiderate* hand
Flings ope this casement with my trembling name,
Then think this name alive, and that thou thus
In it offendest my genius. *Donne.*

S. Gregory reckons uncleanness to be the parent of blindness of mind, *inconsideration*, precipitancy or giddiness in actions, and self-love. *Taylor.*

I am an *inconsiderable* fellow, and know nothing. *Denham.*

If you lament it,
That which now looks like justice will be thought
An *inconsiderate* rashness. *Id. Sophy.*

He who laid down his life for the redemption of the transgressions, which were under the first Testament, cannot be so *inconsiderate of* our frailties. *Decay of Piety.*

If men do know and believe that there is such a being as God, not to demean ourselves towards him as becomes our relation to him is great stupidity and *inconsiderateness*. *Tillotson.*

The most *inconsiderable* of creatures may at some time or other come to revenge itself upon the greatest. *L'Estrange.*

From the consideration of our smallness and *inconsiderableness*, in respect of the greatness and splendor of heavenly bodies, let us with the holy psalmist raise up our hearts. *Ray on the Creation.*

Joseph was delighted with Mariamne's conversation, and endeavoured with all his art to set out the excess of Herod's passion for her; but, when he still found her cold and incredulous, he *inconsiderately* told her the private orders he left behind. *Addison.*

It is a very unhappy token of our corruption, that there should be any so *inconsiderate* among us as to sacrifice morality to politicks. *Id. Freeholder.*

May not planets and comets perform their motions more freely, and with less resistance, in this ethereal medium, than in any fluid which fills all space adequately without leaving any pores, and by consequence is much denser than quicksilver or gold? And may not its resistance be so small as to be *inconsiderable*? *Newton.*

Let no sin appear small or *inconsiderable* by which an almighty God is offended, and eternal salvation endangered. *Rogers.*

If we were under any real fear of the papists, it would be hard to think us so stupid not to be equally apprehensive with others, since we are likely to be the greatest sufferers; but we look upon them to be altogether as *inconsiderable* as the women and children. *Swift.*

INCONSISTING, *adj.* Lat. *in* and *consto*. INCONSIS'TENCE, *n. s.* Not compatible INCONSIS'TENCY, *n. s.* with: inconsistency, INCONSIS'TENT, *adj.* such opposition as INCONSIS'TENTLY, *adv.* that one proposition infers the negation of the other; such contrariety that both cannot be together; absurdity; incongruity: inconsistent, unsuitable; unsteady; changeable; contrary; with self-contradiction.

Finding no kind of compliance, but sharp protestations against the demands, as *inconsistent with* conscience, justice, or religion, the conference broke off. *Clarendon.*

The persons and actions of a farce are all unnatural, and the manners false; that is, *inconsisting* with the characters of mankind. *Dryden's Dufresnoy.*

The idea of an infinite space or duration is very obscure and confused, because it is made up of two parts very different, if not *inconsistent*. *Locke.*

There is a perfect *inconsistency* between that which is of debt, and that which is of free gift. *South.*

Mutability of temper, and *inconsistency* with ourselves, is the greatest weakness of human nature. *Addison.*

Compositions of this nature, when thus restrained, shew that wisdom and virtue are far from being *inconsistent with* politeness and good humour. *Id. Freeholder.*

If a man would register all his opinions upon love, politics, religion, and learning, what a bundle of *inconsistencies* and contradictions would appear at last. *Swift.*

When *inconsistent* with a greater good,
Reason commands to cast the less away.
Dr. Johnson's Irene.

INCON'SOLABLE, *adj.* Fr. *inconsolable*; Lat. *in* and *consolor*. Not to be comforted; sorrowful beyond susceptibility of comfort.

Her women will represent to me that she is *inconsolable*, by reason of my unkindness. *Addison.*

They take pleasure in an obstinate grief, in rendering themselves *inconsolable*. *Fiddes's Sermon.*

INCON'SONANCY, *n. s.* Lat. *in* and *consono*. Disagreement with itself.

INCONSPIC'UOUS, *adj.* Lat. *in* and *conspicio*. In and conspicuous. Indiscernible; not perceptible by the sight.

When an excellent experimenter had taken pains in accurately filling up a tube of mercury, we found that yet there remained store of *inconspicuous* bubbles. *Boyle.*

INCON'STANCY, *n. s.* } Fr. *inconstant*;
INCON'STANT, *adj.* } Lat. *in* and *consto*. Unsteadiness; mutability; diversity. Inconstant, wavering; not firm in resolution; various of inclination; wanting perseverance; applicable to persons.

Your *inconstance* is your confusion.
Chaucer. The Sompnoures Tale.

I have suffered more for their sakes, more than the villainous *inconstancy* of man is able to bear. *Shakspeare.*

O swear not by the moon, th' *inconstant* moon,
That monthly changes in her circled orb,
Lest that thy love prove likewise variable. *Id.*

Be made the mark
For all the people's hate, the princess' curses,
And his son's rage, or the old king's *inconstancy*.
Denham.

I do not think it a mark of *inconstancy* to accommodate our measures, as we do the course which we steer at sea, to the winds and storms of the political horizon. *Milton's Prose Works.*

Inconstant Sylvia, when yet
I had not found him counterfeit,
One morning (I remember well)
Tyed in this silver chain and bell,
Gave it to me, nay, and I know
What he said then; I'm sure I do. *Marvell.*

He is so naturally *inconstant*, that I marvel his soul finds not some way to kill his body. *Sidney.*

O Virtue you affect, *inconstancy* you practise.
Otway's Orphan.

Trust not a man, we are by nature false,
Dissembling, subtile, cruel, and *inconstant*. *Id.*

Where Unpreparedness is encountred with unexpected Force, Weakness with Violence, *Inconstancy* with Importunity, there Destruction must needs be not the effect of chance but nature, and by the closest connexion of causes unavoidable. *South's Sermons.*

Irresolution on the schemes of life which offer to our choice and *inconstancy* in pursuing them are the greatest causes of all our unhappiness. *Addison.*

As much *inconstancy* and confusion is there in their mixtures or combinations; for it is rare to find any of them pure and unmixt. *Woodward.*

Inconstant, blind,
Deserting friends at need, and duped by foes.
Thomson.

I hate *inconstancy*—I loathe, detest,
Abhor, condemn, abjure, the mortal made
Of such quicksilver clay, that in his breast
No permanent foundation can be laid.
Byron. Don Juan.

INCONSU'MABLE, *adj.* } Lat. *in* and *con-*
INCONSUMP'TIBLE, *adj.* } *sumo*. Not to be wasted, spent, or brought to an end: not to be destroyed by fire.

Before I give any answer to this objection of pretended *inconsumptible* lights, I would gladly see the effect undoubtedly proved. *Digby on Bodies.*

By art were weaved napkins, shirts, and coats, *inconsumable* by fire, and wherein they burnt the bodies of kings. *Browne.*

INCONTES'TABLE, *adj.* } Fr. *incontesta-*
INCONTES'TABLY, *adv.* } *ble*; Lat. *in* and *contestor*. Not to be disputed, debated, or controverted: clear beyond all doubt.

Our own being furnishes us with an evident and *incontestable* proof of a Deity; and I believe no body can avoid the cogency of it, who will carefully attend to it. *Locke.*

INCONTIG'UOUS, *adj.* Lat. *in* and *contigo*. In and contiguous. Not touching each other; not joined together.

They seemed part of small bracelets, consisting of equally little *incontiguous* beads. *Boyle.*

INCON'TINENCE, *n. s.* }
INCON'TINENCY, *n. s.* }
INCON'TINENT, *adj.* } Lat. *in* and *con-*
INCON'TINENTLY, *adv.* } *tineo*. Inability to restrain the passions: unchaste; indulging unlawful pleasures: an old meaning of incontinent and incontinently is, shunning delay; immediately.

Men shall be lovers of their own selves, false accusers, *incontinent*, fierce. 2 *Tim.* iii. 3.

They ran towards the far rebounded noise,
To weet what wight so loudly did lament;
Unto the place they came *incontinent*.
Spenser. Faerie Queene

Dispersed all their troupe *incontinent*,
And sent them home to tell a piteous tale
Of their vaine prowesse turned to their proper bale.
Id.

He says he will return *incontinent*.
Shakspeare.

The cognizance of her *incontinency*
Is this; she hath bought the name of whore thus dearly. *Id.*

In these degrees have they made a pair of stairs to marriage, which they will climb *incontinent*, or else be *incontinent* before marriage. *Id.*

Come, mourn with me for what I do lament,
And put on sullen black *incontinent*.
Id. Richard II.

The cause of this war is no other than that we will not *incontinently* submit ourselves to our neighbours. *Hayward.*

But beauty, like the fair Hesperian tree,
Laden with blooming gold, had need the guard
Of dragon-watch with uninchanted eye,
To save her blossoms, and defend her fruit
From the rash hand of bold *incontinence*. *Milton.*

This is my defence:
I pleased myself, I shunned *incontinence*,
And, urged by strong desires, indulged my sense.
Dryden.

The words sine veste Dianam agree better with Livia, who had the fame of chastity, than with either of the Julias, who were both noted of *incontinency*. *Id.*

Incontinently I left Madrid, and have been dogged and waylaid through several nations. *Arbuthnot and Pope.*

INCONTINENCE, in medicine, signifies an inability in any of the organs to retain what should not be discharged without the concurrence of the will. It is most frequently used with regard to a diabetes, or an involuntary discharge of urine. See MEDICINE.

INCONTROVER'TIBLE, *adj.* } Lat. *in*,
INCONTROVER'TIBLY, *adv.* } *controverto*.
Indisputable; to a degree beyond controversy or dispute.

The Hebrew is *incontrovertibly* the primitive and surest text to rely upon; and, to preserve the same uncorrupt, there hath been used the highest caution humanity could invent. *Browne's Vulgar Errours.*

When any tenet is generally received and adopted as an *incontrovertible* principle, we seldom look back to the arguments upon which it was first established. *Johnson's Rambler.*

INCONVE'NIENCE, *n. s.* } Fr. *inconvenient*; Lat. *in* and *convenio*. Unfitness; inexpedience; cause of uneasiness; disadvantage: inconvenient, unfit; incommodious; unseasonable; not agreeing either in time, place, or occasion.
INCONVE'NIENCY, *n. s.*
INCONVE'NIENT, *adj.*
INCONVE'NIENTLY, *adv.*

Seying the manyfolde *inconvenience*
Falling by unbrydled prosperite
Whiche is not tempered with moral prudence,
* * * * *
Moved I am, bothe by right and equite,
To youthe's wele somwhat for to endite.
Chaucer. Prologue to the Remedie of Love.

They lean to their own customs, though they be more unjust, and more *inconvenient* for the common people. *Spenser on Ireland.*

We are not to look that the church should change her publick laws, although it chance that for some particular men the same be found *inconvenient*, especially when there may be other remedy against particular *inconveniences*. *Hooker.*

They plead against the *inconveniences*, not the unlawfulness of popish apparel; and against the *inconvenience*, not the unlawfulness of ceremonies in burial. *Id.*

There is a place upon the top of mount Athos above all clouds of rain, or other *inconvenience*. *Raleigh's History.*

Man is liable to a great many *inconveniences* every moment, and is continually unsecure even of life itself. *Tillotson.*

The *inconvenience* of old age makes him incapable of corporal pleasures. *Dryden.*

Would not quickness of sensation be an *inconvenience* to an animal, that must lie still where chance has once placed it? *Locke.*

He knows that to be *inconvenient*, which we falsely think convenient for us. *Smalridge.*

Consider the disproportion between the worst *inconveniences* that stand in compliance with men, and the eternal displeasure of God. *Rogers.*

We are freed from many *inconveniences*, and we enjoy several advantages. *Atterbury.*

The things of another world, being distant, operate but faintly upon us; to remedy this *inconveniency*, we must frequently revolve their certainty and importance. *Id.*

The next amusement mortgages our fields;
Slight *inconvenience* prisons hardly frown,
From hateful time if prisons set us free. *Young.*

Another *inconvenience* attending private education is the suppressing of the principle of emulation, without which, it rarely happens that a boy prosecutes his studies with alacrity or success. *Beattie.*

This country, with its eyes open to all the *inconveniences* of the connexion, but with its memory full of all its benefits, and with all the feelings belonging to them, renewed solemnly the previously existing obligations. *Canning.*

INCONVER'SABLE, *adj.* Lat. *in* and *conversor*. In and conversable. Incommunicative; ill-qualified by temper for conversation; unsocial.

He is a person very *inconversable*. *More.*

INCONVER'TIBLE, *adj.* Lat. *in* and *converto*. In and convertible. Not transmutable; incapable of change.

It entereth not the veins, but taketh leave of the permeant parts, and accompanieth the *inconvertible* portion unto the siege. *Browne.*

INCONVIN'CIBLE, *adj.* } Lat. *in* and *con-*
INCONVIN'CIBLY, *adv.* } *vincor*. Not to be convinced; incapable of conviction.

It is injurious unto knowledge obstinately and *inconvincibly* to side with any one. *Browne.*

INCO'NY, *adj.* Perhaps from in and conn, to know. Unlearned; artless. This sense is uncertain. In Scotland it denotes mischievously unlucky: as, he's an *incony* fellow. This seems to be the meaning of Shakspeare.

O' my troth, most sweet jests, most *incony* vulgar wit,
When it comes so smoothly off. *Shakspeare.*

INCOR'PORAL, *adj.* } Fr. *incorporel*; Lat. *in* and *corpus*. These words have opposite meanings: incorporal, incorporality, incorporally, signify immaterial; distinct from matter, as do also incorporeal, incorporeally; incorporate is to mingle into a mass; to conjoin as one body; to form into a corporation; to unite, associate, embody: incorporeity is immateriality: incorpse, to unite in one body; in the former words in is used as a privative, in the latter it has the force of increase or addition.
INCORPORAL'ITY, *n. s.*
INCOR'PORALLY, *adv.*
INCOR'PORATE, *v. a., v. n.* & *adj.*
INCORPORA'TION, *n. s.*
INCORPO'REAL, *adj.*
INCORPO'REALLY, *adv.*
INCORPORE'ITY, *n. s.*
INCORPSE', *v. a.*

The apostle affirmeth plainly of all men Christian, that be they Jews or Gentiles, bond or free, they are all *incorporated* into one company, they all make but one body. *Hooker*

In him we actually are, by our actual *incorporation* into that society which hath him for their head. *Id.*

Villainous thoughts, Roderigo, when these mutualities so marshal the way, hard at hand comes the master and main exercise, the *incorporate* conclusion. *Shakspeare. Othello.*

Who the swelling clouds in bladders ties,
To mollify the stubborn clods with rain,
And scattered dust *incorporate* again? *Sandys.*

By your leaves, you shall not stay alone
'Till holy church *incorporate* two in one.
Shakspeare.

Upon my knees
I charm you, by that great vow
Which did *incorporate* and make us one. *Id.*

It is Casca, one *incorporate*
To our attempts. *Id. Julius Cæsar.*

Your most grave belly was deliberate,
Not rash, like his accusers, and thus answered:
True is it, my *incorporate* friends, quoth he,
That I receive the general food at first,
Which you do live upon. *Id. Coriolanus.*

Why do'st thou bend thine eye on vacancy,
And with the *incorporal* air doest hold discourse?
Shakspeare.

He grew unto his seat,
As he had been *incorpsed* and demy-natured
With the brave horse. *Id. Hamlet.*

Moses forebore to speak of angels, and things invisible and *incorporate*. *Raleigh.*

It is a virtue which may be called *incorporeal* and immateriate, whereof there be in nature but few. *Bacon.*

Hearing striketh the spirits more immediately than the other senses, and more *incorporeally* than the smelling. *Id.*

Make proof of the *incorporation* of iron with flint; for if it can be incorporated without over great charge, the cheapness of the flint doth make the compound stuff profitable. *Id.*

This, with some little additional, may further the intrinsick *incorporation*. *Id. Natural History.*

The same is *incorporated* with a majority, and nameth burgesses to parliament. *Carew.*

Death and I
Are found eternal, and *incorporate* both. *Milton.*

Thy soul
In real darkness of the body dwells,
Shut out from outward light,
T' *incorporate* with gloomy night. *Id.*

Thus *incorporeal* spirits to smallest forms
Reduced their shapes immense. *Id.*

Courtesy, that seemed *incorporated* in his heart, would not be persuaded by danger to offer any offence. *Sidney.*

It is not universally true, that acid salts and oils will not *incorporate* or mingle. *Boyle.*

Sense and perception must necessarily proceed from some *incorporeal* substance within us. *Bentley.*

The idolaters, who worshipped their images as gods, supposed some spirit to be *incorporated* therein, and so to make together with it a person fit to receive a worship. *Stillingfleet.*

All this learning is ignoble and mechanical among them, and the Confutian only essential and *incorporate* in their government. *Temple.*

It finds the mind unprepossessed with any former notions, and so easily gains upon the assent, grows up with it, and *incorporates into* it. *South.*

The Romans did not subdue a country to put the inhabitants to fire and sword, but to *incorporate* them into their own community. *Addison's Freeholder.*

Incorporated minds will always feel some inclination towards exterior acts, ritual observances. *Johnson. Rambler.*

INCORPORATIONS, or trades, in the polity of the Royal boroughs of Scotland, are societies of tradesmen or artists, incorporated by royal charter, and endowed with certain exclusive privileges, agreeably to the nature of their respective professions. Their number varies in the different royal boroughs, and they have more or less share in the government of their respective burghs according to the constitution of each. See CORPORATION.

INCORRECT', *adj.* INCORRECT'LY, *adv.* INCORRECT'NESS, *n. s.* INCOR'RIGIBLE, *adj.* INCOR'RIGIBLENESS, *n. s.* INCOR'RIGIBLY, *adv.* Lat. *in* and *corrigo*. That which is faulty or cannot be corrected; inaccurate; full of faults: incorrigible, applied to persons who cannot be reformed or amended, and to things which cannot be improved: incorrigibleness, hopeless depravity: incorrigibly, wicked beyond the possibility of reform.

Some men appear *incorrigibly* mad,
They cleanliness and company renounce.
Roscommon.

What we call penitence becomes a sad attestation of our *incorrigibleness*. *Decay of Piety.*

Provoked by these *incorrigible* fools,
I left declaiming in pedantick schools. *Dryden.*

What are their thoughts of things, but variety of *incorrigible* error? *L'Estrange.*

I would not have chiding used, much less blows, 'till obstinacy *and incorrigibleness* make it absolutely necessary. *Locke.*

Whilst we are *incorrigible*, God may in vengeance continue to chastise us with the judgment of war. *Smalridge.*

The piece you think is *incorrect*: why take it;
I'm all submission; what you'd have it, make it.
Pope.

The most violent party-men are such as have discovered least sense of religion or morality; and when such are laid aside, as shall be found *incorrigible*, it will be no difficulty to reconcile the rest. *Swift.*

INCORRUPT,' *adj.* INCORRUP'TED, *adj.* INCORRUPTIBIL'ITY, *n. s.* INCORRUP'TIBLE, *adj.* INCORRUP'TION, *n. s.* INCORRUPT'NESS, *n. s.* Fr. *incorruptible*; Lat. *in* and *corruptus*. Pure in conduct and principles; free from depravity: incorruptibility, insusceptibleness of corruption or decay: incorruptible, not admitting decay; pure: incorruptness, purity of manners; honesty; integrity. A mind above the power of bribes is incorruptible.

So also is the resurrection of the dead: it is sown in corruption, it is raised in *incorruption*. 1 *Cor.*

Philo, in his book of the world's *incorruptibility*, alledgeth the verses of a Greek tragick poet. *Hakewill.*

Sin, that first
Distempered all things, and, of *incorrupt*,
Corrupted. *Milton's Paradise Lost*

In such abundance lies our choice,
As leaves a great store of fruit untouched,
Still hanging *incorruptible*. *Id.*

Probity of mind, integrity, and *incorruptness* of manners, is preferable to fine parts and subtile speculations. *Woodward.*

Our bodies shall be changed into *incorruptible* and immortal substances, our souls be entertained with the most ravishing objects, and both continue happy throughout all eternity. *Wake.*

INCORRUPTIBILES, INCORRUPTIBLES, in ecclesiastical history, the name of a sect which sprang out of the Eutychians. Their distinguishing tenet was, that the body of Jesus Christ was

incorruptible; by which they meant, that after, and from the time wherein he was formed in the womb of his holy mother, he was not susceptible of any change or alteration; not even of any natural and innocent passions, as of hunger, thirst, &c.; so that he eat without any occasion before his death, as well as after his resurrection. And hence they took their name.

INCRAS'SATE, *v. a.* } Lat. *in* and *crassus.*
INCRASSA'TION, *n. s.* } The act of thickening,
INCRAS'SATIVE, *n. s.* } and the state of growing thick, are called incrassation: incrassate, to make thick: incrassative, having the quality of thickening.

The two latter indicate restringents to stanch, and *incrassatives* to thicken the blood. *Harvey.*

Nothing doth conglaciate but water; for the determination of quicksilver is fixation, that of milk coagulation, and that of oil *incrassation.* *Browne.*

If the cork be too light to sink under the surface, the body of water may be attenuated with spirits of wine; if too heavy, it may be *incrassated* with salt. *Id. Vulgar Errours.*

Acids dissolve or attenuate; alcalies precipitate or *incrassate.* *Newton's Opticks.*

Acids, such as are austere, as unripe fruits, produce too great a stricture of the fibres, *incrassate* and coagulate the fluids; from whence pains and rheumatism. *Arbuthnot.*

INCREASE', *v. n., v. a.,* & *n. s.* } Lat. *in*
INCREA'SER, *n. s.* } and *cresco.*
To grow more in number, or greater in bulk; to advance in quantity or value, or in any quality capable of being more or less; to be fertile; to make more or greater: increase, augmentation; addition to the original stock; produce; generation; progeny; the state of waxing or growing full orbed: increaser, he who increases.

Take thou no usury of him nor *increase.* *Levit.*

Hear and observe to do it, that it may be well with thee, and that ye may *increase* mightily. *Deut.* vi. 3.

He hath *increased* in Judah mourning and lamentation. *Sam.*

I will *increase* the famine. *Ezek.* v. 16.

I will *increase* them with men like a flock. *Id.* xxxvi.

Profane and vain babbling will *increase* unto more ungodliness. 2 *Tim.* ii. 16.

Hye thee from this slaughter-house,
Lest thou *increase* the number of the dead. *Shakspeare.*

Into her womb convey sterility;
Dry up in her the organs of *increase,*
And from her derogate body never spring a babe. *Id.*

Seeds, hair, nails, hedges, and herbs, will grow soonest, if set or cut in the *increase* of the moon. *Bacon's Natural History.*

Upon his shield a palm-tree still *increased,*
Though many weights its rising arms depressed:
His word was, 'Rising most, by being most oppressed.' *Fletcher's Purple Island.*

As Hesiod sings, spread waters o'er thy field,
And a most just and glad *increase* 'twill yield. *Denham.*

Our maker bids *increase;* who bids abstain
But our destroyer, foe to God and man? *Milton.*

Fishes are more numerous or *increasing* than beasts or birds, as appears by their numerous spawn. *Hale.*

It serves to *increase* that treasure, or to preserve it. *Temple.*

From fifty to threescore he loses not much in fancy; and judgment, the effect of observation, still *increases.* *Dryden.*

For three years he lived with large *increase*
In arms of honour, and esteemed in peace. *Id.*

Those grains which grew produced an *increase* beyond expectation. *Mortimer's Husbandry.*

Henry, in knots, involved his Emma's name
Upon this tree; and, as the tender mark,
Grew with the year and widened with the bark:
Venus had heard the virgin's soft address,
That as the wound the passion might *increase.* *Prior.*

Since the desire is infinite, nothing but the absolute and *increased* Infinite can adequately fill it. *Cheyne.*

Him young Thoasa bore the bright *increase*
Of Phorcys. *Pope's Odyssey.*

Hail, bards triumphant! born in happier days,
Whose honours with *increase* of ages grow,
As streams roll down, enlarging as they flow. *Pope.*

Methinks they both, as we recede from them,
Appear to join the innumerable stars
Which are around us, and as we move on
Increase their myriads. *Byron's Cain.*

INCREDIBIL'ITY, *n. s.* } Fr. *incredibilité, incredule;* Latin, *incredibilis, incredulus.* Surpassing belief: the quality or manner of being not to be believed. Incredulity, hardness of belief; refusal of credit to testimony; the state or disposition of unbelief.
INCRED'IBLE, *adj.*
INCRED'IBLENESS, *n. s.*
INCRED'IBLY, *adv.*
INCREDU'LITY, *n. s.*
INCRED'ULOUS, *adj.*
INCRED'ULOUSNESS, *n. s.*

The ship Argo, that there might want no *incredible* thing in this fable, spoke to them. *Raleigh.*

He was more large in the description of paradise, to take away all scruple from the *incredulity* of future ages. *Id.*

I am not altogether *incredulous* but there may be such candles as are made of salamander's wood, being a kind of mineral which whiteneth in the burning, and consumeth not. *Bacon.*

Yet God has wrought things as *incredible*
For his people of old: what hinders now?
Milton's Samson Agonistes.

For objects of *incredibility,* none are so removed from all appearance of truth as those of Corneille's Andromede. *Dryden.*

Presenting things impossible to view,
They wander through *incredible* to true.
Granville.

INCRE'MABLE, *adj.* Lat. *in* and *cremo.* Not consumable by fire.

If from the skin of the salamander these *incremable* pieces are composed. *Browne's Vulgar Errours.*

IN'CREMENT, *n. s.* Lat. *incrementum.* The act of growing greater; increase or produce.

Divers conceptions are concerning the Nile's *increment,* or inundation. *Browne's Vulgar Errours.*

The orchard loves to wave
With Winter winds: the loosened roots then drink
Large *increment,* earnest of happy years. *Phillips.*

This stratum is expanded at top, serving as the seminary that furnisheth matter for the formation and *increment* of animal and vegetable bodies. *Woodward.*

IN'CREPATE, *v. a.* } Lat. *increpo, increpatio.* To chide: reprehension.
INCREPA'TION, *n. s.* }

The admonitions, fraternal or paternal, of his fellow Christians, or of the governors of the church, then more publick reprehensions and *increpations*. *Hammond.*

INCRUST', *v. a.* } Fr. *incruster;* Latin
INCRUS'TATE, *v. a.* } *incrusto.* To cover with
INCRUSTA'TION, *n. s.* } an additional coat adhering to the internal matter; a covering; something superinduced.

The finer part of the wood will be turned into air, and the grosser stick baked and *incrustate* upon the sides of the vessel. *Bacon.*

Having such a prodigious stock of marble, their chapels are laid over with such a rich variety of *incrustations* as cannot be found in any other part. *Addison on Italy.*

Some rivers bring forth spars, and other mineral matter so as to cover and *incrust* the stones. *Woodward.*

Any of these sun-like bodies in the centres of the several vortices, are so *incrustated* and weakened as to be carried about in the vortex of the true sun. *Cheyne.*

Save but our army, and let Jove *incrust*
Swords, pikes, and guns, with everlasting rust. *Pope.*

The shield was purchased by Woodward, who *incrusted* it with a new rust. *Arbuthnot and Pope.*

How was my heart *incrusted* by the world;
O how self-fettered was my grov'ling soul. *Young.*

IN'CUBATE, *v. n.* } Lat. *incubo.* To sit
INCUBA'TION, *n. s.* } upon eggs: the act of
IN'CUBUS, *n. s.* } sitting upon eggs to hatch them. Incubus, the night-mare.

Women may now go safely up and down;
In every bush, and under every tree,
Ther is none other *Incubus* but he
And he ne will don hem no dishonour.
Chaucer. The Wif of Bathes Tale.

Whether that vitality was by *incubation*, or how else, is only known to God. *Raleigh.*

Birds have eggs enough at first conceived in them to serve them, allowing such a proportion for every year as will serve for one or two *incubations*. *Ray.*

The *incubus* is an inflation of the membranes of the stomach, which hinders the motion of the diaphragma, lungs, and pulse, with a sense of a weight oppressing the breast. *Floyer.*

As the white of an egg, by *incubation*, so can the serum by the action of the fibres be attenuated. *Arbuthnot.*

When the whole tribe of birds by *incubation*, produce their young, it is a wonderful deviation, that some few families should do it in a more novercal way. *Derham.*

INCUBUS, or Night Mare, is a disease consisting in oppression of the breast, so very violent, that the patient cannot speak or even breathe. The Greeks call it εφιαλτης, q. d. leaper, or one that rusheth on a person. In this disease the senses are not quite lost, but drowned and astonished, as is the understanding and imagination; so that the patient seems to think some huge weight thrown on him, ready to strangle him. Children are very liable to this distemper; so are corpulent people, and men of much study and application of mind, by reason the stomach in all these finds some difficulty in digestion.

INCUL'CATE, *v. a.* } Fr. *inculquer;* Lat.
INCUL'CATE, *n. s.* } *inculco.* To impress by frequent admonitions; to enforce by repetition. Inculcation, repeated admonition.

Manifest truth may deserve sometimes to be *inculcated*, because we are too apt to forget it. *Atterbury.*

Homer continually *inculcates* morality and piety to the gods. *Broome's Notes to Pope's Odyssey.*

His teachers would have known what peculiar precepts and examples it was most expedient to *inculcate* upon him. *Beattie.*

INCULT', *adj.* Fr. *incultus;* Lat. *inculte.* Uncultivated; untilled.

Her forests huge,
Incult, robust and tall, by Nature's hand
Planted of old. *Thomson's Autumn.*

INCUL'PABLE, *adj.* } Latin *inculpabilis.*
INCUL'PABLY, *adv.* } Not deserving blame: not in a responsible manner.

As to errors or infirmities, the frailty of man's condition has invincibly, and therefore *inculpably*, exposed him. *South.*

Ignorance, so far as it may be resolved into natural inability, is, as to men at least, *inculpable*, and consequently not the object of scorn, but pity. *Id.*

INCUM'BENCY, *n. s.* } Latin, *incumbo.*
INCUM'BENT, *adj.* & *n. s.* } The act of lying upon another; the state of keeping a benefice. Incumbent, resting; lying upon; imposed as a duty; obligatory. Incumbent, the present possessor of an ecclesiastical benefice.

Then with expanded wings he steers his flight
Aloft, *incumbent* on the dusky air,
That felt unusual weight. *Milton's Paradise Lost.*

The ascending parcels of air, having now little more than the weight of the *incumbent* water to surmount, were able both so to expand themselves as to fill up that part of the pipe which they pervaded, and, by pressing every way against the sides of it, to lift upwards with them what water they found above them. *Boyle.*

With wings expanded wide ourselves we'll rear,
And fly *incumbent* on the dusky air. *Dryden.*

There is a double duty *incumbent* upon us in the exercise of our powers. *L'Estrange.*

Thus, if we think and act, we shall shew ourselves duly mindful not only of the advantages we receive from thence, but of the obligations also which are *incumbent* upon us. *Atterbury.*

In many places the whole ecclesiastical dues are in lay hands, and the *incumbent* lieth at the mercy of his patron. *Swift.*

These fines are only to be paid to the bishop, during his *incumbency* in the same see. *Id.*

Man is the destined prey of pestilence,
And o'er his guilty domes
She draws a close *incumbent* cloud of death.
Thomson.

While full of death, and fierce with ten-fold frost
The long long night, *incumbent* o'er their heads,
Falls horrible. *Id.*

Here the rebel giants lye;
And, when to move the *incumbent* load they try,
Ascending vapours on the day prevail. *Addison.*

But though there were only one nation, one family, or one person, upon the earth, certain duties would be *incumbent* on that nation, family or person. *Beattie.*

An INCUMBENT, or minister, resident on his benefice, is so called, because he does, or at least ought to, bend his whole study to discharge the cure of his church.

INCUM'BER, *v. a.* Fr. *encombrer*. To embarrass. See ENCUMBER.

My cause is called, and that long looked-for day
Is still *encumbered* with some new delay. *Dryden.*

INCUR', *v. a.* } Lat. *incurro*; Span. *in-*
INCUR'SION, *n. s.* } *currir*; Ital. *incorrere*. To become liable to blame or punishment; to press on the senses: incursion, a hostile attack; invasion without conquest; inroad; ravage.

Spain is very weak at home, or very slow to move, when they suffered a small fleet of English to make an hostile invasion, or *incursion*, upon their havens and roads. *Bacon.*

The motions of the minute parts of bodies are insible, and *incur* not to the eye; but yet they are to e deprehended by experience. *Id.*

I have *incurred* displeasure from inferiors for giving ay to the faults of others. *Hayward.*

They, not obeying,
Incurred, what could they less? the penalty;
And, manifold in sin, deserved to fall. *Milton.*

So judge thou still, presumptuous! 'till the wrath,
Which thou *incurrest* by flying, meet thy flight
Sevenfold, and scourge that wisdom back to hell.
Id.

Now the Parthian king hath gathered all his host
gainst the Scythian, whose *incursions* wild
ave wasted Sogdiana. *Id.*

Sternly he pronounced
he rigid interdiction, which resounds
et dreadful in mine ear, though in my choice
ot to *incur*. *Id. Paradise Lost.*

The mind of man, even in spirituals, acts with correal dependance; and so is he helped or hindered its operations, according to the different quality of xternal objects that *incur into* the senses. *South.*

Sins of daily *incursion*, and such as human frailty is avoidably liable to. *Id.*

They had a full persuasive that not to do it were desert God, and consequently to *incur* damnation. *Id.*

The *incursions* of the Goths disordered the affairs of Roman empire. *Arbuthnot on Coins.*

To imitate the fictions and sentiments of Spenser *incur* no reproach; for allegory is perhaps one of most pleasing vehicles of instruction. *Johnson's Rambler.*

INCURABIL'ITY, *n. s.* } Fr. *incurabilité*;
INCU'RABLE, *adj.* } Latin *in* and *curo*.
INCU'RABLENESS, *n. s.* } Impossibility of
INCU'RABLY, *adv.* } cure: remediless;
INCU'RIOUS, *adj.* } not to be removed medicine: these words are used principally h reference to bodily disease; but also in a irative sense, as descriptive of any state which eyond remedy: incurious is negligent; inentive.

If I bide here, life can I not sustain;
f I go hence my peines be *incurable*:
Where him to finde, I knowe no place certain;
nd thus I ne wote, of these things twain,
Vhiche I maie take, and which I maie refuse;
Iy hert is wounded, heron to think or muse.
Chaucer. Lament of Mary Magdaleine.

Pause not; for the present time's so sick,
hat present medicine must be ministered,
r overthrow *incurable* ensues. *Shakspeare.*

Stop the rage betime,
efore the wound do grow *incurable*;
or being green, there is great hope of help. *Id.*
'e'll instantly open a door to the manner of a er and improper consumption, together with the reason of the *incurability* of the former, and facile cure of the other. *Harvey.*

No man withholds thee, nothing from thy hand
Fear I *incurable*; bring up thy van;
My heels are fettered, but my fist is free.
Milton. Samson Agonistes.

We cannot know it is or is not, being *incurably* ignorant. *Locke.*

A schirrus is not absolutely *incurable*, because it has been known that fresh pasture has cured it in cattle. *Arbuthnot.*

The Creator did not bestow so much skill upon his creatures, to be looked upon with a careless *incurious* eye. *Derham.*

He seldom at the park appeared;
Yet, not *incurious*, was inclined
To know the converse of mankind. *Swift.*

If idiots and lunaticks cannot be found, *incurables* may be taken into the hospital. *Id.*

But ah! what woes remain! life rolls apace
And that *incurable* disease old age,
In youthful bodies more severely felt,
More sternly active, shakes their blasted prime.
Armstrong.

INCURVA'TION, *n. s.* } Lat. *incurvo*. The
INCUR'VATE, *v. a.* } act of bending; the
INCUR'VITY, *n. s.* } state of being bent; flexion of the body in token of reverence: to crook: a change from a straight line.

One part moving while the other rests, one would think, should cause an *incurvation* in the line. *Glanville.*

The *incurvity* of a dolphin must be taken not really, but in appearance, when they leap above water, and suddenly shoot down again: strait bodies, in a sudden motion, protruded obliquely downward, appear crooked. *Browne.*

He made use of acts of worship which God hath appropriated; as *incurvation*, and sacrifice. *Stillingfleet.*

Sir Isaac Newton has shewn, by several experiments of rays passing by the edges of bodies, that they are *incurvated* by the action of these bodies. *Cheyne.*

IN'DAGATE, *v. a.* } Lat. *indago*. To search,
INDAGA'TION, *n. a.* } or beat out: indagation,
INDAGA'TOR, *n. s.* } an enquiry or examination: indagator, an examiner.

Part hath been discovered by himself, and some by human *indagation*. *Browne's Vulgar Errours.*

The number of the elements of bodies requires to be searched into by such skilful *indagators* of nature. *Boyle.*

Paracelsus directs us, in the *indagation* of colours, to have an eye principally upon salts. *Boyle.*

INDART', *v. a.* In and dart. To dart in; to strike in.

I'll look to like, if looking liking move;
But no more deep will I *indart* mine eye,
Than your consent gives strength to make it fly.
Shakspeare.

INDEBT', *v. a.* } Lat. *in* and *debeo*. To
INDEBT'ED, *adj.* } put into debt; to oblige or put under obligation: indebted, obliged by something received; bound to restitution; having incurred a debt. It has *to* before the person to whom the debt is due, and *for* before the thing received.

Forgive us our sins, for we forgive every one that is *indebted* to us. *Luke* xi. 4.

If the course of politick affairs cannot in any good course go forward without fit instruments, and that

which fitteth them be their virtues, let polity acknowledge itself *indebted* to religion, godliness being the chiefest top and well-spring of all true virtues, even as God is of all things. *Hooker.*

He for himself
Indebted and undone, has nought to bring.
Milton.

Let us represent to our souls the love and beneficence *for* which we daily stand *indebted* to God.
Rogers.

Few consider how much we are *indebted* to government, because few can represent how wretched mankind would be without it. *Atterbury.*

This blest alliance may
Th' *indebted* nation bounteously repay.
Granville.

We are wholly *indebted for* them to our ancestors.
Swift.

Thy forehead wrapt in clouds,
A leafless branch thy sceptre, and thy throne,
A sliding car *indebted* to no wheels. *Cowper.*

For the most valuable comforts of life we are *indebted* to the social and benevolent attentions of one another. *Beattie.*

Friends fail—slaves fly—and all betray—and more
Than all the most *indebted*—but a heart
That loves without self-love. 'Tis here—now prove it.
Byron.

INDE'CENCY, *n. s.* } Fr. *indecence;* Lat.
INDE'CENT, *adj.* } *in* and *decet*. Any
INDE'CENTLY, *adv.* } thing unbecoming; any thing contrary to good manners; something wrong, but scarcely criminal: unfit to be seen or heard.

If on they rushed, repulse
Repeated, and *indecent* overthrow
Doubled, would render them yet more despised,
And to their foes a laughter.
Milton's Paradise Lost.

Characters, where obscene words were proper in their mouths, but very *indecent* to be heard.
Dryden.

He will in vain endeavour to reform *indecency* in his pupil, which he allows in himself. *Locke.*

Till these men can prove these things, ordered by our church, to be either intrinsically unlawful or *indecent*, the use of them, as established amongst us, is necessary. *South.*

And it is abominable, because it abounds in filthy and *indecent* images. *Beattie.*

INDECID'UOUS, *adj.* Lat. *in, de, cado*. In and deciduous. Not falling; not shed. Used of trees that do not shed their leaves in winter.

We find the statue of the sun framed with rays about the head, which were the *indeciduous* and unshaken locks of Apollo. *Browne.*

INDECLI'NABLE, *adj.* Fr. *indeclinable;* Lat. *indeclinabilis*. Not varied by terminations.

Pondo is an *indeclinable* word, and when it is joined to numbers it signifies libra. *Arbuthnot.*

INDEC'OROUS, *adj.* } Lat. *in, decus, inde-*
INDECO'RUM, *n. s.* } *corus*. Conduct unsuitable, unsemly, and improper: unbecoming.

What can be more *indecorous* than for a creature to violate the commands, and trample upon the authority, of that awful Excellence to whom he owes his life?
Norris.

The soft address, the castigated grace,
Are *indecorums* in the modern maid. *Young.*

INDEED', *adv.* Belg. *inde dædt;* Teut. *inder that*, i. e. that is truly. See DEED. In reality; in truth: used emphatically to express superiority, as above the common rate: this is to be granted; a particle of connexion. It is used sometimes as a slight assertion or recapitulation in a sense hardly perceptible or explicable, and, though some degree of obscure power is perceived, might, even where it is properly enough inserted, be omitted without being missed. To denote concession in comparisons.

Some, who have not deserved judgment of death, have been for their goods' sake caught up and carried streight to the bough: a thing *indeed* very pitiful and horrible. *Spenser.*

Though such assemblies he had *indeed* for Religion's sake, hurtful nevertheless they may prove as well in regard of their fitness to serve the turn of hereticks, and such as privily will venture to instil their poison into new minds. *Hooker.*

Then didst thou utter, I am yours for ever,
'Tis grace *indeed*. *Shakspeare.*

Against these forces were prepared to the number of near one hundred ships; not so great of bulk *indeed*, but of a more nimble motion. *Bacon.*

I said I thought it was confederacy between the juggler and the two servants; tho' *indeed* I had no reason so to think. *Id.*

Borrows in mean affairs his subjects' pains;
But things of weight and consequence *indeed*,
Himself doth in his chamber them debate.
Davies.

Yet loving *indeed*, and therefore constant.
Sidney.

This limitation, *indeed*, of our author will save those the labour who would look for Adam's heir among the race of brutes; but will very little contribute to the discovery of one next heir amongst men. *Locke.*

Such sons of Abraham, how highly soever they may have the luck to be thought of, are far from being Israelites *indeed*. *South.*

There is *indeed* no great pleasure in visiting these magazines of war, after one has seen two or three of them. *Addison.*

There is nothing in the world more generally dreaded, and yet less to be feared, than death: *indeed*, for those unhappy men whose hopes terminate in this life, no wonder if the prospect of another seems terrible and amazing. *Wake.*

When young *indeed*
In full content, we sometimes nobly rest,
Unanxious for ourselves. *Young.*

It is *indeed* true that habits of long acquaintance will sometimes overcome dislike. *Beattie*

Indeed a certain fair and fairy one
Of the best class, and better than her class.
Byron. Don Juan.

I dread it, *indeed*, but upon far other grounds; I dread it from a consciousness of the tremendous power Great Britain possesses of pushing hostilities in which she may be engaged to consequences which I shudder to contemplate. *Canning.*

INDEFAT'IGABLE, *adj.* } Spanish and
INDEFAT'IGABLY, *adv.* } French, *indefatigable;* Lat. *in* and *defatigo*. Unwearied; not exhausted with labor; diligent: without intermission, and without tiring.

Who shall spread his airy flight,
Unborne with *indefatigable* wings,
Over the vast abrupt. *Milton*

A man *indefatigably* zealous in the service of the church and state, and whose writings have highly deserved of both. *Dryden.*

The ambitious person must rise early and sit up late, and pursue his design with a constant *indefatigable* attendance: he must be infinitely patient and servile. *South.*

INDEFECTIBIL'ITY, *n. s.* } Lat. *in* and
INDEFEC'TIBLE, *adj.* } *defectus.* The quality of suffering no decay, decline, or defect: unfailing; constant.

INDEFEI'SIBLE, *adj.* Fr. *indefaisable.* Not to be cut off; not to be vacated; irrevocable.

So *indefeisible* is our estate in those joys, that, if we do not sell it in reversion, we shall, when once invested, be beyond the possibility of ill husbandry. *Decay of Piety.*

INDEFEN'SIBLE, *adj.* Lat. *in* and *defensus.* That cannot be defended or maintained.

As they extend the rule of consulting Scripture to all the actions of common life, even so far as to the taking up of a straw, so it is altogether false or *indefensible.* *Sanderson.*

INDEF'INITE, *adj.* } Fr. *indefini;* Italian
INDEF'INITELY, *adv.* } *indefinite;* Lat. *indefi-*
INDEFIN'ITUDE, *n. s.* } *nitus.* Not determined or limited; undecided; large beyond human comprehension, although not absolutely without limits: quantity not limited or defined.

We observe that custom, whereunto St. Paul alludeth, and whereof the fathers of the church in their writings make often mention, to shew *indefinitely* what was done; but not universally to bind for ever all prayers unto one only fashion of utterance. *Hooker.*

Though a position should be wholly rejected, yet that negative is more pregnant of direction than an *indefinite;* as ashes are more generative than dust. *Bacon's Essays.*

Her advancement was left *indefinite;* but thus, that it should be as great as ever any former queen of England had. *Bacon.*

They arise to a strange and prodigious multitude, if not *indefinitude*, by their various positions, combinations, and conjunctions. *Hale.*

We conceive no more than the letter beareth; that is, four times, or *indefinitely* more than thrice. *Browne.*

Tragedy and picture are more narrowly circumscribed by place and time than the epick poem; and the time of this last is left *indefinite.* *Dryden.*

If the word be *indefinitely* extended, that is, so far as no human intellect can fancy any bounds of it, then what we see must be the least part. *Ray.*

Though it is not infinite, it may be *indefinite;* though it is not boundless in itself, it may be so to human comprehension. *Spectator.*

A duty to which all are *indefinitely* obliged, upon some occasions, by the expressed command of God. *Smalridge.*

INDELIB'ERATE, *adj.* } Fr. *indeliberé.*
INDELIB'ERATED. } In and deliberate. Unpremeditated; done without consideration.

Actions proceeding from blandishments, or sweet persuasions, if they be *indeliberated*, as in children, who want the use of reason, are not presently free actions. *Bramhall.*

The love of God better can consist with the *indeliberate* commissions of many sins, than with an allowed persistance in any one. *Government of the Tongue.*

INDEL'IBLE, *adj.* Fr. *indelebile;* Lat. *indelebilis.* Not to be blotted out or effaced; not to be annulled.

Wilful perpetration of unworthy actions brands with *indelible* characters the name and memory. *King Charles.*

They are indued with *indelible* power from above to feed, to govern this household, and to consecrate pastors and stewards of it to the world's end. *Sprat.*

Thy heedless sleeve will drink the coloured oil,
And spot *indelible* thy pocket soil. *Gay's Trivia.*

INDEL'ICACY, *n. s.* } Latin *in* and *deliciæ;*
INDEL'ICATE, *adj.* } hence *delicatus.* Want of decency; coarseness of appearance or manner: inelegant. See DELICACY.

Your papers would be chargeable with worse than *indelicacy*, they would be immoral, did you treat detestable uncleanness as you rally an impertinent self-love. *Addison.*

INDEMNIFICATION, *n. s.* } Fr. *indem-*
INDEM'NIFY, *v. a.* } *nité;* Ital. *in-*
INDEM'NITY, *n. s.* } *demnita;* in, and Lat. *damno.* Security against loss; reimbursement of penalty or loss, and security from punishment: to preserve from injury.

I will use all means, both of amnesty and *indemnity*, which may most fully remove all fears, and bury all jealousies in forgetfulness. *King Charles.*

Insolent signifies rude and haughty, *indemnify* to keep safe. *Watts.*

Just laws, to be sure, and admirable equity, if a stranger is to collect a mob which is to set half Manchester on fire; and the burnt half is to come upon the other half for *indemnity*, while the stranger goes off unquestioned, by the stage! *Canning.*

INDENT', *v. a., v. n.* & *n. s.* } Fr. *denté;*
INDENTA'TION, *n. s.* } Ital. *indentare;*
INDENT'URE, *n. s.* } Latin *in* and *dens;* a tooth. To mark any thing with inequalities like a row of teeth; to cut in and out; to make a wave or undulate. Indent, from the method of cutting counterparts of a contract together, that, laid on each other, they may fit, and any want of conformity may discover a fraud; to contract; to bargain; to make a compact. Indent, inequality; incisure. Indentation, waving in any figure. Indenture, a covenant, so named because the counterparts are indented or cut one by the other; a contract of which there is a counterpart.

In Hall's chronicle much good matter is quite marred with *indenture* English. *Ascham's Schoolmaster.*

Trent shall not wind with such a deep *indent,*
To rob me of so rich a bottom here. *Shakspeare.*

Shall we buy treason, and *indent* with fears,
When they have lost and forfeited themselves?
Id.

About his neck
A green and gilded snake had wreathed itself,
Who with her head, nimble in threats, approached
The opening of his mouth; but suddenly,
Seeing Orlando, unlinked itself,
And with *indented* glides did slip away
Into a bush. *Id. As You Like It.*

He descends into the solemnity of a pact and covenant, and has *indented* with us. *Decay of Piety.*

Trent, who, like some earth-born giant, spreads
His thirty arms along the *indented* meads. *Milton.*

The serpent then, not with *indented* wave,
Prone on the ground, as since; but on his rear
Circular base of rising folds, that towered
Fold above fold, a surging maze! *Id.*

The margins do not terminate in a straight line, but are *indented*, each *indentation* being continued in a small ridge, to the *indentation* that answers it on the opposite margin. *Woodward.*

The margins on each side do not terminate in a straight line, but are *indented*. *Id.*

The critick to his grief will find
How firmly these *indentures* bind. *Swift.*

INDEPEN'DENCE, *n. s.* } French *independance*; in, and Latin, *dependeo*. Freedom; exemption from control: not depending; not supported by any other; not relying on another; not controlled. It is used with *on*, *of*, or *from*, the object; of which *on* seems most proper, since we say to depend on, and consequently dependent on; not relating to any thing else as its superior. Independent, one who holds that every congregation is a complete church, subject, in religious matters, to no superior authority. Independently, without reference to other things or subjects.

INDEPEN'DENCY, *n. s.*
INDEPEN'DENT, *adj.* & *n. s.*
INDEPEN'DENTLY, *adv.*

We shall, in our sermons, take occasion to justify such passages in our liturgy as have been unjustly quarrelled at by presbyterians, *independents*, or other puritan sectaries. *Sanderson.*

Dispose lights and shadows, without finishing every thing *independently* the one of the other. *Dryden.*

Since all princes of *independent* governments are in a state of nature, the world never was without men in that state. *Locke.*

Creation must needs infer providence, and God's making the world irrefragably proves that he governs it too; or that a being of dependent nature remains nevertheless *independent* upon him in that respect. *South.*

Dreams may give us some idea of the great excellency of a human soul, and some intimations of its *independency* on matter. *Addison.*

A very famous *independent* minister was head of a college in those times. *Id. Spectator.*

The town of St. Gaul is a protestant republick, *independent* of the abbot, and under the protection of the cantons. *Addison.*

The consideration of our understanding, which is an incorporeal substance *independent from* matter; and the contemplation of our own bodies, which have all the stamps and characters of excellent contrivance; these alone do very easily guide us to the wise Author of all things. *Bentley.*

Let fortune do her worst, whatever she makes us lose, as long as she never makes us lose our honesty and our *independence*. *Pope.*

Give me, I cried, enough for me,
My bread and *independency*:
So bought an annual rent or two,
And lived just as you see I do. *Id.*

Hail! *Independence*, hail! Heaven's next best gift
To that of life and an immortal soul!
Thomson's Liberty.

I praise you much, ye meek and patient pair,
For ye are worthy; chusing rather far
A dry but *independent* crust, hard earned,
And eaten with a sigh, than to endure
The rugged frowns and insolent rebuffs
Of knaves in office. *Cowper.*

He was as *independent*—aye, much more
Than those who were not paid for *independence*.
Byron. Don Juan.

The house of Braganza was placed at the head of an *independent* monarchy at the instance and by the friendship of Great Britain. *Canning.*

INDEPENDENCY. Under the term BISHOP we have stated at considerable length the chief arguments in favor of the episcopal form of church government. It will be fair to add a more detailed statement of the principal arguments of the Independents in favor of their plan. In support of it, they observe, that the word εκκλησια, translated church, is always used in Scripture to signify either a single congregation, or the place where a single congregation meets. Thus that unlawful assembly at Ephesus, brought together against Paul by the craftsmen, is called εκκλησια, a church. Acts xix. 32, 39, 41. The word, however, is generally applied to a more sacred use; but still it signifies either the body assembling, or the place in which it assembles. The whole body of the disciples at Corinth is called the church, and spoken of as coming together into one place. 1 Cor. xiv. 23. The place into which they came together has been likewise thought to be called a church. See 1 Cor. xi. 18, 20. Wherever there were more congregations than one there were likewise more churches than one. See 1 Cor. xi. 18. The whole nation of Israel is indeed called a church, but it was no more than a single congregation; for it had but one place of public worship, viz. first the tabernacle, and afterwards the temple. The Catholic church of Christ, his holy nation and kingdom, is also a single congregation, having one place of worship, viz. heaven, where all the members assemble by faith and hold communion; and in which, when they shall all be fully gathered together, they will in fact be one glorious assembly. We find it called 'the general assembly and church of the first-born, whose names are written in heaven.' The Independent can find no other description of a church in the New Testament; not a trace of a diocese or presbytery consisting of several congregations all subject to one jurisdiction. The number of disciples in Jerusalem was certainly great before they were dispersed by the persecution; yet they are never mentioned as forming distinct assemblies, but as one assembly meeting with its elders in one place; sometimes in the temple, sometimes in Solomon's porch, and sometimes in an upper room. After the dispersion the disciples who fled from Jerusalem, as they could no longer assemble in one place, are never called a church by themselves, or one church, but the churches of Judea, Samaria, and Galilee (Acts ix. 31, Gal. i. 22). Whence the Independents conclude that in Jerusalem the words church and congregation were of the same import; and if such was the case there, where the gospel was first preached, we may reasonably expect to find it so in other places. Thus, when Paul on his journey calls the elders of the church of Ephesus to Miletus, he speaks to them as the joint overseers of a single congregation. See Acts xx. 28. Had the church at Ephesus consisted of different congregations, united under such a jurisdiction as that of a modern presbytery, it would have been natural to say 'Take heed to yourselves, and to the flocks over which the Holy Ghost hath made you overseers:' but this is a way of speaking of which the Independents find not an instance in the whole New Testament.

The sacred writers, when speaking of all the Christians in a nation or province, never call them the church of such a nation or province, but the churches of Galatia (Gal. i. 2), of Macedonia (2 Cor. viii. 1), and of Asia (1 Cor. xvi. 0). On the other hand, when speaking of the disciples in a city or town, who might ordinarily assemble in one place, they uniformly call them church; saying the church of Antioch, the church at Corinth, the church of Ephesus, and the like.

In each of these churches or congregations there were elders or presbyters, and deacons; and in every church there seem to have been more than one elder, in some many, who 'labored in word and doctrine.' Thus we read (Acts xiv. 23) of Paul and Barnabas ordaining elders in every church; and (Acts xx. 17) of a company of elders in the church of Ephesus, who were exhorted to 'feed the flock, and to take heed to themselves, and to all the flock over which the Holy Ghost had made them overseers:' but of such elders as are to be found in modern Presbyterian churches, who neither teach, nor are apt to teach, the Independents find no vestige in the Scriptures, nor in the earliest writers of the Christian church. The rule or government of this presbytery or eldership in a church is not their own, but Christ's. They are not lords over God's heritage, nor can they pretend to more power over the disciples than the apostles had. But when the administration of the apostles in the church of Jerusalem, and other churches where they acted as elders, is enquired into by an Independent, it does not appear to him that they did any thing of common concern to the church, without the consent of the multitude: nay, it seems they thought it necessary to judge and determine in discipline in presence of the whole church (Acts vi 1, 6; xv. 22; 1 Cor. v. 3, 4, 5).

Excommunication and absolution were in the power of the church at Corinth, and not of the elders, as distinguished from the congregation (1 Cor. v., 2 Cor. ii.) The apostle indeed speaks of his delivering some unto Satan (1 Tim. i. 20), but it is by no means clear that he did it by himself, and not after the manner pointed at, 1 Cor. v. 4, 5; even as it does not appear, from his saying, in one epistle, that the gift was given unto Timothy by the putting on of his hands, that this was not done in the presbytery of a church, as in the other epistle we find it actually was. The trying and judging of false apostles was a matter of the first importance: but it was done by elders with the flock at Ephesus (Rev. ii. 2; Acts xx. 28—30); which flock did in the days of Ignatius all partake of the Lord's supper, and pray together in one place. Even the power of binding and loosing, or the power of the keys, as it has been called, was by our Saviour conferred not upon a particular order of disciples, but upon the church. See Matt. xviii. 15, 16, 17, 18. It is not said, if he shall neglect to hear the one or two, tell it to the elders of the church; far less can it be meant that the offended person should tell the cause of his offence to all the disciples in a presbytery or diocese consisting of many congregations: but he is required to tell it to that particular church or congregation to which they both belong; and the sentence of that assembly, pronounced by its elders, is in a very solemn manner declared to be final, from which there lies no appeal to any jurisdiction on earth.

With respect to the constituting of elders in any church or congregation, the Independent reasons as follows. The officers of Christ's appointment are either ordinary and permanent in the church, or they were extraordinary and peculiar to the planting of Christianity. The extraordinary officers were employed in laying the plan of the gospel churches, and in publishing the New Testament revelation. Such were the apostles, the chosen witnesses of our Saviour's resurrection; such were the prophets inspired by the Holy Ghost for explaining infallibly the Old Testament by the things written in the New; and such were the evangelists, the apostle's ministers. These can be succeeded by none in that which was peculiar to them, because their work was completed by themselves. But they are succeeded in all that was not peculiar to them by elders and deacons, the only two ordinary and permanent orders of ministers in the church. We have already seen that it belongs to the office of the elder to feed the flock of Christ; and the only question to be settled is, how men are ordinarily called to that office; for about the office of the deacon there is little or no dispute. No man now can pretend to be so called of God to the ministry of the word as the apostles and other inspired elders were, whom he chose to be the publishers of his revealed truth, and to whose mission he bore witness in an extraordinary manner.

But what the apostles were to those who had the divine oracles from their mouths, that their writings are to us: and therefore, as no man can lawfully pretend a call from God to make any addition to those writings, so neither can any man pretend to be lawfully called to the ministry of the word already written, but in the manner which that word directs. Now there is nothing of which the New Testament speaks more clearly than of the characters of those who should exercise the office of elders in the church, and of the actual exercise of that office. The former are graphically drawn in the epistles to Timothy and Titus; and the latter is minutely described in Paul's discourse to the Ephesian elders, in Peter's exhortation to elders, and our Lord's commission to those ministers with whom he promised to be always present even unto the end of the world. It is not competent for any man or body of men to add to, or diminish from, the description of a gospel minister given in these places, so as to insist upon the necessity of any qualification which is not there mentioned, or to dispense with any qualification as needless which is there required. Neither has Jesus Christ, the only legislator to the church, given to any ministers or people any power or right whatsoever to call, send, elect, or ordain, to that office, any person who is not qualified according to the description given in his law. Let a man have hands laid upon him by such as could prove an uninterrupted descent by imposition of hands

from the apostles; let him be set apart to that office by a company of ministers themselves the most conformable to the scripture character, and let him be chosen by the most holy people on earth; yet, if he answer not the New Testament description of a minister, he is not called of God to that office, and is no minister of Christ, but is indeed running unsent. No form of ordination can pretend to such a clear foundation in the New Testament as the description of the persons who should be elders of the church; and the laying on of hands, whether by bishops or presbyters, is of no more importance in the mission of a minister of Christ, than the waving of one's hand in the air, or the putting of it into his bosom; for now, when the power of miracles has ceased, it is obvious that such a rite, by whomsoever performed, can convey no powers, whether ordinary or extraordinary. Indeed it appears to have been sometimes used even in the apostolic age without any such intention. See Acts xiii. 3. In a word, whoever in his life and conversation is conformable to the character which the inspired writers give of a bishop or elder, and is likewise qualified by his 'mightiness in the scripture,' to discharge the duties of that office, is fully authorised to administer the sacraments of baptism and the Lord's supper, to teach, exhort, and rebuke, with all long suffering and doctrine, and has all the call and mission which the Lord now gives to any man; whilst he who wants the qualifications mentioned has not God's call, whatever he may have; nor any authority to preach the gospel of Christ, or to dispense the ordinances of his religion. From this view of the Independent principles, which is faithfully taken from their own writers, it appears, that, according to them, even the election of a congregation confers upon the man whom they may choose for their pastor no new powers, but only a new relation between him and a particular flock, giving him an exclusive right, either by himself or in conjunction with other pastors constituted in the same manner, to exercise among them that authority which he derives immediately from Christ, and which, in a greater or less degree, is possessed by every sincere Christian.

There are two sects of Independents in Scotland: the first of whom have no peculiar denomination besides the general one of Independents or Congregationalists. Their religious sentiments are strictly Calvinistic, and they agree in general with those of the English Independents. The other sect is generally denominated in Scotland Glassites, from their founder Mr. John Glas; and sometimes in England Sandemanians, from Mr. Robert Sandeman, who spread their doctrines in England and America. Some subdivisions have lately taken place among them: but both sects agree in the general principles above stated with regard to church government.

The INDEPENDENTS are a sect of protestants, so called from their maintaining that each congregation of Christians, which meets ordinarily in one place for public worship, is a complete church, has full power to regulate every thing relating to religious government within itself, and is in no respect dependent upon, or accountable to, other churches. This term is used specifically for a respectable and increasing body of Protestant dissenters in England: a large portion of the Protestant churches of North America are also Independents; and the term will describe generically the sentiments upon church government of the Baptists in both these countries, and various other dissenting bodies in England.

The Independents, considered as a sect, arose in England during Elizabeth's reign. The hierarchy established by her, the vestments worn by the clergy, the book of common prayer, and, above all, the sign of the cross used in administering baptism, were very offensive to many of her subjects, who, during the persecutions of queen Mary I., had taken refuge among the protestants of Germany and Geneva. They thought that the church of England resembled in these particulars the antichristian church of Rome; and they called for a more thorough reformation and a purer worship. From this circumstance they were first stigmatised by their adversaries with the general name of Puritans. Elizabeth was not disposed to comply with their demands; and the Puritans were not united among themselves. Unanimous in nothing, but in their antipathy to the forms of doctrine and discipline established by law, they were soon divided into a variety of sects.

Of these the most famous was that which was formed about 1581 by Robert Brown, a man of insinuating manners, but neither steady nor consistent in his principles and conduct. See BROWN. He did not differ much, in point of doctrine, either from the church of England, or from the rest of the Puritans; but he had formed new and singular notions concerning the nature of a church, and the rules of ecclesiastical government. He maintained that such a number of persons as could be contained in an ordinary place of worship ought to be considered as a church, and enjoy all the rights and privileges of an ecclesiastical community. These small societies he pronounced independent, jure divino, and entirely exempt from the jurisdiction of the bishops, in whose hands the court had placed the reins of spiritual government; as well as from that of presbyteries and synods, which other Puritans regarded as the supreme visible sources of ecclesiastical authority. He also maintained that the power of governing each congregation resided in the people; and that each member had an equal share in this government. Hence all points both of doctrine and discipline were submitted to the discussion of the whole congregation; and whatever was supported by a majority of voices passed into a law. The congregation also elected certain brethren to the office of pastors, to perform the duties of public instruction and divine worship; reserving however to themselves the power of dismissing these ministers, and reducing them to the condition of private members, whenever they should think such a step conducive to the spiritual advantage of the community. The right of the pastors to preach was not exclusive, or peculiar to them alone. To any member who thought proper to exhort or instruct the brethren, was accorded the liberty of prophesying or preaching. The zeal with which Brown and his asso-

ciates propagated these opinions was doubtless intemperate. He affirmed that all communion was to be broken off with those religious societies that were founded upon a different plan from his; and treated the church of England as a spurious church, whose ministers were unlawfully ordained, whose discipline was popish and antichristian, and whose sacraments and institutions were destitute of all efficacy. The sect, unable to endure the severe treatment which followed the avowal of these sentiments, retired into the Netherlands, and founded churches at Middlebourg, Amsterdam, and Leyden; but their founder returned to England; and, having renounced his principles of separation, took orders in the established church, and obtained a benefice.

The Puritan exiles, whom he thus abandoned, soon split into parties, and their affairs declined. This engaged the wiser part of them to mitigate the severity of their founder's plan, and to soften the rigor of his uncharitable decisions. The person who had the chief merit of bringing about this reformation was John Robinson, one of their pastors, a man who had much piety, and no inconsiderable portion of learning. This well-meaning reformer, perceiving the defects that reigned in the discipline of Brown, and in the spirit and temper of his followers, employed his zeal and diligence in correcting them, and in new modelling the society, so as to render it less odious to its adversaries, and less liable to the just censure of those true Christians who look upon charity as the chief end of the commandments. Hitherto the sect had been called Brownists. But Robinson having, in his Apology, affirmed, Cætum quemlibet particularem esse totam, integram, et perfectam ecclesiam, ex suis partibus constantem, immediatè et Independenter quoad alias ecclesias sub ipso Christo, the sect was henceforth called Independents, of which the apologist was considered as the founder. The Independents now exhibited candor and charity enough to acknowledge that true religion and solid piety might flourish in communities under the jurisdiction of bishops, or the government of synods and presbyteries. They were also much more attentive than the Brownists, in keeping up a regular ministry in their communities: for, while the latter allowed promiscuously all ranks and orders of men to teach in public, the Independents had, and still have, a certain number of ministers, chosen respectively by the congregations where they are fixed; nor is any person among them permitted to speak in public before he has submitted to a proper examination of his capacity and talents, and been approved of by the heads of the congregation. This society has produced divines as eminent for learning, piety, and virtue, as any church in Christendom.

From 1642 the Independents are very frequently mentioned in our annals. The English Independents assumed this title publicly in a piece which they published at London in 1644, entitled Apologetical Narration of the Independents. But afterwards, to avoid the odium of sedition and anarchy charged on the sect, numbers of them renounced this title, and called themselves Congregational Brethren, and their religious assemblies congregational churches. The first Independent or congregational church in England was set up in 1616 by Mr. Jacob, who had adopted the religious sentiments of Robinson. The charge alleged against them by Rapin (in his History of England, vol. II. p. 514, folio edition), that they could not so much as endure ordinary ministers in the church, &c., is groundless. He was led into this mistake by confounding the Independents and Brownists. Other charges equally unjustifiable have been urged against the Independents by this historian, and others. Rapin says, that they abhorred monarchy, and approved of a republican government. This might have been true with regard to many persons among them, in common with other sects; but it does not appear, from any of their public writings, that republican principles formed their distinguishing characteristic. On the contrary, in a public memorial drawn up by them in 1647, they declare, that they do not disapprove of any form of civil government, but 'do freely acknowledge that a kingly government, bounded by just and wholesome laws, is both allowed by God, and also a good accommodation unto men.' The Independents, however, have been generally ranked among the regicides, and charged with the death of Charles I. Whether this fact be admitted or denied, no conclusion can be fairly drawn from the greater prevalence of republican principles, or from violent proceedings at that period, that can affect the distinguishing tenets and conduct of the Independents in our times. It is certain that the present Independents are steady friends to a limited monarchy. Rapin is further mistaken when he represents the religious principles of the English Independents as contrary to those of all the rest of the world. It appears from two confessions of faith, one composed by Robinson on behalf of the English Independents in Holland, and published at Leyden in 1619, entitled Apologia pro Exulibus Anglis, qui Brownistæ vulgo appellantur; and another drawn up in London in 1658, by the principal members of this community in England, entitled A Declaration of the Faith and Order owned and practised by the Congregational Churches in England, agreed upon and consented unto by their Elders and Messengers, in their Meeting at the Savoy, October 12th, 1658, as well as from other writings of the Independents, that they differed from the rest of the reformed in no single point of any consequence, except that of ecclesiastical government; and their religious doctrines were almost entirely the same with those adopted by the church of Geneva.

During the administration of Cromwell the Independents acquired considerable reputation and influence; and he made use of them as a check to the ambition of the Presbyterians, who aimed at a very high degree of ecclesiastical power, and who had succeeded, soon after the elevation of Cromwell, in obtaining a parliamentary establishment of their own church government. But after the Restoration their cause declined; and in 1691 they entered into an association with the Presbyterians residing in and

about London, comprised in nine articles, that tended to the maintenance of their respective institutions. These may be found in the second volume of Whiston's Memoirs, and the substance of them in Mosheim. At this time the Independents and Presbyterians, called from this association the United Brethren, were agreed with regard to doctrines, being generally Calvinists, and differed only with respect to ecclesiastical discipline. But at present, though the English Independents and Presbyterians form two distinct parties of Protestant Dissenters, they are distinguished by very trifling differences with regard to church government. The Independents are generally more attached to the tenets distinguished by the term Calvinism than the Presbyterians.

Independency was first carried to the American colonies in 1620, and, by successive puritan emigrants from England, in 1629 and 1633. One Morel, in the sixteenth century, endeavoured to introduce it into France; but it was condemned at the synod of Rochelle, where Beza presided; and again at the synod of Rochelle in 1644. On this subject, see Mosheim's Ecclesiastical History, by Maclean, vol. IV.; Neal's History of the Puritans, vols. II. III. and IV.; and Burnet's History of his own Times, vol. I., &c. The Independents of the present day, it may be added, have sustained a noble part in the advocacy of Bible, Missionary, and Education Societies, of every description.

INDERABIA, an island of small extent near the mouth of the Persian Gulf. It is perhaps three miles in length, low, level, and narrow, and separated from the main land by a strait, three miles in breadth, and which may be navigated without much danger: but ships running for shelter under the island must not come within a mile of its south-east end, until a tree, which stands by itself, bears W.N.W. Lat. 26° 40′ N.

INDERGEREE, a river of Sumatra, on the north-east coast, running into the sea, in long. 103° 20′ E., lat. 0° 33′ S.

INDERGUR, or INDARGHUR, is the name of various hill fortresses in Hindostan, so called after one of the Hindoo deities.

INDERMAY POINT, a cape on the north coast of Java, in long. 108° 18′ E., lat. 6° 12′ S.

INDESERT,′ *n. s.* In and desert. Want of merit. This is a useful word, but not much received.

Those who were once looked on as his equals, are apt to think the fame of his merit a reflection on their own *indeserts*. *Addison.*

INDES'INENTLY, *adv.* Fr. *indesinenter;* Lat. *in* and *desino.* Without cessation.

They continue a month *indesinently*.
Ray on the Creation.

INDESTRUCTIBLE, *adj.* In and destructible. Lat. *in* and *destruo.* Not to be destroyed.

Glass is so compact and firm a body, that it is *indestructible* by art or nature. *Boyle.*

INDETER'MINABLE, *adj.* } Fr. *indeterminé;* Lat. *in, de, termino.*
INDETER'MINATE, *adj.* }
INDETER'MINATELY, *adv.* }
INDETER'MINED, *adj.* } Not to be fixed, defined, or settled; indeterminate, unfixed; indefinite: indeterminately, not in a settled manner: indetermination, want of fixed or stated direction.
INDETERMINA'TION, *n. s.* }

By contingents I understand all things which may be done, and may not be done, may happen, or may not happen, by reason of the *indetermination* or accidental concurrence of the causes. *Bramhall.*

There is not only obscurity in the end, but beginning of the world; that, as its period is inscrutable, so is its nativity *indeterminable*. *Browne.*

His perspicacity discerned the loadstone to respect the North, when ours beheld it *indeterminately*. *Id.*

We should not amuse ourselves with floating words of *indetermined* signification, which we can use in several senses to serve a turn. *Locke.*

The rays of the same color were by turns transmitted at one thickness, and reflected at another thickness, for an *indeterminate* number of successions. *Newton's Opticks.*

The depth of the hold is *indeterminately* expressed in the description. *Arbuthnot on Coins.*

INDETERMINATE PROBLEM, or unlimited problem, in algebra, that which admits of a great number of different answers, or of innumerable different solutions. In such problems the number of unknown quantities concerned is greater than the number of conditions or equations by which they are to be found; from which it happens, that generally some other conditions or quantities are assumed to supply the defect, which, being taken at pleasure, give the same number of answers as varieties in those assumptions. Diophantus was the first writer on Indeterminate Problems, in his Algebra, first published in 1575 by Xylander. His book being wholly on this subject, such questions have been called Diophantine Problems. Des Cartes, Fermat, Frenicle, Wallis, Euler, Grange, &c., have cultivated this branch of algebra: and Mr. J. Leslie, in the second volume of the Edinburgh Philosophical Transactions, has given an ingenious paper on the solution of Indeterminate Problems, by a new and general principle.

INDEVOUT', *adj.* } Lat. *indevotus* (*in, devotus*); Fr. *indevot.* Not religious: a want of devotion; irreligion.
INDEVO'TION, *n. s.* }

He prays much; yet curses more; whilst he is meek, but *indevout*. *Decay of Piety.*

Let us make the church the scene of our penitence, as of our faults; deprecrate our former *indevotion*, and, by an exemplary reverence, redress the scandal of prophaneness. *Id.*

IN'DEX, *n. s.* Lat. *indico.* The discoverer; the hand that points to any thing, as the hour of a dial; the table of contents to a book.

To such *indexes*, although small
To their subsequent volumes, there is seen
The baby figure of the giant mass
Of things to come at large. *Shakspeare.*

Her silver head adorning
(Her dotage *index*) much she bragged, yet feigned,
For by false tallies many years she gained.
Fletcher's Purple Island.

That which was once the *index* to point out all virtues, does now mark out that part of the world where least of them resides. *Decay of Piety.*

Tastes are the *indexes* of the different qualities of plants, as well as of all sorts of aliment. *Arbuthnot.*

They have no more inward self-consciousness of what they do or suffer, than the *index* of a watch, or the hour it points to. *Bentley.*

If a book has no *index* or good table of contents, 'tis very useful to make one as you are reading it; and in your *index* to take notice only of parts new to you.

Watts.

But I shall add them in a brief appendix,
To come between mine epic and its *index*.

Byron. Don Juan.

INDEX, EXPURGATORY, a catalogue of prohibited books in the church of Rome. The first catalogues of this kind were made by the inquisitors; and afterwards approved of by the council of Trent, with some retrenchments and additions. Thus, an index of heretical books being formed, it was confirmed by a bull of Clement VIII. in 1595, and printed with several introductory rules; by the fourth of which the use of the Scriptures in the vulgar tongue is forbidden in these words:—'Since it is plain by experience, that if the sacred writings are permitted every where, and without difference to be read in the vulgar tongue, men, through their rashness, will receive more harm than good; let the bishop or inquisitor determine, with the advice of the parish priest or confessor, to whom permit the reading of the Bible, translated by catholic authors in the vulgar tongue, according they shall judge whether it be most likely that such reading of the scripture may do harm, tend to the increase of faith and piety. Let them also have the same power as to all other writings. But if any, without such leave, shall presume to read or have them, without first showing the Bible to the ordinaries, he shall not receive the absolution of his sins. And as to all booksellers who shall sell the Bibles translated into the vulgar tongue, without such leave, or by any other method shall publish them, let them forfeit the price of the books, and let the money be given to pious uses by the bishop; and let him be subject to other punishments; at the pleasure of the said bishop, according to the nature of the offence. As to regulars, they shall not read or buy them, without leave first obtained from their prelates.' By the tenth rule it is obtained, that no book shall be printed at Rome without the approbation of the pope's vicar or some person delegated by the pope; nor in any other place, unless allowed by the bishop of the diocese, or some person deputed by him, or by the inquisitor of heretical pravity. In pope Clement's catalogue is a decree that all the books, even of catholic authors, written since the year 1515, which was the year preceding that in which Luther began to declaim against indulgences, should be corrected; not only by retrenching what is unconformable to the doctrine of Rome, but also by adding what may be judged proper by the correctors.

The duke of Alva, after this, procured another one to be printed at Antwerp in 1571, which was published by Francis Junius about the year 1573. There were two others published in 1584 and 1612, by the cardinals Quiroga and Sandoval, and several others by the inquisitors and officers of the sacred palace. The most considerable of all the indices is that of Anthony, a Sotomayor, supreme president and inquisitor-general in the kingdom of Spain, which was made for all the states subject to the king of Spain, and comprehends all the others. This was published, with the advice of the supreme senate of the general inquisition, in 1640, and reprinted at Geneva in 1667. To this there were many rules prefixed; and to the Geneva edition was added the index of the decrees which were made by the master of the holy palace, by virtue of his office, or by the command of the holy congregation, or by the holy congregations for the indices and holy office, after the before-mentioned index of the council of Trent. The rules of the former indices are explained and confirmed by these; and the fifth rule, which enlarges the fourth of the index of Trent, prohibits not only all bibles in the vulgar tongue, comprehending all except those that are Hebrew, Greek, Latin, Chaldee, Syriac, Ethiopic, Persic, and Arabic; but all parts of them, either printed or manuscript, with all summaries and abridgments in the vulgar language or tongue.—*Limborch's History of the Inquisition*, book ii., chap. 16.

The INDEX OF A BOOK is that part annexed to a book, referring to the particular matters therein contained. The index is intended to to point out every important particular in a book, in its alphabetical order, that the reader may at once, and without difficulty, find out any article he wishes to be informed of, that is discussed or mentioned in the work: and as these are hardly known even to the author, till the work is finished, the index always appears with most propriety subjoined to the work. Every book of any extent ought to have both contents and index. Most modern indexes to books are very carelessly compiled. About a century or two ago very complete indexes were made to various learned works by the editors of the classics in usum Delphini, as well as by Minellius, Farnabius, Oudendorp, Ruddiman, and other literati. But now the compilation of an index, being thought too great a drudgery by authors, is often entrusted to persons very ill-qualified for the task; in consequence of which modern indexes are seldom either complete or properly arranged. And if the work is extensive, the reader is perplexed with three or four different indexes, or an index divided into so many parts, while one complete general index, properly compiled and arranged, would answer the purpose much better.

INDEX OF A GLOBE is a little stile fitted on to the north pole, and turning round with it, pointing to certain divisions in the hour circle. It is sometimes also called gnomon. See GEOGRAPHY.

INDEXTERITY, *n. s.* In and dexterity. Want of dexterity; want of readiness; want of handiness; clumsiness; aukwardness.

The *indexterity* of our consumption-curers demonstrates their dimness in beholding its causes. *Harvey.*

INDIA.

INDIA, an abridgment of Hindostan, is a name often given to that region of Asia lying to the south of Tartary, and between Persia and China, with its dependent islands. It contains, besides Hindostan, the BIRMAN EMPIRE, SIAM, COCHIN CHINA, TONQUIN, THIBET, JAPAN, and CEYLON; but is now, in its geographical features, more usually, and far more properly, described under those respective heads, which see.

But we may conveniently consider, under this head, the chief occurrences, of an historical kind, connected with this interesting portion of the earth.

1. *India as known to the ancients.*—By the name of India the ancients understood only the western peninsula, on this side the Ganges, and the peninsula beyond it, having little or no knowledge of the countries which lie farther eastward. But though originally they were acquainted only with the western parts of Hindostan, they gradually extended the name of India over the other countries they discovered to the east; so that probably they would have involved all the rest in the same general designation, had they been as well acquainted with them as are the moderns. By whom these countries were originally peopled is a question which, in all probability, will never be solved. Certain it is, that some works in these parts discover marks of astonishing skill and power in the inhabitants; such as the images in the island of Elephanta, the rocking stones of immense weight, yet so nicely balanced that a man can move them with his hand, the observatory at Benares, &c. These stupendous works are, by Bryant, attributed to the Cushites or Babylonians; and it is possible that the subjects of Nimrod, the beginning of whose kingdom was in Shinar, might extend themselves in this direction, and thus fill the fertile regions of the east with inhabitants, before they migrated to the less mild and rich countries to the westward. Thus would be formed for a time that great division betwixt the inhabitants of India and other countries; so that the western nations knew not even of the existence of India, but by obscure report; while the inhabitants of the latter, ignorant of their own origin, invented a thousand idle tales concerning the antiquity of their tribes, which some of the moderns have been credulous enough to believe. The first among the western nations who distinguished themselves by their application to navigation and commerce, and who were of consequence likely to discover these distant nations, were the Egyptians and Phœnicians. The former, however, soon lost their inclination for naval affairs, and held all sea-faring people in detestation; though the extensive conquests of Sesostris, if we can believe them, must have in a great measure supplied this defect. He is said to have fitted out a fleet of 400 sail in the Arabian Gulf or Red Sea, which conquered all the countries lying along the Erythrean Sea to India; while the army, led by himself, marched through Asia, and subdued all the countries to the Ganges; after which he crossed that river, and advanced to the Eastern Ocean. Great disputes have been carried on with respect to this conqueror, and his expedition; but Dr. Robertson, in his Disquisition concerning Ancient India, doubts whether any such expedition was ever made. Herodotus makes no mention of the conquest of India by Sesostris, though he relates his history at some length: and Diodorus Siculus, who first mentions it, informs us that he had it from the Egyptian priests; who related 'many things rather from a desire to promote the honor of their country than from attention to truth.' Strabo rejected the account altogether, and ranks the exploits of Sesostris in India with the fabulous ones of Bacchus and Hercules.

It is certain, however, that the Tyrians kept up a constant intercourse with some parts of India by navigating the Arabian Gulf, or the Red Sea. Of this navigation they became masters by taking from the Idumeans some maritime places on the coast; but, as the distance betwixt the nearest place of that sea and Tyre was considerable, the land carriage must have been very tedious and expensive; for which reason it was necessary to become masters of a port on the east of the Mediterranean, nearer to the Red Sea than Tyre. With this view they took possession of Rhinvelura; and to that port all the goods from India were conveyed by a much shorter and less expensive route. This is the first authentic account of any intercourse betwixt India and the western part of the world: and to this we are without doubt in a great measure to ascribe the vast wealth and power for which the city of Tyre was anciently renowned; for in other respects the whole territory of Phœnicia was but of little consequence. Notwithstanding the frequency of these voyages, however, the ancients have left little account of them. The most particular description we have of the wealth, power, and commerce of ancient Tyre, is in the prophecies of Ezekiel. If the Tyrians kept any journals of their voyages, it is probable that they were lost when the city was destroyed by Alexander the Great.

Though the Israelites, in the reigns of David and Solomon, carried on an extensive and lucrative commerce, yet Dr. Robertson is of opinion that they did not trade to any part of India. There are only two places mentioned to which their ships sailed, viz. Ophir and Tarshish; both of which are now supposed to have been situated on the east coast of Africa; the ancient Tarshish was probably the present Mocha: and Ophir the kingdom of Sofala, so remarkable in former times for its mines, that it was called by oriental writers the golden Sofala. See OPHIR and TARSHISH. Thus India continued long unknown to, and undisturbed by the western nations. But, soon after the destruction of the Babylonian monarchy by the Persians, we find Darius Hystaspis undertaking an expedition against the Indians. Herodotus informs us, that he sent Scylax of Caryandra to explore

ıe river Indus; who sailed from Caspatyrus, a ɔwn at its source, and near the territories of 'actya, eastward to the sea; thence, turning 'estward, he arrived at the place where the 'hœnicians had formerly sailed round Africa, fter which Darius subdued the Indians, and ecame master of that coast. His conquests, owever, were not extensive, as they did not ɔach beyond the territory watered by the Indus; et the acquisition was very important, as the ɔvenue derived from the conquered territory, ccording to Herodotus, was near a third of that f the whole Persian empire. But very little nowledge of the country was acquired by this xpedition of Darius, for the Greeks paid no re-ard to the transactions of barbarians; and as ɔr Scylax, he told so many incredible stories in ıe account he gave of his voyage, that he was isbelieved in almost every thing, whether true or ılse. The Greeks acquired much more know-ɔdge of India by Alexander's expedition, al-ıough be went no farther into the country than ıe Setlege (Hyphasis). See HINDOSTAN. The readth of this district, from Ludhana on the etlege to Attock on the Indus, is computed to e 259 geographical miles in a straight line; and ılexander's march, computed in the same manner, id not exceed 200; nevertheless by the spread-ıg of his numerous army over the country, and ıe exact measurement and delineation of all is movements by men of science whom he em-loyed, a very extensive knowledge of the 'estern part of India was obtained. Of this elebrated conqueror's exploits, previous to this xpedition, an account will be found under the rticle MACEDON.

According to major Rennel, the space of ɔuntry through which Alexander sailed on the ndus was not less than 1000 miles; and as, uring the whole of that navigation, he obliged ıe nations on both sides of the river to submit ɔ him, we may be certain that the country on ach side was explored to some distance. An xact account, not only of his military operations, ut of every thing worthy of notice relating to ıe countries through which he passed, was pre-erved in the journals of his three officers, Lagus, learchus, and Aristobulus; and these journals ırrian followed in the composition of his history. 'rom these authors we learn, that, in the time of ılexander, the western part of India was pos-essed by seven very powerful monarchs. The 'rritory of Porus, which Alexander first con-uered and then restored to him, is said to have ɔntained no fewer than 2000 towns; and the ing of the Prasii had assembled an army of 0,000 cavalry, 2000 armed chariots, and a great umber of elephants, to oppose the Macedonian ıonarch on the banks of the Ganges. The navi-ıble rivers with which the Panjab country ɔounds, afforded then, and still continue to ford, an intercourse from one part to another y water: and, as these rivers probably had then ıany ships on them for commerce, Alexander ıight easily collect all the number he is said to ave had, viz. 2000; since it is reported, that emiramis was opposed by double the number ı the Indus, when she invaded India.

The country on each side the Indus was found, in the time of Alexander, to be in no degree inferior in population to the kingdom of Porus. The climate, soil, and productions of India, as well as the manners and customs of the inhabitants, are exactly described, and the descriptions found to correspond in a surprising manner with modern accounts. The stated change of seasons, now known by the name of monsoons, the periodical rains, the swellings and inundations of the rivers, with the appearance of the country during the time they continue, are particularly mentioned. The descriptions of the inhabitants are equally particular; their living entirely upon vegetables; their division into tribes or casts, with many of the particularities of the modern Hindoos. The military operations, however, extended but a very little way into India properly so called; no further indeed than the modern province of Lahore, and the countries on the banks of the Indus, from Moultan to the sea. To secure the obedience of those countries, Alexander built, it is said, a number of fortified cities; and, the farther eastward he extended his conquests, the more necessary did he find this task. Three he built in India itself; two on the banks of the Hydaspes, and a third on the Acesines, both navigable rivers, falling into the Indus, after they have united their streams. By these he intended not only to keep the adjacent countries in awe, but to promote a commercial intercourse between different parts. With this view, on his return to Susa, he surveyed the course of the Euphrates and Tigris, causing the cataracts or dams to be removed, which the Persian monarchs had built to obstruct the navigation of these rivers. After the navigation was thus opened, he proposed that the valuable commodities of India should be imported into the other parts of his dominions by the Persian Gulf, and through the Red Sea to Alexandria, and thence dispersed over Europe.

On the death of Alexander, the eastern part of his dominions devolved first on Pytho, the son of Agenor, and afterwards on Seleucus. The latter was sensible of the advantages of keeping India in subjection. With this view, he undertook an expedition into that country, partly to confirm his authority, and partly to defend the Macedonian territories against Sandracottus, king of the Prasii. The particulars of his expedition are very little known; Justin being the only author who mentions them. Plutarch tells us that Seleucus carried his arms farther into India than Alexander; and Pliny, whose authority is of considerably greater weight than either, corroborates the testimony of Plutarch in this instance, though his language is obscure. Bayer thinks it implies that Seleucus marched from the Hyphasis to the Hysudrus, thence to Palibothra, and thence to the mouth of the Ganges; the distances of the principal stations being marked, and amounting in all to 2244 Roman miles. But Dr. Robertson considers it very improbable that the expedition of Seleucus should have been continued so far, as in that case 'the ancients would have had a more accurate knowledge of this part of the country than they seem ever to have possessed.' The career of Seleucus in the east was stopped by Antigonus, who prepared

to invade the western part of his dominions. The former was therefore obliged to conclude a treaty with Sandracottus; but Dr. Robertson is of opinion, that during the lifetime of Seleucus, which continued forty-two years after the death of Alexander, no diminution of the Macedonian territories took place. With a view of keeping up a friendly intercourse with the Indian prince, Seleucus sent Megasthenes, one of Alexander's officers, to Palibothra, capital of the kingdom of the Prasii, on the banks of the Ganges. This city is by Dr. Robertson thought to be the modern Allahabad, but major Rennel supposes it to be Patna. As Megasthenes resided in this city for a considerable time, he made many observations relative to India in general, which he afterwards published. But he mingled with his relations the most extravagant fables; such as accounts of men with ears so large that they could wrap themselves up in them; of tribes with one eye, without mouths or noses, &c., if the extracts from his book, given by Arrian, Diodorus, and other ancient writers, can be credited. After the embassy of Megasthenes to Sandracottus, and that of his son Damaichus to Allitrochidas, the successor of Sandracottus, we hear no more of the affairs of India with regard to the Macedonians, until the time of Antiochus the Great, who made a short incursion into India about 197 years after the death of Seleucus. All that we know of this expedition is, that the Syrian monarch, after finishing a war he carried on against the two revolted provinces of Parthia and Bactria, obliged Sophagasenus, king of the country which he invaded, to pay a sum of money, and give him a number of elephants. It is probable that the successors of Antiochus were obliged, soon after his death, to abandon all their Indian territories.

After the loss of India by the Syrians, an intercourse was kept up for some time betwixt it and the Greek kingdom of Bactria. This last became an independent state about sixty-nine years after the death of Alexander; and, according to the few hints we have concerning it in ancient authors, carried on a great traffic with India. Nay, the Bactrian monarchs are said to have conquered more extensive tracts in that region than Alexander himself had done. Six princes reigned over this new kingdom in succession; some of whom, elated with the conquests they had made, assumed the title of the great king, by which the Persian monarchs were distinguished in their highest splendor. Strabo informs us, that the Bactrian princes were deprived of their territories by the Scythian Nomades, who came from the country beyond the Saxartes, and were known by the names of Asii, Pasiani, Tachari, and Scaurauli. This is confirmed by the testimony of the Chinese historians, quoted by M. de Guignes. According to them, about 126 years before the Christian era, a powerful horde of Tartars pushed from their native seats on the confines of China, and obliged to move farther to the west, passed the Iaxartes, and, pouring in upon Bactria like an irresistible torrent, overwhelmed that kingdom, and put an end to the dominion of the Greeks, after it had lasted nearly 150 years. From this time to the close of the fifteenth century all thoughts of establishing any dominion in India were totally abandoned by the Europeans. The only object now was to promote a commercial intercourse with that country; and Egypt was the medium by which that intercourse was to be promoted. Ptolemy, the son of Lagus, first raised the power and splendor of Alexandria, by carrying on a trade to India. His son Ptolemy Philadelphus prosecuted the same plan very vigorously. In his time the Indian commerce once more began to centre in Tyre; but, to remove it effectually thence, he attempted to form a canal between Arsinoe on the Red Sea, near the place where Suez now stands, and the Pelusiac, or eastern branch of the Nile. This canal was about 100 cubits broad, and thirty deep; so that by means of it the productions of India might have been conveyed to Alexandria entirely by water. We know not whether this work was ever finished, or whether it was found useless on account of the dangerous navigation towards the northern extremity of the Red Sea; but it is certain that no use was made of it, and a new city, named Berenice, situated almost under the tropic upon the western shore of the Red Sea, became the staple of Indian commerce. Thence the goods were transported by land to Coptos, a city three miles from the Nile, to which it was joined by a navigable canal. Thus, however, there was a very tedious land carriage of no less than 258 Roman miles through the barren desert of Thebais; but Ptolemy caused search to be made every where for springs, and, wherever these were found, he built inns for the accommodation of travellers.

Ships during this period sailed from Berenice, and coasting along the Arabian shore to the promontory of Syagrus, now Cape Rafalgate, held their course along the coast of Persia, till they arrived at the mouth of the western branch of the Indus. They either sailed up this branch till they came to Pattala, now Tatta, at the upper part of the Delta, or continued their course to some other emporium on the west part of the Indian coast. A more convenient course was afterwards found by sailing directly to Zizenis, a place concerning which there is now some dispute. Montesquieu believes it to have been the kingdom of Sigertis, on the coast adjacent to the Indus, and which was conquered by the Bactrian monarchs; but major Rennel is of opinion that it was a port on the Malabar coast. Dr. Robertson thinks that during the time of the Ptolemies very little progress was made in the discovery of India, and contests the opinion of major Rennel, that 'under the Ptolemies the Egyptians extended their navigation to the extreme point of the Indian continent, and even sailed up the Ganges to Palibothra, now Patna.' In this case, he thinks, that the interior parts of India must have been much better known to the ancients, than we have any reason to believe they were. The extreme danger of navigating the Red Sea in ancient times seems to have been the principal reason which induced Ptolemy to remove the communication with India, from Arsinoe to Berenice, as there were other harbours on the same coast considerably nearer the Nile

than it. After the ruin of Coptos, by the emperor Dioclesian, the Indian commodities were conveyed from the Red Sea to the Nile from Cosseir, supposed by Dr. Robertson to be the Philoteras Portus of Ptolemy, to Cous, the Vicus Apollinis, a journey of four days. Hence Cous, from a small village, became an opulent city; but in process of time the trade from India removed to Kene, farther down the river. It was to this monopoly of Indian commerce, that Egypt owed its vast wealth and power, during the time of its Macedonian monarchs; but it appears surprising that no attempt was made by the Syrian monarchs to rival them in it, especially as the latter were in possession of the Persian gulf, from whence they might have imported the Indian commodities by a much shorter navigation than could be done by the Egyptians.

On the conquest of Egypt by the Romans, the Indian commodities continued, as usual, to be imported to Alexandria in Egypt, and from thence to Rome; but the most ancient communication betwixt the east and west parts of Asia seems never to have been entirely given up. Syria and Palestine are separated from Mesopotamia by a desert; but the passage through it was much facilitated by its affording a station which abounded in water. Hence the possession of this station became an object of such consequence, that Solomon built upon it the city called in Syria Tadmor, and in Greek Palmyra. Both these names are expressive of its situation in a spot adorned with palm trees. Though its situation for trade may to us seem very unfavorable; being sixty miles from the Euphrates, by which alone it could receive the Indian commodities, and 203 from the nearest coast of the Mediterranean; yet the value and small bulk of the goods in question rendered the conveyance of them by a long carriage over land not only practicable but lucrative and advantageous. Hence the inhabitants became opulent and powerful, and this place long maintained its independence after the Syrian empire became subject to Rome.

2. *India from its intercourse with the Romans, until the erection of the Gaznian empire.*—The excessive eagerness of the Romans for Asiatic luxuries of all kinds kept up an unceasing intercourse with India, during the whole time that the empire continued in its power; and, even after the destruction of the western part, it was kept up between Constantinople and those parts of India which had been visited formerly by merchants from the west. Long before this period, however, a much better method of sailing to India had been discovered by one Hippalus, the commander of an Indian ship, who lived about eighty years after Egypt had been annexed to the Roman empire. This man having observed the periodical shifting of the monsoons, and how steadily they blew from the east or west during some months, ventured to leave the coast, and sail boldly across the Indian Ocean, from the mouth of the Arabian Gulf to Musiris, a port on the Malabar coast; which discovery was reckoned a matter of such importance, that the name of Hippalus was given to the wind by which he performed the voyage. Pliny gives a very particular account of the manner in which the Indian traffic was now carried on, mentioning the particular stages, and the distances between them: viz. From Alexandria to Juliopolis, according to this writer, was two miles; and there the cargo destined for India was shipped on the Nile, and carried to Coptos, distant 303 miles, the voyage being usually performed in twelve days. From Coptos they were conveyed by land to Berenice, distant 258 miles, and halting at different stations as occasion required. The journey was finished on the twelfth day; but on account of the heat the caravan travelled only in the night. The ships left Berenice about midsummer, and in thirty days reached Ocelis, now Gella, at the mouth of the Arabian Gulf, or the modern Cape Fartaque on the coast of Arabia Felix; from whence they sailed in forty days to Musiris, already mentioned. Their homeward voyage began early in December; when setting sail with a north-east wind, and meeting with a south or south-west one when they entered the Arabian Gulf, the voyage was completed in less than a year. With regard to the situation of Musiris, as well as of Barace, another Indian port to which the ancients traded, major Rennel and Dr. Robertson agree that they stood between Goa and Tellicherry; and that probably the modern Meerzaw or Merjee is the Musiris, and Barcelore the Barace of the ancients. Ptolemy, who flourished about A. D. 200, having the advantage of so many previous discoveries, gives a more particular description of India than is to be met with in any of the ancient writers; notwithstanding which his accounts are frequently inconsistent not only with modern discoveries, but with those of more ancient geographers than himself. A capital error in his geography is, that he makes the peninsula of India stretch from the Sinus Barygazenus, or gulf of Cambay, from west to east; instead of extending, according to its real direction, from north to south; and this error appears the more extraordinary, that Megasthenes had published a measurement of this peninsula, nearly consonant to truth, which had been adopted with some variations by Eratosthenes, Strabo, Diodorus Siculus, and Pliny. His information concerning the situation of places, however, was much more accurate. With respect to some districts on the eastern part of the peninsula, as far as the Ganges, he comes very near the truth. M. d'Anville, has determined the modern names of many of Ptolemy's stations, as Kilkare, Negapatam, the mouth of the river Cauveri, Masulipatam, &c. The peninsula of Malacca was in all probability the boundary of the ancient discoveries by sea, but by land they had correspondence with countries still farther distant.

While the Seleucidæ continued to enjoy the empire of Syria, the trade with India continued to be carried on by land in the way already mentioned. The Romans, having extended their dominions as far as the Euphrates, found this method of conveyance still established, and the trade was by them encouraged and protected. But the progress of the caravans being frequently

interrupted by the Parthians, particularly when they travelled towards those countries where silk and others of the most valuable manufactures were procured, it became an object to the Romans to conciliate the friendship of the sovereigns of those distant countries. This attempt seems to have been made; for the Chinese historians tell us, that Antoun, by whom they mean the emperor Marcus Antoninus, the king of the people of the western ocean, sent an embassy to Ounti, who reigned in China A. D. 166.

With regard to the Indian islands, considering the little way they extended their navigation, the ancients could not be acquainted with many of them. Ceylon, however, they called Taprobane: the name was entirely unknown in Europe before the time of Alexander the Great; but that conqueror, though he did not visit, had heard of it; but all the accounts of ancient geographers concerning it are confused and contradictory. The other islands described by Ptolemy to the eastward of Taprobane are, according to Dr. Robertson, those called Andaman and Nicobar in the Gulf of Bengal. From the time of Ptolemy to that of the emperor Justinian we have no account of any intercourse of the Europeans with India, or of any progress made in the geographical knowledge of the country. Under that emperor Cosmas, an Egyptian merchant, made some voyages to India, whence he acquired the surname of Indicopleustes. Having afterwards turned monk, he published several works; one of which, named Christian Topography, has reached us. In this, though mixed with many strange reveries, he relates, with great simplicity and appearance of truth, what he had seen in his travels or had learned from others; and describes several places on the western coast of the hither peninsula, which he calls the chief seat of the pepper trade. From one of the ports on that coast, named Male, Dr. Robertson thinks that the name of Malabar may probably be derived, as well as that of Maldives, given to a cluster of islands at no great distance. Cosmas informs us also, that in his time the island of Taprobane had become a great staple of trade. He supposed it to lie about half way betwixt the Persian Gulf and the country of the Sinæ: in consequence of which commodious situation it received the silk of the Sinæ, and the precious spices of the remote regions of the east, which were from thence conveyed to all parts of India, Persia, and the Arabian Gulf. He calls it not Taprobane, but Sieldibia, derived from Selendib, or Serendib, a name by which it is still known in the east. From him also we learn, that the Persians, having overthrown the empire of the Parthians, applied themselves with great diligence and success to maritime affairs; in consequence of which they became formidable rivals to the Romans in the Indian trade. The latter being thus in danger of entirely losing that lucrative branch, Justinian formed a scheme of preserving some share of it by means of his ally the emperor of Abyssinia. In this he was disappointed, though afterwards he obtained his end in a way entirely unexpected. Two monks who had been employed as missionaries in different parts of the east, and had penetrated as far as the country of the Seres or China, induced by the liberal promises of Justinian, brought a quantity of the eggs of silkworms in a hollow cane. They were then hatched by the heat of a dunghill; and, being fed with the leaves of the mulberry, worked and multiplied as well as in those countries of which they are natives. Vast numbers were soon reared in Greece; from whence they were exported to Sicily, and from thence to Italy; in all which countries silk manufactures have since been established. On the conquest of Egypt by the Saracens, in 640, the India trade was of course transferred to them; and they soon began to pursue it with much more vigor than the Romans had done. The city of Bassora was built by the caliph Omar, upon the west banks of the great river formed by the union of the Euphrates with the Tigris. Thus the command of both rivers was secured, and the new city soon became a place of almost as much consequence as Alexandria itself.

Dr. Robertson takes notice, that, from the evidence of an Arabian merchant who wrote in 852, it appears, that not only the Saracens, but the Chinese also, were destitute of the mariner's compass; contrary to a common opinion, that this instrument was known in the east long before its discovery in Europe. Notwithstanding this disadvantage, they penetrated far beyond Siam, which had set bounds to the navigation of Europeans. They became acquainted with Sumatra and other Indian islands; extending their navigation as far as Canton in China. A regular commerce was now carried on from the Persian Gulf to all the countries lying betwixt it and China, and even with China itself. Many Saracens settled in India properly so called, as well as in the countries beyond it. In the city of Canton they were so numerous, that the emperor permitted them to have a cadi or judge of their own religion; the Arabian language was understood and spoken in every place of consequence; and ships from China are even said to have visited the Persian Gulf. According to the Arabian accounts of those days, the peninsula of India was at that time divided into four kingdoms. The first was composed of the provinces situated on the Indus and its branches, the capital of which was Moultan. The second had the city of Canoge, which, from its remaining ruins, appears to have been a very large place. The Indian historians relate, that it contained 30,000 shops, in which betel nut was sold, and 60,000 sets of musicians and singers who paid a tax to government. The third kingdom was that of Cachemire, first mentioned by Massoudi, who gives a short description of it. The fourth kingdom, Guzerat, is represented by the same author as the most powerful of the whole. Another Arab writer, who flourished about the middle of the fourteenth century, divides India into three parts; the northern comprehending all the provinces on the Indus; the middle extending from Guzerat to the Ganges; and the southern, which he denominates Comar, from Cape Comorin. From the relation of the Arabian merchant above mentioned, explained by the commentary of

another Arabian who had likewise visited the eastern parts of Asia, we learn many particulars concerning the inhabitants of these distant regions at that time, which correspond with what is observed among them at this day. They take notice of the general use of silk among the Chinese, and the manufacture of porcelain, which they compare to glass. They also describe the tea-plant, with the manner of using its leaves; whence it appears, that in the ninth century the use of this plant in China was as common as it is at present. They mention likewise the great progress which the Indians had made in astronomy; a circumstance which seems to have been unknown to the Greeks and Romans; they assert, that in this branch of science they were far superior to the most enlightened nations of the west, on which account their sovereign was called the King of Wisdom. The superstitions, extravagant penances, &c., known to exist at this day among the Indians, are also mentioned by those writers; all which particulars manifest that the Arabians had a knowledge of India far superior to that of the Greeks or Romans. The industry of the Mahommedans, in exploring the most distant regions of the east, was rivalled, however, by the Christians of Persia, who sent missionaries all over India and the countries adjoining, as far as China itself. But, while the western Asiatics thus kept up a constant intercourse with these parts, the Europeans had in a manner lost all knowledge of them. The port of Alexandria, from which they had formerly been supplied with the Indian goods, was now shut against them; and the Arabs, satisfied with supplying the demands of their own subjects, neglected to send any by the usual channels to the towns on the Mediterranean. The inhabitants of Constantinople and some other great towns were supplied with Chinese commodities by the most tedious and difficult passage imaginable. The silk of that country was purchased in the most westerly province named Chensi; thence it was conveyed by a caravan, which marched eighty or 100 days to the banks of the Oxus. Here it was embarked, and carried down the river to the Caspian; whence, after a dangerous voyage across that sea, it was carried up the river Cyrus as far as it is navigable; after which it was conducted by a land-carriage of five days to the river Phasis, then down that stream into the Euxine, and thence to Constantinople. The passage of goods from Hindostan was less tedious; being carried either directly to the Caspian or to the Oxus, but by a passage much shorter than that from China; after which they were conveyed down the Phasis to the Euxine, and thus to Constantinople. In spite of every difficulty, however, this commerce flourished, and Constantinople became a considerable mart for East Indian commodities; and from it all the rest of Europe was chiefly supplied with them for more than two centuries. The perpetual hostilities in which the Christians and Mahommedans were during this period engaged, contributed still to increase the difficulty; but, the more it increased, the more desirous Europeans seemed to be of possessing the luxuries of Asia. About this time the cities of Amalfi and Venice, with some others in Italy, having acquired a great degree of independence, began to exert themselves in promoting domestic manufactures, and importing the productions of India. Some traces of this revival of a commercial spirit, according to Dr. Robertson, may be observed from the end of the seventh century. But, during the seventh and eighth centuries, it is very probable that no commercial intercourse whatever took place betwixt Italy and Alexandria; for, prior to this period, all the public deeds of the Italian and other cities of Europe were written upon paper made of the Egyptian papyrus, but after that upon parchment. About the end of the tenth century, a considerable revolution took place in India, by the conquests of Mahmud Gazni, who erected the empire of Gazna.

3. *India, from the erection of the Gaznian empire, to the death of Mohammed Shah.*—The authentic history of Hindostan is reckoned to commence with the conquests of Mahmud Gazni. Major Rennel thinks nothing before that period is to be depended on. Mahmud's kingdom had arisen out of that of the Saracens, who had extended their conquests immensely, under the caliph Al-Walid, both to the east and west. Mahmud was the third from Abistagi, a governor of Khorasan, who had revolted from the king of Bucharia. He possessed great part of the ancient Bactria. Gazna, near the source of the Indus, and Balkh, were his chief cities. After conquering the rest of Bactria, he invaded Hindostan, A. D. 1000, and reduced the province of Moultan, which was inhabited by the Kuttry and Rajpoot tribes (the Catheri and Malli of Alexander), who still retained their ancient bravery, and made a very formidable resistance. Mahmud being equally influenced by a love of conquest, and a superstitious zeal to exterminate the Hindoo religion, a league was at last formed against him among all the Indian princes, from the Ganges to the Nerbudda. Their allied troops were, however, defeated; and in 1008 the famous temple of Nagracut in the Panjab was destroyed. In 1011 Mahmud destroyed the city and temple of Tanafar, and reduced Delhi. In 1018 he took Canoge, and demolished the temples of that and several other cities; but failed in his attempts on Ajimere. In his twelfth expedition, in 1024, he reduced the whole peninsula of Guzerat, and destroyed the famous temple of Sumnaut, as well as those of all the other cities he conquered. At his death, in 1028, he possessed the east and largest part of Persia, with the Indian provinces from the west part of the Ganges to Guzerat, and those between the Indus and the mountains of Ajmere.

But in 1158 this extensive empire began to fall to pieces. The west and largest part was seized by the Gauri, while the east contiguous to the Indus remained in the possession of Cusroe, whose capital was Lahore. In 1184 his sons were expelled by the Gauri, and in 1194 Mohammed Gori penetrated into Hindostan as far as Benares, committing as great devastation as Mahmud Gazni had done. He also reduced the south part of Ajimere, and the territory

south of the Jumna, the fort of Gualior, &c. On his death, in 1205, the empire of Gazna was again divided, and the Patan or Alghan empire was founded by Cuttub, who had the Indian part, the Persian remaining to Eldoze. Cuttub made Delhi his capital; and in 1210 his successor, Altumish, reduced the greatest part of Hindostan Proper. One of his sons obtained the government of Bengal, and, from this period, one of the emperor's sons had always that government. During his reign, the bloody Jenghiz Khan put an end to the other branch of the Gaznian empire, as related under the article GAZNA, but Hindostan was left undisturbed.

The kingdom of Malwa, which had been reduced in 1205 by Cuttub, shook off the yoke in 1265, and the Rajpoots revolted. From this period the most dreadful confusion and massacres followed almost to the time that the British government commenced. The empire being subdivided among a set of rapacious governors, the people were reduced to the greatest degree of misery. To add to their distress, the Moguls made such frequent and formidable invasions, that at last the emperor Ferose II. allowed them to settle in the country in 1292. The emperor was incited by Alla, governor of Gurrah, to attempt the conquest of the Deccan; and Alla being employed in that business, wherein he amassed an immense quantity of treasure, no sooner accomplished it, than he deposed and murdered Ferose, and assumed the sovereignty of Hindostan. After this he reduced the forts of Guzerat, Ratanpour, and Cheitore; and in 1303 the city of Warangole, capital of Tellingala. After this the remainder of Malwa was subdued; in 1306 the conquest of the Deccan was undertaken; and in 1310 Alla carried his army into Dowiatabad and the Carnatic. But all this usurper's expeditions, and those of his general Cafoor, seem to have been made more with the view of plunder than of permanent conquest. The quantity of riches Cafoor amassed was so great, that it is said his soldiers carried away only the gold, leaving the silver behind as too cumbersome. In 1322 several places rebelled, but were reduced; and the Carnatic was ravaged from sea to sea in 1326, when Alla died. His successors were not able to retain the dominions he left. Under Mohammed III. the inhabitants of the Deccan revolted, and drove the Mahommedans completely out of all their territories, except the city of Dowlatabad. In 1344 Belaldeo, king of the Deccan, who had headed the revolt, founded the city of Bisnagur. Many provinces in Bengal, Guzerat, and Panjab, also revolted. Ferose III., who succeeded Mohammed in 1351, was a wise prince, who preferred the improvement of his empire by the arts of peace, to the extension of it by war and conquest. In his reign, which lasted thirty-seven years, agriculture, commerce, and manufactures, were encouraged. But upon his death, in 1388, a civil war broke out, which continued five years, till Mahmud III. succeeded in 1393. During this period Hindostan exhibited the uncommon phenomenon of two emperors residing in the same capital, yet at war with each other. In this unfortunate situation of affairs, Tamerlane, after subduing all the west of Tartary and Asia, turned his arms against Hindostan, and made an easy conquest of it. But the bloody monster, not contented with his victory, ordered a general massacre of the inhabitants, in consequence of which, it is said, that 100,000 of them were murdered in one hour. In January, 1399, he defeated the Indian army, with great slaughter, and soon after took the city of Delhi, which then consisted of three cities, surrounded by walls. Though no resistance was made, and of course there was no pretence for bloodshed, yet a quarrel was fomented within a few days by his Tartar soldiers, who pillaged the city, massacred most of the people, and sold the rest for slaves. The spoils, in plate and jewels, were immense. After this dreadful carnage, Tamerlane marched through the other provinces of Hindostan, defeating the Indians every where, and slaughtering the worshippers of fire. On the 25th of March this bloody conqueror retired, leaving Mahmud in possession of the throne, and reserving only Panjab to himself.

The death of Mahmud III., in 1413, put an end to the Patan dynasty. He was succeeded by Chizer, a descendant of Mahomet the impostor, and his posterity continued to reign till 1450, when Alla II. abdicated the throne, and Belloli, an Afghan, took possession of it. Under him a prince who resided at Jionpour became so formidable, that he left him only the shadow of authority. Belloli's son, however, recovered a great part of the empire, about 1501, when he made Agra his residence. In the reign of Ibraham II. Sultan Baber, a descendant of Tamerlane, conquered a considerable part of the empire. His first expedition was in 1518; and in 1525 he took Delhi. On the death of Baber, who reigned only five years, his son Humaioon was driven from the throne, and obliged to take shelter among the Rajpoot princes of Ajimere. The sovereignty was usurped by Sheer Khan, who in 1545 was killed at the siege of Cheitore. His territories extended from the Indus to Bengal; but the government was so unsettled, that no fewer than five sovereigns succeeded within nine years after his death. This induced a strong party to join in recalling Humaioon; who is said to have been a prince of great virtue and abilities; but he lived only one year after his return. Upon his death, in 1555, his son Acbar succeeded, one of the greatest princes that ever reigned in Hindostan. He was then only fourteen years of age; but, during his long reign of fifty-one years, he established the empire on a more sure foundation than it had probably ever been before. His first years were spent in reducing the revolted provinces, and in securing their future obedience, not only by appointing faithful governors, but by attending to the rights and privileges of the people, and establishing an unlimited toleration in religion. In 1585 he invaded the Deccan; but, though the war continued twenty years, the only progress made was the reduction of Candeish, Tellingana, the west part of Berar, and the north part of Amednagur. The city of Amednagur was taken in 1601, after a tedious and bloody siege. Under his successor, Jehan Guire, the war was faintly carried on, the

empire being disturbed by his rebellious son Shah Jehan, and his councils distracted by the influence of his mistress Noor Jehan. In this monarch's reign Sir Thomas Roe, the first British ambassador at the court of Hindostan, arrived. Jehan Guire died in 1627, and was succeeded by his son Shah Jehan, who pushed the conquest of the Deccan with vigor, but in so destructive a manner, that most of the princes submitted. A war next broke out with the Portuguese which ended in their expulsion from Hoogly. Shah Jehan was a debauched prince; and his rebellion against his father was retaliated by that of his son Aurengzebe, who dethroned him, disguising his ambition under the mask of religion, and committing the greatest crimes under that pretence. He engaged in a war with his brothers, Morad and Dara, whom he defeated and put to death, and then pretended to lament their misfortune. He, however, treated his father with tenderness till his death in 1666. From 1660, when Aurengzebe attained full possession of the throne, till 1678, a profound tranquillity prevailed throughout the empire; but from a jealousy of Sevagee, the founder of the Mahratta state, he undertook the conquest of the Deccan; and, having quelled a rebellion of the Patans beyond the Indus, he persecuted the Hindoos so severely, that the Rajpoot tribes in Ajimere commenced a war against him. In this war, having headed his armies in person, he was hemmed in among the mountains, and would have been taken prisoner, had not the Rajpoots generously allowed him to escape, as well as his empress, whom they actually had taken prisoner. This did not prevent him from renewing his incursions into that country in 1681.

He took and razed Checture, committing great devastations, and destroying the Hindoo temples and idols every where; but was at last obliged to abandon his persecutions, and allow the Hindoos to remain in peace. He reduced, however, the greatest part of the Deccan, and even during the last five years of his life was employed in the field. His long absence from his capital occasioned rebellions to break out in various parts; and about this period the Jats, or Juts, first made their appearance in the province of Agra. At his death, in 1707, his empire extended from 10° to 35° lat., and nearly as many degrees in long. 'His revenue,' says Major Rennel, 'exceeded £35,000,000 sterling, a country where provisions are about four times as cheap as in England. But so weighty a sceptre could be wielded only by a hand like Aurengzebe's; and accordingly, in fifty years after his death, a succession of weak princes and wicked ministers reduced this astonishing empire to nothing.'

He left four sons; Mausum, Azem, Kaumbush, and Acbar. This last had rebelled against his father, and been obliged to fly to Persia thirty years before. A civil war commenced between Mausum and Azem; and a decisive battle was fought, wherein 300,000 men were engaged on both side, and Azem was defeated and killed. Mausum then assumed the title of Bahader Shah, and, during his short reign of five years, gave proofs of considerable abilities. He defeated and killed his brother Kaum-Bush; after which he reduced the Seiks, a new sect of religionists, who, in the reign of Shah Jehan, had silently established themselves along the eastern mountains, and had now taken up arms in Lahore, ravaging the country to the banks of the Jumnah. Bahader Shah died at Lahore, after a short illness, and the empire was again contested among his four sons. Of these the second, named Azem Coshaum, took possession of the treasures, but was opposed by his brothers, who agreed to divide the empire. Azem was defeated and killed, in a battle gained chiefly by the valor of Shah Jehan, the youngest, who was willing to abide by the agreement. But the intrigues of Zoolfecar Khan, an omrah in high trust, prevented this. A new civil war took place, in which Jehan was killed. The two surviving brothers tried their fortune in a third battle, in which Jehauder, the eldest, being victor, took possession of the throne; but in nine months was dethroned by Furroksere, the son of Azem Ooshaun, assisted by Houssein Ali Khan and Abdoollah Khan, two brothers, who had extensive governments in the eastern provinces. In 1713 the Seiks again took arms; and, in 1716, were grown so formidable, that the emperor marched against them. About this time the English East India Company obtained the famous firman, or grant, by which their goods of export and import were exempted from duties. Furroksere was deposed and murdered by the brothers Houssein and Abdoollah, who set up another emperor, whom they also deposed and murdered in the same year; and thus, in eleven years after Aurengzebe's death, eleven of his posterity, who had either possessed or been competitors for the throne, were exterminated; and the government declined so rapidly, that the empire seemed ready to fall to pieces. In 1718 the two brothers raised to the throne Mohammed Shah, the grandson of Bahader: who, warned by the fate of his predecessors, soon rid himself of these two powerful subjects, though at the expense of a civil war. But new enemies started up. Nizam Al Mulek, viceroy of the Deccan, in 1722, had been offered the place of vizier, or prime minister, but did not accept it. Independence was his aim, and the increasing power of the Mahrattas furnished him with a pretence for augmenting his army. Persuaded that he had a party at court, he, in 1738, came thither, with a great body of armed followers; but, finding that the interest of the emperor was still too powerful for him, he invited the famous Persian usurper, Nadir Shah, or Kouli Khan to invade Hindostan.

This invitation was readily accepted, and Nadir entered the country without opposition; yet, when far advanced into Hindostan, he considered the issue of matters to be so uncertain, that he offered to evacuate the country and retire for fifty lacks of rupees, about £500,000 sterling. The intrigues of the nizam and his party hindered the emperor from complying with this demand; instead of which he threw himself upon the usurper's mercy, who then took possession of Delhi, and demanded a ransom of £30,000,000 sterling. After a conference with

the emperor, Nadir seized upon 200 cannon, with some treasure and jewels which he sent off to Candahar. He then marched back to Delhi, where a commotion arose about the price of corn. While Nadir endeavoured to quell it, a shot was fired at him, and narrowly missed him; upon which the barbarian ordered a general massacre of the inhabitants, and slaughtered 120,000, or, according to some, 150,000 persons. This was followed by a seizure of all the jewels, plate, &c., which could be found; besides, exacting the £30,000,000, which was done with the utmost rigor.

In the midst of these scenes Nadir caused the marriage of his son to be celebrated with a grand-daughter of Aurengzebe, and then took leave of the emperor, with professions of friendship, on the 6th of May 1739. He is said to have carried off goods and treasure to the value of £125,000,000 sterling. Mohammed had also ceded to him all the provinces of Hindostan west of the Indus. The villanous nizam possessed almost all the remaining power of the empire, which he employed to establish himself in the sovereignty of the Deccan. Bengal had become independent in 1738, under Aliverdy Cawn, and was not long after invaded by a vast army of Mahrattas in the emperor's name, who, not being able to pay them his arrears of tribute, sent them to Bengal to collect it themselves. About the same time the Rohillas, a tribe from the mountains between India and Persia, erected an independent state on the east of the Ganges, eighty miles from Delhi. The empire seemed now to be running fast to its dissolution. Nadir Shah being murdered, Abdallah, one of his generals, seized on the east part of Persia and the adjacent Indian provinces which Mohammed Shah had ceded to Nadir, and formed them into the kingdom of Kandahar, or Abdalli. See KANDAHAR.

4. *India, from the death of Mohammed Shah to the recovery of Calcutta by the English, in* 1757.—In 1739 Mohammed Shah died, and was succeeded by his son Ahmed; during whose reign, which lasted only six years, the division of the remainder of the empire took place; and nothing remained to the family of Tamerlane but a small tract of territory round Delhi. The Jauts established themselves in Agra; Oude was seized on by Seifdar Jang, father of the late Sujah Dowlah; Allahabad by Mohammed Kouli; Ajmere reverted to its ancient lords the Rajpoots; Malivah was divided between the Poonah Mahrattas and several native zemindars; and the Mahrattas, besides their dominion in the Deccan, possessed the greatest part of Berar, Guzerat, and Orissa. Abdallah, having established his empire of Kandahar, entered Lahore and Moultan: and now 'the whole country of Hindostan,' says major Rennel, 'was in commotion, each party fearing the machinations or attacks of the other; so that all regular government was at an end, and villany was practised in every form. Perhaps in the annals of the world it has seldom happened, that the bonds of government were so suddenly dissolved, over a portion of country containing at least 60 000,000 of inhabitants.' In 1748 the nizam Al Mulek died, at the age of 104; and was succeeded by his son Nazir Jung, to the prejudice of his elder brother Gazi, vizier to the nominal emperor.

The contest that followed on this occasion, for the throne of the Deccan and the nabobship of Arcot, first engaged the British and French to act as auxiliaries on opposite sides. Immediately after the peace of Aix-la-Chapelle, the French commandant, M. Dupleix, began to sow dissension among the nabobs, who had by this time usurped the sovereignty of the country. Nizam Al Mulek, viceroy of Deccan and nabob of Arcot, had, as officer for the Mogul, nominated Anaverdy Khan to be governor of the Carnatic in 1745. On the death of the nizam his second son, Nazir Zing, was appointed to succeed him in his viceroyalty, and his nomination was confirmed by the Mogul. He was opposed by his cousin Muzapher Zing, who applied to Dupleix for assistance. By him he was supplied with a body of Europeans and some artillery; after which, being also joined by Chunda Saib, an active Indian prince, he took the field against Nazir Zing. The latter was supported by a body of British troops under colonel Laurence: and the French, dreading the event of an engagement, retired in the night; so that their ally was obliged to throw himself on the clemency of Nazir Zing. His life was spared, though he himself was detained as a state prisoner; but the traitor, forgetting the kindness shown him on this occasion, entered into a conspiracy against the life of Nazir Zing, and murdered him in his camp; in which infamous transaction he was encouraged it is said by Dupleix and Chunda Saib, who had retired to Pondicherry. Immense riches were found in the tents of Nazir Zing, great part of which fell to the share of Dupleix, whom Muzapher Zing now associated with himself in the government. By this association the Frenchman assumed the state and formalities of an eastern prince; and he and his colleague Muzapher Zing appointed Chunda Saib nabob of Arcot. In 1749 Anaverdy Khan had been defeated and killed by Muzapher Zing and Chunda Saib, assisted by the French; after which his son, Mohammed Ali Khan, had put himself under the protection of the English at Madras, and was confirmed by Nazir Zing, as his father's successor in the nabobship or government of Arcot. This government therefore was disputed betwixt Mohammed Ali Khan, appointed by the legal viceroy Nazir Zing, and supported by the English company, and Chunda Saib, nominated by the usurper Muzapher Zing, and protected by Dupleix, who commanded at Pondicherry. Muzapher, however, did not long enjoy his ill-acquired authority; for in 1751 the nabobs who had been the means of raising him to the power he enjoyed, thinking themselves ill rewarded for their services, fell upon him suddenly, defeated his forces, and put him to death; proclaiming Salabat Zing next day viceroy of the Deccan. On the other hand, the Mogul appointed Gauzedy Khan, the elder brother of Salabat Zing, who was confirmed by Mohammed Ali Khan in the government of Arcot; but the affairs of the Mogul were at that time in such disorder that he could not support the nomination he had

made. Chunda Saib in the mean time determined to recover, by force, the nabobship of Arcot, from which he had been deposed by the Mogul, who had placed Anaverdy Khan in his room. With this view he had recourse to Dupleix at Pondicherry, who reinforced him with 2000 sepoys, sixty Caffrees, and 420 French; upon condition that, if he succeeded, he should cede to the French the town of Velur in the neighbourhood of Pondicherry, with its dependencies, consisting of forty-five villages. Thus reinforced, he defeated Anaverdy Khan, who lost his life in the engagement, re-assumed the government of Arcot, and punctually performed the engagements he had come under to his French allies. All this time Mohammed Ali Khan had been supported by the English, to whom he fled after his father's death. By them he was supplied with a reinforcement of men, money and ammunition, under the conduct of major Laurence, a brave and experienced officer; whereby he gained some advantages over the enemy; and, repairing afterwards to Fort St. David's, he obtained a farther reinforcement. With all this assistance, however, he accomplished nothing of any moment; and, the English auxiliaries having retired, he was defeated by his enemies. He now was obliged to enter into a more close alliance with the English, and cede to them some commercial points which had been long in dispute; after which captain Cope was despatched to put Trichinopoli in a state of defence, while de Gingis, a Swiss officer, marched at the head of 400 Europeans to the assistance of the nabob. On this occasion Mr. (afterwards lord) Clive first appeared in a military capacity. He had been employed before as a writer, but seemed very little qualified for that or any other department of civil life. He now marched towards Arcot at the head of 210 Europeans and 500 sepoys; and in his first expedition displayed the qualities of a great commander. His movements were conducted with such secrecy and despatch, that he made himself master of the enemy's capital before they knew of his march; and gained the affections of the people by his generosity, in affording protection without ransom. In a short time, however, he found himself invested in Fort St. David's by Rajah Saib, son to Chunda Saib, an Indian chief, pretender to the nabobship of Arcot, at the head of a numerous army; the operations of the siege being conducted by European engineers. Thus, in spite of his utmost efforts, two practicable breaches were made, and a general assault given; but Mr. Clive, having intelligence of the intended attack, defended himself with such vigor, that the assailants were every where repulsed with loss, and obliged precipitately to raise the siege. Mr. Clive, being reinforced by a detachment from Trichinopoli, then marched in quest of the enemy; and, having overtaken them in the plains of Arani, attacked and entirely defeated them on the 3d of December 1751. This victory was followed by the surrender of the forts of Timery, Conjaveram, and Arani; after which he returned in triumph to Fort St. David's. In the beginning of 1752 he marched towards Madras, where he was reinforced by a small body of troops from Bengal. Though the whole did not exceed 300 Europeans, with as many natives as were sufficient to give the appearance of an army, he boldly proceeded to a place called Koveripauk, about fifteen miles from Arcot, where the enemy lay to the number of 1500 sepoys, 1700 horse, with 150 Europeans, and eight pieces of cannon. Victory was long doubtful, until Mr. Clive having sent round a detachment to fall upon the rear of the enemy, while the English attacked the entrenchments in front with their bayonets, a general confusion ensued, the enemy was routed with considerable slaughter, and only saved from total destruction by the darkness of the night. The French to a man threw down their arms on this occasion, and surrendered themselves prisoners of war; all the baggage and cannon falling at the same time into the hand of the victors. On the return of Mr. Clive to Fort St. David's, he was superseded in the command by major Laurence. Being detached by him with 400 Europeans, a few Mahratta soldiers, and a body of sepoys, to cut off the enemy's retreat to Pondicherry, he was attended with his usual success, took several forts, vanquished the French commander M. d'Anteuil, and obliged him with all his party to surrender prisoners of war. Chunda Saib, in the mean time, lay encamped with an army of 30,000 men at Syringham, an island near Trichinopoli; but, major Laurence having intercepted his provisions, he was forced to fly. Being obliged to pass through the camp of the Tanjore general, he obtained a pass for that purpose; but was nevertheless detained by the nabob, who was an ally of the British, and his head was struck off. After the flight of Chunda Saib his army was attacked and routed by major Laurence; and the island of Syringham surrendered, with about 1000 French soldiers under the command of Mr. Law, brother to him who schemed the Mississippi Company. M. Dupleix, mortified at this bad success, proclaimed Rajah Saib, son to Chunda Saib, nabob of Arcot; and afterwards produced forged commissions from the great Mogul, appointing him governor of all the Carnatic from the Kristnah to the sea. To carry on this deception, a messenger pretended to come from Delhi, and was received with all the pomp of an ambassador from the great Mogul. Dupleix, mounted on an elephant and preceded by music and dancing women, after the oriental fashion, received his commission from the hands of this impostor; after which he affected the state of an eastern prince; kept his durbar or court, appeared sitting cross-legged on a sofa, and received presents as sovereign of the country, from his own council as well as from the natives. Thus the forces of the English and French East India companies were engaged in a course of hostilities, under the title of auxiliaries to the contending parties at a time when no war existed between the two nations. In the mean time Gauzedy Khan assumed the dignity appointed him by the Mogul; but had not been in possession of it above fourteen days when he was poisoned by his own sister. His son, Shah Abadin Khan, was appointed to succeed him by the Mogul; but, the latter being unable to give him proper assistance, Salabat Zing remained without any rival, and made a present to the

French commander of all the English possessions to the northward. Thus concluded the campaign of 1752. Next year both parties received considerable reinforcements; the English by the arrival of admiral Watson with a squadron of ships of war, having on board a regiment commanded by colonel Aldercroon; and the French by M. Gadeheu, commissary and governor-general of all their settlements, on whose arrival M. Dupleix departed for Europe. The new governor made the most friendly proposals, and desired a cessation of arms until the disputes could be adjusted in Europe. These being readily listened to on the part of the British, deputies were sent to Pondicherry, and a provisional treaty and truce were concluded, on condition that neither of the two companies should for the future interfere in any of the differences that might take place in the country. The other articles related to the settlements that should be retained or possessed by the respective companies until fresh orders should arrive from the courts of London and Versailles; and till then it was stipulated, that neither of them should be allowed to procure any new grant or cession, or to build forts in defence of any new establishment; nor should they proceed to any cession, retrocession, or evacuation of what they then possessed; but every thing should remain on the same footing as formerly.

The treaty was published on the 11th of January 1755; at the end of which month admiral Watson returned with his squadron from Bombay; and M. Gadeheu returned to France in the beginning of February, leaving M. Leyrit his successor at Pondicherry. M. Bussy, with the soubahdar Salabat Zing, commanded in the north; and M. de Saussay was left to command the troops at Syringham. Matters, however, did not long continue in a state of tranquillity. Early in the year it appeared that the French were endeavouring to get possession of all the Deccan. M. Bussy demanded the fortress of Golconda from Salabat Zing; and M. Leyrit encouraged the governor who rented Velu to take up arms against the nabob. He even sent 300 French and as many sepoys from Pondicherry to support this rebel, and oppose the English employed by the nabob to collect his revenues from the tributary princes. In this office they had been engaged ever since the cessation of hostilities; one-half of the revenue being paid to the nabob, and the other to the company, which now involved them in military expeditions into the country of the polygars, who had been previously summoned to send agents to settle accounts with the nabob. Four of them obeyed the summons; but one Lachenaig refused, and it was therefore resolved to attack him. The country was very strong, being fortified both by nature and art: it was surrounded by craggy hills, detached from one another, and covered with bushes so as to be impassable for any but the natives. The works, which the natives had thrown up from hill to hill, were indeed very rude, being formed of large stones laid one upon another without any cement, and flanked by round earthen towers; but before the wall was a deep and broad ditch, with a large hedge of bamboos in front, so thick that it could not be penetrated but by the hatchet or fire. Two lines of this kind were forced, though not without some loss; after which, Lachenaig was obliged to submit. The English army now marched to Madura, a strong Indian town about sixty miles south of Trichinopoli. On their approach it submitted without opposition, and the inhabitants seemed pleased with their change of government. Here a deputation was received from a neighbouring polygar, desiring an alliance, accompanied with an offer of two settlements on the sea coast, opposite to the island of Ceylon. Before this time they could not have reached Tinevelly, but by a circuitous march of 400 or 500 miles; but from the new settlements the distance to that place was only fifty miles, and reinforcements or supplies of any kind might be sent them from Madras or Fort St. David in four or five days. This offer being accepted, colonel Heron, the English commander, marched to attack the governor of Madura, who had fled to Coilgoody. The road was so rugged, that cannon could with difficulty be brought up: and, as the troops were not furnished with scaling ladders, there seemed to be little hope of gaining the place. The colonel, however, determined to make an assault after the Indian manner, by burning down the gates with straw; and eventually the place was taken and plundered, not sparing even the temples. After this exploit the army returned to Madura; where leaving a garrison, they proceeded to Tinevelly, which submitted without opposition, and owned the jurisdiction of the nabob. It afterwards appeared that the revenues collected in this expedition had not been sufficient to defray the expenses of the army; and a report being spread that Salabat Zing was advancing into the Carnatic along with M. Bussy, the French commander, it was thought proper to recal colonel Heron to Trichinopoli. Before this he had been prevailed on by Mazuphe Cawn, the Indian chief who accompanied him, to convey to him an investiture of the countries of Madura and Tinevelly, for an annual rent of £187,500 sterling. In his way he was likewise induced by the same chief to make an attempt on a strong fort named Nellytangaville, situated about thirty miles west of Tinevelly, and belonging to a refractory polygar. This attempt, however, proving unsuccessful for want of cannon, the colonel returned with Mazuphe Cawn to Trichinopoli. The last expedition of this commander was against a fort named Volsynatim, situated near the entrance of the woods belonging to the Colleries. In their march the English army had to go through the pass of Natam, one of the most dangerous in the peninsula. It begins about twenty miles north of Trichinopoli, and continues for six miles through a wood; being barely sufficient to admit a single carriage, at the same time that a bank running along each side rendered it impossible to widen it. A detachment of pioneers and sepoys were sent to scour the woods before the main body ventured to pass through such a dangerous defile; but the march was after all stopped by one of the heaviest tumbrils sinking in a slough, out of which the oxen were not able

to draw it. This prevented the other tumbrils from moving forward, as well as three field pieces that formed the rear division of artillery, and the whole line of baggage; and in this divided and defenceless state the rear division of the baggage was attacked by the Indians; and the whole would have been destroyed, had it not been for the courage and activity of captain Smith, who here commanded forty Caffres and 200 sepoys, with one six-pounder. Considerable damage, however, was done, and the Indians recovered their gods. Colonel Heron being tried by a court-martial for misconduct in this expedition, and found guilty, was declared incapable of serving the company; soon after which he returned to Europe, and died in Holland.

In the mean time Nanderauze, an Indian prince, formed a scheme to get possession of Trichinopoli; and communicated his design to M. de Saussay, the commander of the French troops: but this gentleman communicated this intelligence to the English commander, and the enterprise miscarried. As soon as the company were informed of the acquisitions made by M. Bussy in the Deccan, it was determined to encourage the Mahrattas to attack Salabat Zing, in order to oblige him to dismiss his French auxiliaries. It was necessary therefore to select a commander well experienced in the political systems of the country, as well as in military affairs; and for this purpose Mr. Clive, now governor of Fort St. David's, was invested with a lieutenant-colonel's commission in the king's troops. Three companies of the king's artillery consisting of 100 men each, and 300 recruits, were sent from England on this occasion, and they arrived at Bombay on the 27th of November: when on a sudden the presidency of Madras conceived that this expedition could not be prosecuted without infringing the convention made with the French commander. It was therefore laid aside, and the presidency of Madras directed all their force for the present against Tulagee Angria, who had long been a formidable enemy to the English commerce. The dominions of this pirate consisted of several islands near Bombay, and an extent of land on the continent about 180 miles in length, and from thirty to forty in breadth. He possessed also several forts that had been taken from the Europeans; the trade of piracy having, it seems, been hereditary in his family, and indeed followed by most of the inhabitants of this coast. His fleet consisted of several kinds of vessels peculiar to this country, named grabs and gallivats; both having generally two masts, and some three; the latter being about 200 tons burden, and the former 150. They had forty or fifty oars, by which they might be moved at the rate of four miles an hour; and are mounted with six or eight pieces of cannon, carrying balls from 6 to 12 lbs. Angria had commonly a fleet of sixty or seventy of these vessels. An unsuccessful attempt had been made in 1717, by the presidency of Bombay, against the forts of Geriah and Kennary, the principal strong holds of Angria. Another was made in 1722, under admiral Matthews, against a fort named Tabley, about fifteen leagues south of Bombay: but this also miscarried, through the cowardice and treachery of the Portuguese, who pretended to assist the English. The Mahrattas having implored the assistance of the English against this common enemy, commodore William James was sent from Bombay on the 22nd of March 1755, with the Protector of forty-four, the Swallow of sixteen guns, and two bomb ketches; but with instructions not to hazard the fleet by attacking any of the pirate's forts, only to blockade the harbours, while the Mahratta army carried on their operations by land. He had scarcely commenced his voyage when he fell in with a considerable fleet of the pirates, which he would have taken, had it not been for the timidity and dilatory behaviour of his allies. They had invested three of the forts, but durst not approach nearer than two miles, and even there entrenched themselves up to the chin, to be secure against the fire of the fort. The commodore, provoked at this pusillanimous behaviour, determined, for the honor of the British arms, to exceed the orders he had received. Running within 100 yards of a fort named Severndroog, he in a few hours ruined the walls, and set it on fire; a powder magazine also blowing up, the people, to the number of about 1000, abandoned the place. The whole force of the attack being then turned upon Goa, a white flag was soon hung out as a signal of surrender. The governor, however, did not wait the event of a capitulation, but passed over to Severndroog, where he hoped to maintain his ground. The fire was now renewed against this fortress; and, the seamen having cut a passage through one of the gates with their axes, the garrison soon surrendered; at the same time that two other forts besieged by the Mahrattas hung out flags of truce and capitulated, and thus were four of Angria's forts, hitherto deemed impregnable, subdued in one day. These successes were followed by the surrender of Bancoote, a strong fortified island, now called Fort Victoria, which the British retained in possession: the other forts were delivered up to the Mahrattas. On the arrival of admiral Watson in November 1755, it was determined to root out the pirate at once, by attacking Geriah his capital: but it was so long since any Englishmen had seen this place, and the reports of its strength had been so much exaggerated, that it was thought proper to first reconnoitre it. It was then attacked by such a formidable fleet, that Angria, losing courage at their approach, fled to the Mahrattas, leaving Geriah to be defended by his brother. The fort was soon obliged to surrender. All its ramparts were either cut out of the solid rock, or built of stones ten feet long edgeways: in it were found 200 pieces of brass cannon, six brass mortars, and a great quantity of ammunition and military stores, besides money and effects to the value of £125,000. About 2000 people were made prisoners; among whom were the wife, children, mother, brother, and admiral of the pirate; but they were treated with clemency: and his family, at their own request, continued under the protection of the English at Geriah. The other forts belonging to Angria soon submitted; so that his power on the coast of Malabar was entirely annihilated.

While the affairs of the British went on thus

successfully, M. Bussy had been constantly employed near the person of Salabat Zing, and made use of his influence with that prince to enlarge the possessions of the French: at length the prime minister of Salabat Zing represented to him the danger and shame of allowing a small body of foreigners thus to give law to a great prince; and, having formed a powerful combination against the French, obtained an order for their dismission. M. Bussy took his leave without any marks of disgust, having under his command about 600 Europeans, 5000 sepoys, and a fine train of artillery. Orders were sent to all the polygars to oppose his passage; but, notwithstanding this opposition, Bussy reached Hydrabad with very little loss. Here he took possession of a garden belonging to the kings of Golconda, where he resolved to keep his post until succours should arrive from Pondicherry and Masulipatam. Salabat Zing proposed to attack him here; and, the better to attain his purpose, applied to the English presidency at Madras for a body of troops to assist him in that service. Accordingly a detachment of 400 Europeans and 1500 sepoys was on the point of being ordered to join Salabat, when expresses from Bengal informed them of the greatest danger that had ever threatened the British settlements in Hindostan. This arose from the displeasure of Surajah Dowla, the new nabob of Bengal. His grandfather Aliverdy Khan having died, in April or May 1756, Surajah succeeded to the nabobship of Bengal, Bahar, and Orixa. He was congratulated on his accession by Mr. Drake, the English president at Calcutta, and readily promised protection to his countrymen; but he soon after took offence at the imprisonment of Omichund, an eminent Gentoo merchant, who had lived several years under the protection of the English government. Of this circumstance, however, Surajah did not directly complain; but founded his pretence of war upon the conduct of the English in repairing the fortifications of Calcutta; which indeed was absolutely necessary, on account of the great probability of a war with the French. The nabob, however, threatened an attack if the works were not instantly demolished. With this requisition the president and council pretended to comply; but nevertheless went on with them. Surajah Dowla took the field on the 30th of May 1756, with an army of 40,000 foot, 30,000 horse, and 400 elephants; and on the 2d of June detached 20,000 men to invest the fort at Cassumbazar, a large town on an island formed by the west branch of the Ganges. This fort was regularly built, with sixty cannon, and defended by 300 men, principally sepoys. The nabob pretending a desire to treat, Mr. Watts, the chief of the factory, was persuaded to put himself in his power; which he had no sooner done, than he was made a close prisoner, along with Mr. Batson, a surgeon, who accompanied him. The two prisoners were treated with great indignity, and threatened with death; but two of the council who had been sent for by the tyrant's command were sent back again, with orders to persuade the people of the factory to surrender it at discretion. This proposal met with great opposition; but was at last complied with, though very little to the advantage of the prisoners; for they were not only deprived of every thing they possessed, but stripped almost naked, and sent to Hoogly, where they were closely confined. The nabob, encouraged by this success, marched directly to Calcutta, which he invested on the 15th. The capture of this city, and the catastrophe that followed, are related under the article CALCUTTA. See also HOLWELL. The news of this disaster put an end to the expedition projected against M. Bussy; and colonel Clive was instantly despatched to Bengal with 400 Europeans and 1000 sepoys, on board of the fleet commanded by admiral Watson. They did not arrive till the 15th of December at a village called Fulta, situated on a branch of the Ganges, where the inhabitants of Calcutta had taken refuge after their misfortune. Their first operations were against the forts of Busbudgia, Tanna, Fort William, and Calcutta, now in the hands of the enemy. All these were reduced almost as soon as they approached them. Hoogly, the place of rendezvous for all nations who traded to Bengal (its warehouses and shops being always filled with the richest merchandise of the country), was likewise reduced and destroyed, with the granaries and storehouses of salt on each side the river; which proved very detrimental to the nabob, by depriving him of the means of subsistence for his army. Surajah Dowla, enraged at this success of the English, now seemed determined to crush them at once by a general engagement. From this, however, he was intimidated by a successful attack on his camp, which induced him to conclude a treaty, on the 9th of February, 1757, on the following conditions: 1. That the privileges granted to the English by the Mogul should not be disputed: 2. That all goods with English orders should pass, by land or water, free of any tax: 3. All the Company's factories which had been seized by the nabob should be restored; and the goods, money, and effects, accounted for: 4. That the English should have liberty to fortify Calcutta: and, 5. To coin their own gold and silver.

5. *India from the war with France in* 1757 *to the taking of Pondicherry in* 1761.—As intelligence was now received of a war between France and England, an attack was meditated on Chandernagore. It remained therefore only to obtain the consent of the nabob; but, in ten days after the conclusion of the treaty, he sent a letter to admiral Watson, complaining of his intention, and surmising that the English designed to turn their arms against him as soon as they made themselves masters of Chandernagore. This was strenuously denied by the admiral; and a number of letters passed, in which the latter made use of expressions which were supposed to imply a tacit consent that Chandernagore should be attacked. An attack was therefore made, and it soon capitulated. This intelligence, however, seemed to be by no means agreeable to Surajah Dowla. He pretended displeasure on account of the English infringing the treaties, and complained that they had ravaged some parts of his dominions. This was denied by the admiral; but from this time both parties made preparations for war. The nabob returned no

answer till the 13th of June, when he sent a declaration of war. The English council at Calcutta now resolved on the deposition of the nabob; which at this time appeared practicable, by supporting the pretensions of Meer Jaffier Ali Cawn, who had entered into a conspiracy against him. Meer Jaffier had married the sister of Aliverdy Cawn, the predecessor of Surajah; and was now supported in his pretensions by the general of the horse, and by Jugget Seet the nabob's banker, the richest merchant in all India. By these three the design was communicated to Mr. Watts, the English resident at the nabob's court, and by him to colonel Clive and the secret committee at Calcutta. The management of the affair being left to Mr. Watts and Mr. Clive, it was thought proper to communicate it to Omichund, through whom the correspondence that was necessary might be carried on with Meer Jaffier. This agent proved so avaricious, that it was resolved to serve him in his own way; and, by a piece of treachery to him also, to gain their point with both parties. Two treaties were therefore written out; in one of which it was promised to comply with Omichund's demand, but in the other his name was not even mentioned; and both these treaties were signed by all the principal persons concerned, admiral Watson alone excepted, whom no political motives could influence to sign an agreement which he did not mean to keep. These treaties, the same in every other respect, were to the following purport: 1. All the effects and factories belonging to Bengal, Bahar, and Orixa, were to remain in possession of the English, nor should any more of the French ever be allowed to settle in these provinces. 2. In consideration of the losses sustained by the English Company, by the capture and plunder of Calcutta, he agreed to pay one crore of rupees, or £1,250,000 sterling. 3. For the effects plundered from the English at Calcutta, he engaged to pay fifty lacks of rupees, or £625,000. 4. For the effects plundered from the Gentoos, Moors, and other inhabitants of Calcutta, twenty lacks, or £250,000. 5. For the effects plundered from the American merchants, inhabitants of Calcutta, seven lacks, or £87,500. 6. The distribution of all these sums to be left to admiral Watson, colonel Clive, Roger Drake, William Watts, James Kilpatrick, and Richard Becher, esquires, to be disposed of by them to whom they think proper.

Colonel Clive began his march against Surajah Dowla on the 13th of June, the day on which that chief sent off his last letter. The decisive action at Plassey followed, in which the treachery of Meer Jaffier, who commanded part of the nabob's troops, and stood neuter during the engagement, rendered the victory easy. The unfortunate nabob fled to his capital, but left it the following evening, disguised like a faquir, with only two attendants. By these he appears to have been abandoned and even robbed; for on the 3d of July he was found wandering forsaken and almost naked on the road to Patna. Next day he was brought back to Muxadabad; and a few hours after privately beheaded by Meer Jaffier's eldest son.

The usurper took possession of the capital in triumph; and, on the 29th of June, colonel Clive went to the palace, and in presence of the rajahs and grandees of the court solemnly handed him to the musnud (or carpet) and throne of state, where he was unanimously saluted soubahdah or nabob, and received the submission of all present. While these transactions were going forward, the utmost efforts were used to expel the French entirely from Bengal. By the articles of capitulation at Chandernagore, the whole of that garrison were to continue prisoners of war; but, about the time of signing the treaty, Mr. Law with a small body of troops made his escape out of Cassumbazar, and bent his march towards Patna. There he had been protected by the late nabob; and, on the commencement of fresh hostilities, had collected about 100 French, the only remains of that nation in Bengal. With these he was within two hours' march of Surajah Dowla's camp when the battle of Plassey was fought; on hearing of which he stopped; but afterwards, being informed of the nabob's escape, he marched again to his assistance, and was within a few hours of joining him when he was taken. Three days after he was pursued by Major Eyre Coote at the head of 223 Europeans, three companies of sepoys, fifty Lascars, or Indian sailors, and ten Marmutty men, or pioneers, to clear the roads, together with two pieces of cannon, six-pounders. On this expedition the major exerted his utmost diligence to overtake his antagonist, and spent a very considerable space of time in the pursuit; for, though he set out on the 6th of July, he did not return to Muxadabad till the 1st of September. Mr. Law, however, had the good fortune to escape. Major Coote now obliged Ramnarain, the most powerful rajah in the country, to swear allegiance to Meer Jaffier; and laid open the interior state of the northern provinces. Before his return, admiral Pocock had succeeded to the command of the fleet on the decease of admiral Watson. News were also received, that the French had been very successful on the coast of Coromandel.

Salabat Zing had applied to the English for assistance against the French; but, as they were prevented from performing their agreement by the disaster at Calcutta, he was under the necessity of accommodating the differences with his former friends, and admitting them again into his service. M. Bussy was now reinforced by the troops under Law, who had collected 500 Europeans in his journey. With these he undertook to reduce the English factories of Ingeram, Bandermalanka, and Vizagapatam: but as the latter was garrisoned by 140 Europeans and 420 sepoys, it was supposed that it would make some defence; by the conquest of it, however, the French became masters of all the coasts from Ganjam to Masulipatam. In the southern provinces the like bad success attended the British cause. The rebel polygars, having united their forces against Mazuphe Cawn, obtained a complete victory; after which, the English sepoys being prevailed upon to quit Madura, the conqueror seized upon that city for himself. In the beginning of 1758 the French made an attempt on Trichinopoli. The command was given to M. d'Auteuil, who invested the place

with 900 men in battallon, 4000 sepoys, 100 hussars, and a great body of Indian horse. The place was then in no condition to withstand such a force, as most of the garrison had gone to besiege Madura under captain Caillaud; but hearing of the danger he marched back, and entered the town by a road which the enemy had neglected to guard: when the French general drew off his forces disconcerted, and returned to Pondicherry. Captain Caillaud then laid siege to Madura, but was so vigorously repulsed, that he was obliged to turn the siege into a blockade, and, before any progress could be made in it, Mazuphe Cawn was prevailed upon to resign it for the sum of 170,000 rupees. A large garrison of sepoys was now again therefore put into the place, and Caillaud returned to Trichinopoli. An attempt was next made by colonel Ford on Nellore; but the enterprise proved unsuccessful, through the unheard of cowardice of a body of sepoys, who, having sheltered themselves in a ditch, absolutely refused to stir a step. Several other enterprises of no great moment were undertaken; but the event was on the whole unfavorable to the British, whose force by the end of the campaign was reduced to 1718 men, while that of the French amounted to 3400 Europeans, of whom 1000 were sent to Pondicherry.

Both parties now received considerable reinforcements from Europe; admiral Pocock being joined on the 24th of March by commodore Stevens with a squadron of five men of war, and the French by nine men of war and two frigates, having on board general Lally with a large body of troops. The British admiral went in quest of them, and an engagement took place, in which the French were defeated with the loss of 600 killed and a great number wounded; while the English had only twenty-nine killed and eighty-nine wounded. The former returned to Pondicherry, where they landed their men, money, and troops. After the battle three of the British captains were tried for misbehaviour, and two of them dismissed from the service. As soon as his vessels were refitted, the admiral sailed again in quest of the enemy; but could not bring them to an action before the 3d of August, when the French were defeated a second time, with the loss of 251 killed and 602 wounded. Notwithstanding this success at sea, the British were greatly deficient in land forces; the re-establishment of their affairs in Bengal having almost entirely drained the settlements on the coast of Coromandel. The consequence of this was the loss of Fort St. David, which the French general Lally reduced, destroying the fortifications and villages, and ravaging the country in such a manner as filled the natives with indignation. He proved successful, however, in the reduction of Devicottah, but was obliged to retreat with loss from before Tanjore, his army being distressed for want of supplies. From this time the affairs of the French daily declined. On their retreat from Tanjore, they abandoned the island of Syringham; they took Tripatore, however, but were defeated in their designs on the important post of Chinglapet, about forty-five miles south-west of Madras. Their next enterprises on Fort St. George and Madras were equally unsuccessful. The latter was besieged from the 12th of December, 1758, to the 27th of February, 1759, when they were obliged to abandon it with great loss.

The remainder of the year 1759 proved entirely favorable to the British arms. D'Ache the French admiral, who had been very roughly handled by admiral Pocock on the 3d of August, 1758, having refitted his fleet, and been reinforced by three men of war at the islands of Mauritius and Bourbon, now ventured once more to face his antagonist. A third battle ensued on the 10th of September, 1759, when the French, notwithstanding their superiority both in number of ships and weight of metal, were obliged to retreat with considerable loss; having 1500 men killed and wounded, while those on board the English fleet did not exceed 569. By the 17th of October the British fleet was completely refitted; and admiral Pocock, having been joined by a reinforcement of four men of war, soon after returned to England. All this time the unfortunate general Lally had been employed in unsuccessful endeavours to retrieve the affairs of his countrymen; but his fate was at last decided by laying siege to Wandewash, which had lately been taken by colonel Coote. The advantage in numbers was entirely in favor of the French general; the British army consisting only of 1700 Europeans, including artillery and cavalry, while the French amounted to 2200 Europeans. The auxiliaries on the English side were 3000 black troops, while those of the French amounted to 10,000 black troops, and 300 Caffres; nor was the difference less in proportion in the artillery, the English bringing into the field only fourteen pieces of cannon and one howitzer, while the French had twenty-five pieces in the field and five on their batteries against the fort. The battle began about 11 A. M. on the 22d of January, 1760, and in three hours the whole French army fled towards their camp; but quitted it on finding themselves pursued by the English, who took all their cannon except three small pieces. They collected themselves under the walls of Cheltaput, about eighteen miles from the field of battle, and soon after retired to Pondicherry. Colonel Coote now caused the country to be wasted to the very gates of this fortress, by way of retaliation for what the French had done in the neighbourhood of Madras. He then set about the siege of Cheltaput, which surrendered in one day; a considerable detachment of the enemy was intercepted by captain Smith; the fort of Timmery was reduced by major Monson, and the city of Arcot by captain Wood. This last conquest enabled the British to restore the nabob to his dominions, of which he had been deprived by the French; and it greatly weakened both the French force and interest in India. M. Lally, in the mean time, had recalled his forces from Syringham, by which means he augmented his army with 500 Europeans. These were now shut up in Pondicherry, which was become the last hope of the French in India. To complete their misfortunes, admiral Cornish arrived at Madras with six men of war; and, as the French had now no fleet in these parts, the admiral readily engaged to cooperate with the land forces. The consequence

was the reduction of Carical, Chellambrum, and Verdachellum, by a strong detachment under major Monson; while colonel Coote reduced Permacoil, Almamverpa, and Waldour. He was thus at last enabled to lay siege to Pondicherry itself; and the place capitulated on the 15th of January, 1761, by which an end was put to the power of the French in this part of the world.

6. *Of the British wars with the native powers, to the appointment of lord Clive as governor of Bengal.*—While the British were thus employed Meer Jaffier, the nabob of Bengal, who had been raised to that dignity by the ruin of Surajah Dowla, found himself in a very disagreable situation. The treasure of the late nabob had been valued at sixty-four crore of rupees (about £80,000,000 sterling), and in expectation of this sum, Meer Jaffier had submitted to the exactions of the English. On his accession to the government, however, the treasure of which he became master fell so much short of expectation, that he could not fulfil his engagements to them, and was reduced to the extremity of mortgaging his revenues. In this dilemma his grandees became factious and discontented, his army mutinous for want of pay, and himself odious to his subjects. The English themselves, who had raised him to supreme power, also brought a variety of charges against him. On the 13th of June, 1760, Mr. Holwell wrote from Calcutta to Mr. Warren Hastings, that he had received, by express, intelligence of the murder of the princesses of Aliverdy Khan and Shah Ahmet in a most inhuman manner, by Meer Jaffier's orders. In like manner we are told that many others of Surajah Dowla's relations had perished; yet when it was thought proper to replace Meer Jaffier, in 1761, all these dead persons were found alive excepting two. It must also be remembered, in behalf of the unfortunate nabob, that, besides the sums exacted of him by the English at his accession, he had ceded to them a large extent of territory, and granted them so many immunities in trade, that he had in a manner deprived himself of all his resources. There were accounts of this remarkable revolution published at the time materially differing from one another. Our troops according to each of them took possession of the palace; Meer Cossim was raised to the musnud; and the old nabob hurried into a boat, with a few of his domestics and necessaries, and sent away to Calcutta in a manner wholly unworthy of the high rank he so lately held. The servants of the company, who were the projectors of the revolution, made no secret that there was a present promised them of twenty lacks of rupees from Cossim, who was desirous of making the first act of his power the assassination of Jaffier, and was very much displeased when he found that the English intended giving him protection at Calcutta.

It could scarcely be supposed that Meer Cossim, raised to the nabobship in this manner, would be more faithful to the English than Meer Jaffier had been. Nothing advantageous to the interests of the company could indeed be reasonably expected from such a revolution. No successor of Meer Jaffier could be more entirely in subjection than the late nabob, from his natural imbecility, had been. This last consideration had induced many of the council at first to oppose the revolution; and indeed the only plausible pretence for it was, that the administration of Meer Jaffier was so very weak, that, unless he was aided and even controlled by some persons of ability, he himself must soon be ruined, and very probably the interests of the company along with him. Meer Cossim, however, was a man of a very different disposition from his father-in-law. As he knew that he had not been served by the English out of friendship, so he did not think of making any return out of gratitude; but, instead of this, considered only how he could most easily break with such troublesome allies. For a while, however, it was necessary for him to take all the advantage he could of his alliance with them. By their assistance he cleared his dominions of invaders, and strengthened his frontiers, and he reduced the rajahs who had rebelled against his predecessor, obliging them to pay the usual tribute; by which means he repaired his finances, and thereby secured the fidelity of his troops. Having thus, by the assistance of the English, brought his government into subjection, he took the most effectual means of securing himself against their power. As the vicinity of his capital, Muxadabud, to Calcutta, gave the English factory there an opportunity of inspecting his actions, and interrupting his designs when they thought proper, he took up his residence at Mongheer, a place 200 miles farther up the Ganges, which he fortified in the best and most expeditious manner. Sensible of the advantages of the European discipline, he now resolved to new-model his army. For this purpose he collected all the Armenian, Persian, Tartar, and other soldiers of fortune, whose military characters might serve to raise the spirits of his Indian forces, and abate their natural timidity. He also collected all the wandering Europeans who had borne arms, and the sepoys who had been dismissed from the English service, and distributed them among his troops. He changed the fashion of the Indian muskets from matchlocks to firelocks; and, as their cannon were almost as deficient as their small arms, he procured a pattern of one from the English, by which he soon formed a train of artillery: having thus done every thing in his power to enable himself to withstand the English by force of arms, he resolved also to free his court from their emissaries, by imprisoning or putting to death every person of any consequence in his dominions who had shown any attachment to their interest. His next step was to free himself from those restraints which his predecessor Meer Jaffier, and even he himself, had been obliged to lay upon the Indian trade, to gratify the avarice of his European allies. At his accession, indeed, he had ceded to the company a tract of land worth no less than £700,000 annually, besides £70,000 a-year on other accounts. All this, however, was not sufficient; the immunities granted them in trade were of still worse consequence than even those vast concessions. He knew by experience the distress which these immunities had brought upon his predecessor, and therefore determined to put an end to them. In pursuance

of this resolution, he began in 1762 to subject the English traders every where to the payment of certain duties, and required that their disputes, if beyond the limits of their own jurisdiction, should be decided by his magistrates. This gave such alarm at Calcutta, that, in November 1762, the governor Mr. Vansittart waited on him in person at Mongheer, to expostulate with him upon the subject. The nabob answered his remonstrances by saying that if the servants of the English company were permitted to trade in all parts, and in all commodities, custom free, they must of course draw all the trade into their own hands, and his customs would be of little value. That he would sooner collect no customs, and so draw a number of merchants into the country and increase his revenues by encouraging the cultivation and manufacture of a large quantity of goods. By these intimations Mr. Vansittart was much disconcerted; and under the circumstance thought proper to submit to certain regulations, by which the trade of the English was put under restrictions. This excited the utmost indignation at Calcutta. On the 17th of January, 1763, the council passed a resolution, disavowing the treaty made by the governor; affirming that he assumed a right to which he was by no means authorised; that the regulations proposed were dishonorable to them as Englishmen, and tended to the ruin of all public and private trade; and that the president's issuing out regulations, independent of the council, was an absolute breach of their privileges. They sent orders therefore to all the factories, that no part of the agreement between the governor and nabob should be submitted to. Application was again made to Meer Cossim to persuade him to a third agreement; but, before the success of this negotiation could be known, hostilities commenced on the part of the English. There was at that time in Patna (a city on the Ganges, about 300 miles above Calcutta), a fortified factory belonging to the East India Company, where were a a few European amd Indian soldiers. By this factory the city was suddenly attacked on the 25th of June 1763, and instantly taken, though it was defended by a strong garrison. The governor and garrison fled into the country on the first appearance of danger; but, perceiving that the victors took no care to prevent a surprise, he suddenly returned with a reinforcement, retook the city, and drove all the English into their fort. Eventually the English left the fort with a design to retreat into the territories of a neighbouring nabob; but being pursued by a superior force they were all either killed or taken. The nabob at the same time slaughtered the deputies who had been sent him by the council of Calcutta, to treat about a new agreement with regard to commercial affairs. These acts of treacherous hostility were soon followed by a formal declaration of war. Meer Jaffier, notwithstanding the crimes formerly alleged against him, was proclaimed nabob of Bengal, and the English army immediately took the field under the command of major Adams. The whole force, however, at first consisted only of one regiment of the king's troops, a few of the Company's, two troops of European cavalry, ten companies of sepoys, and twelve pieces of cannon. These very soon came to action with the enemy; and cleared the country of them as far as Cossimbuzar River, a branch of the Ganges which lay between Calcutta and Muxadabad, or Murshedabad, the capital of the province.

All the pains taken by Meer Cossim to discipline his troops had not made them able to cope with the Europeans. The English were suffered to pass the river without opposition; but an army of 10,000 Indians was advantageously posted between the river and the city. These were entirely defeated, and major Adams pushed on directly for the capital. In his way he found the Indians again strongly posted with entrenchments fifteen feet high, and defended by a numerous artillery. This strong post was taken by stratagem; a feint being made with a small body of troops against that part where the enemy had collected their greatest strength. In the mean time the greatest part of the British army had in the night marched round the Indian fortification, and by day break made a furious assault on a place where there was only a slight guard. These instantly fled; the entrenchments were abandoned; and the city fell into the hands of the conquerors. The British now penetrated into the heart of the province, crossed the numerous branches of the Ganges, and traversed morasses and forests in quest of the enemy. Meer Cossim, on the other hand, was not wanting in his defence; but the utmost efforts he could use were totally insufficient to stop the career of an enemy so powerful and victorious. The two armies met on the banks of a river called Nunas Nullas, on the second of August 1763. Cossim had chosen his post with great judgment, and his forces had much of the appearance of an European army, not only in their arms and accoutrements, but in their division into brigades, and even in their clothing. The battle was more obstinate than usual, being continued for four hours: but, though the Indian army consisted of no fewer than 20,000 horse and 8000 foot, the English proved in the end victorious, and the enemy were obliged to quit the field with the loss of all their cannon. From this time the Indians did not attempt any regular engagement with the British. They made a stand indeed at a place named Auda Nulla, which they had fortified in such a manner that it seemed proof against any sudden attack. But here also they suffered themselves to be deceived, and the place was taken with great slaughter. They now abandoned a vast tract of country, to the very gates of Mongheer. The next operation was the siege of Mongheer itself; which, notwithstanding all the pains Meer Cossim had been at to fortify it, held out only nine days after the trenches were opened: so that nothing now remained to complete the conquest of Bengal but the reduction of the city of Patna. Meer Cossim, in the mean time, enraged at the progress of the English, vented his rage on the unhappy prisoners taken at Patna: all of whom, to the number of about 200, he caused to be inhumanly murdered. Dr. Fullarton was the only person who escaped, having received a pardon from the tyrant a few days before the massacre. This inhumanity was far

from being of any service to the cause of Meer Cossim. Major Adams marched without delay from Mongheer to Patna; and, as the place was indifferently fortified, it made but a feeble resistance. The cannon of the English soon made a practicable breach, and in eight days this great city was taken by storm. Thus the nabob was deprived of all his fortified places, his army was reduced to a small body, and himself obliged to fly to Sujah Dowla nabob of Oude, who acted as grand vizier to the Mogul. Here he was kindly received, and an asylum promised for his person; but admittance was refused to his army, nor would the nabob consent to make his country a seat of war. The English were entire masters of Bengal; for, though Meer Jaffier was proclaimed nabob, he had no authority but what they conferred on him. Major Adams did not long survive the conquest of Patna, which was taken on the 6th November 1763; he died in March 1764. Meer Cossim being thus driven out, an agent was sent from Calcutta to Sujah Dowla, proposing an alliance with him and the Mogul, and offering to asssist them against Meer Cossim or any other enemy who should attempt an invasion of their dominions; in return for which it was expected that they should declare themselves open enemies to Cossim, and use their utmost endeavours to seize and deliver him up with all his effects. This design was communicated to Major Adams on the 8th of December 1763; but, as he was next day to resign the command of the army, major Carnac was desired to watch the motions of Meer Cossim, as well as to guard the dominions of Meer Jaffier against any hostilities which might be attempted.

It soon appeared that the friendship of the English was not what Sujah Dowla desired. He considered them as usurpers, who, having obtained a footing in the country under pretence of commerce, could be satisfied with nothing less than the entire possession of it, to the ruin of the original inhabitants. In the beginning of February 1764, therefore, he had determined to assist Meer Cossim in attempting to recover Bengal, and the president and council of Calcutta determined to commence an immediate and offensive war against him. But difficulties occurred in carrying on a war at this time, arising from the death of major Adams, whose name had become formidable to the Indians, and the mutinous disposition of the army. The former was obviated by the appointment of colonel Hector Munro, who, in military skill, was not inferior to his predecessor; and a most severe example of the mutineers was made, twenty-four of whom were blown away from the mouths of cannon. Meer Cossim commenced hostilities by cutting off a small party of English troops, and sending their heads to the Mogul and Sujah Dowlah. An army of 50,000 men was collected, with a most formidable train of artillery. The hostile armies met on the 22nd of October, 1764, at Buxard, on the Carumnassa, about 100 miles above Patna. The event was similar to that of other engagements with the British. The allied Indian army was defeated with the loss of 6000 killed on the spot, 130 pieces of cannon, a proportionable quantity of military stores, and all their tents; while, on the side of the conquerors, only thirty-two Europeans and 239 Indians were killed, and fifty-seven Europeans and 473 Indians wounded. The only place of strength now belonging to the allies on this side the river was a fort named Chanda Geer, which stood on the top of a high hill, or rather rock, situated on the bank of the Ganges, by which it could be constantly supplied with provisions; and as to military stores, it stood in little need of them, so long as stones could be found to pour down on the assailants. Notwithstanding these difficulties, however, colonel Munro advanced to attack it, but was repulsed; and, though the attack was renewed next day, it was attended with no better success: on which the English commander proceeded to encamp with his army under the walls of Benares. Soon after this, colonel Munro being recalled, the command devolved on major Sir Robert Fletcher. The nabob in the mean time, instead of attacking the English army at once, contented himself with sending out parties of light horse to skirmish with its advanced posts, while the main body lay at the distance of about fifteen miles from Benares. On the 14th January 1765 Sir Robert ventured at midnight to break up his camp under the walls of Benares, and to march off towards the enemy. In three days he came up with the main body, who retreated before him; on which he resolved to make another attempt on Chanda Geer, which he reduced; or rather the garrison mutinied for want of pay, and obliged the commander to surrender. The reduction of Chanda Geer was followed by that of Eliabad, a large city on the Ganges, between sixty and seventy miles above Chanda Geer, defended by thick and high walls, and a strong fort. Sujah Dowla in the mean time had been abandoned by the Mogul, who concluded a treaty with the English soon after the battle of Buxard. He, however, gathered together the remains of his routed armies, and applied to the Mahrattas for assistance. This native people, though very formidable to the other nations of Hindostan, had never been able to cope with the English. On the 20th of May, 1765, general Carnac, having assembled his troops, marched immediately to attack them; and, having gained a complete victory at a place called Calpi, obliged them to retreat with precipitation across the Yumna. Sujah Dowla, now destitute of every resource, determined to throw himself on the clemency of the English. Previous to this, however, he allowed Meer Cossim and the assassin Somers to escape; nor could any consideration ever prevail upon him to deliver them up. Three days after the battle of Capi, the nabob surrendered himself unconditionally to general Carnac.

In the beginning of February this year died Meer Jaffier Ali Cawn, nominal nabob of Bengal. The succession was disputed betwixt his eldest surviving son Najem il Doula, a youth of about eighteen years of age, and a grandson by his eldest son Miran, at that time only seven years old. As the English were absolute sovereigns of the country, it was the council of Calcutta which had, in fact, to decide this question. The point being carried in favor of Najem, it

was next debated on what terms he should be admitted to the succession. The late nabob, among other impositions, had obliged himself to support an army of 12,000 horse, and as many foot. It was alleged that he had not fulfilled his engagement, and that he had disbanded most of the troops. It was, therefore, now judged expedient that the nabob should settle £800,000 annually on the company, to be paid out of the treasury; that he should also discard the prime minister Nuncomar, and receive in his place a person appointed by the council, who was to act in the double capacity of minister and governor. The council were also to have a negative upon the nomination of all the superintendants and principal officers employed in collecting or receiving of the revenues. With these extravagant requisitions the young nabob was obliged to comply, though he had discernment enough to perceive that he was now a mere slave to the council of Calcutta. Obliged by treaty to dismiss Nuncomar from the office of vizier, he still continued to show him the same favor, until at last he was charged with carrying on a treasonable correspondence with Sujah Dowla, for which the nabob was enjoined to send him to Calcutta to take his trial. The unfortunate prince used every method to deliver his favorite from the impending danger, but to no purpose: he was obliged to submit to the mortification of having all his desires with regard to his release rejected, though the committee afterwards set him at liberty without trial. The extraordinary powers thus exerted by the council of Calcutta seem at last to have induced the company to desire some more efficient control over them. The great character which lord Clive had already gained in the east justly marked him out as a proper person for adjusting their affairs. On the 3rd of May 1765 he, therefore, arrived, with full powers as commander-in-chief, president, and governor of Bengal. An unlimited power was also committed to a select committee, consisting of his lordship and four gentlemen, to act and determine every thing themselves, without dependence on the council. It was, however, recommended in their instructions to consult the council in general; but the sole power of determining all cases was left with them, until the troubles of Bengal should be entirely ended. By these gentlemen a plan of reformation was instantly set about: by which, however, violent disputes were occasioned; but the committee, disregarding these, exerted their authority to the full extent, seldom even acquainting the council with their transactions, and never waiting for their opinion.

7. *From the arrival of lord Clive, as president of Bengal, to the death of Hyder Aly.*—Lord Clive found that the success of the British arms could be productive of nothing but wars; that to ruin Sujah Dowla was to break down the strongest barrier which the Bengal provinces could have against the incursions of the Mahrattas and other native powers to the west, who had long desolated the northern provinces; and that the Mogul, with whom the company had concluded a treaty, was utterly unable to support himself, and would require the whole British power in the east to secure him in his dignity. He therefore concluded a treaty with Sujah Dowla. The Mogul emperor was satisfied by obtaining a more ample revenue than he had for some time enjoyed, by which means he might be enabled to march an army to Delhi: for the company his lordship obtained the office of duan, or collector of revenues, for the province of Bengal and its dependencies. Thus Sujah Dowla was again put in possession of his dominions, excepting a small territory which was reserved to the Mogul, and estimated at twenty lacks of rupees, or £250,000 annually. The company were to pay twenty-six lacks of rupees, amounting to £325,000 sterling. They engaged also to pay to the nabob of Bengal an annual sum of fifty-three lacks, or £662,500 for the expenses of government, and the support of his dignity. The remainder of the revenues of Bengal were allotted to the company, who, on their part, guaranteed the territories in possession of Sujah Dowla and the Mogul.

The East India Company had now acquired the sovereignty of a territory equal in extent to the most flourishing kingdom in Europe. By all this, however, they were so far from being enriched, that the disorder of their affairs attracted the attention of government, and gave the British ministry an opportunity at last of depriving them of their territorial possessions, and subjecting the province of Bengal to the authority of the crown. New misfortunes also occurred in the east, and the company found a most formidable enemy in Hyder Aly. This man had raised himself from the rank of a sepoy, to be one of the most considerable princes in Hindostan. Being sensible that the power of the English was an insuperable bar to his designs, he practised on the nizam of the Deccan; and partly by promises, partly by threats, engaged him to renounce his alliance with the company, and to enter into a war against them. Having introduced the European discipline among his troops, he imagined that, with the advantage of numbers, he should be able to cope with his antagonists. In this, however, he was deceived; for, on the 16th September 1767, his army was entirely defeated by colonel Smith near Trinomally; after which the nizam deserted his new ally, and concluded another treaty with the English. From the latter, however, he did not obtain peace, but at the expense of ceding to them the Duanny of the Balegat Carnatic, which includes the dominions of Hyder Aly and some petty princes. Hyder, thus deserted by his ally, transferred the seat of war to a mountainous country, where, during 1767, nothing decisive could be effected; but his Indian cavalry was sometimes enabled to cut off the supplies, and interrupt the communications of the British. During these operations some ships were fitted out at Bombay, which conveyed 400 European soldiers, and about 800 sepoys to attack Mangalore, one of Hyder's principal sea-ports. This enterprise proved successful, and nine ships were brought away; but too small a garrison having been left in the place, it was almost immediately after retaken. In the mean time the appointment of field deputies to attend the army, and to control and superintend the conduct of the commander-

in-chief, greatly weakened the British operations. Hyder Aly had the prudence to avoid a general engagement, but frequently intercepted the convoys of the English, cut off their detached parties, and wearied them out with long and continual marches. The news of his success, against an enemy hitherto invincible by all the powers of India, so raised his reputation, that adventurers flocked to him from all parts; by which means his cavalry soon increased to upwards of 90,000, to which, however, his infantry bore no proportion. Notwithstanding all his success, the forces of Hyder Aly were altogether unable to cope with those of Britain, even when there was the greatest imaginable disparity of numbers. A detachment of the company's forces had made an assault upon a fort called Mulwaggle, in which they were repulsed with some loss. This, with the small number of the detachment, encouraged Hyder to march, at the head of a great part of his army, to the protection of the fort. The commanding officer however, colonel Wood, did not hesitate, with only 460 Europeans and 2300 sepoys, to attack this army, consisting of 14,000 horse, 12,000 men armed with matchlock guns, and six battalions of sepoys. The engagement lasted six hours; when at last Hyder, notwithstanding his numbers, was obliged to retreat, leaving the field covered with dead bodies; and the loss of the British was upwards of 300 killed and wounded. This engagement, however, was attended with no consequences affecting the war in general, which went on for some time in the same manner, and greatly to the disadvantage of the company. The divisions and discontents among the officers and council daily increased, the soldiers deserted, and every thing went to ruin. The revenues of the establishment of Madras being at last unequal to the expenses of the war, large remittances were made from Bengal to answer that purpose; and, as these were made in a kind of base gold coin, the company is said by that means alone to have lost £40,000 in the difference of exchange. At last Hyder Aly suddenly appeared within a few miles of Madras, which occasioned such an alarm, that the presidency were induced to enter into a negociation with him. An offensive and defensive treaty was therefore concluded on the 3d of April 1769, on the simple condition that the forts and places taken on both sides should be restored, and each party sit down contented with their own expenses.

It was stipulated that, in case of either party being attacked by their enemies, the other should give them assistance: and in this case even the number of troops to be supplied by each was specified. It soon after appeared, however, that the presidency of Madras was resolved to pay very little regard to this engagement. Hyder Aly, being in a little time after involved in a war with the Mahrattas, applied for assistance; but was refused by the presidency, who pretended that they themselves dreaded a quarrel with the Mahrattas. Hyder now, therefore, found himself overmatched, and applied several times to the English for the assistance he had a right to expect; but was constantly refused. This first appears to have inclined him to apply to the French, and by their means he obtained military stores in the greatest abundance, a number of experienced officers and soldiers, and much of the European discipline. Thus, in a short time, imagining himself a match for the Mahrattas, he renewed the war, and gained such decisive advantages as quickly obliged them to conclude an advantageous treaty with him. It now appeared that the English had not much hesitation in quarrelling with the Mahrattas. These tribes were originally governed by princes called rajahs, who reigned at Setterah; and, though in process of time they came to be divided into a number of petty states, yet they paid a nominal respect to the ram-rajah, who had a right to assemble the chiefs, and order out their troops on any emergency. By degrees the dignity of ram-rajah or sou-rajah (as he was also called) became merely titular, the administration being entirely possessed by the paishwa or chancellor. This office being usurped by one particular family, Nana-row, the reigning paishwa seized the ram-rajah, and confined him in a fortress. At his death he left two sons, Mada-row and Narain-row; of whom the former, being the elder, succeeded him in the paishwaship. Ionogee Boosla, or Bouncello, the immediate predecessor of Modagee Boosla, rajah of Berar, was one of the pretenders to the dignity of ram-rajah, as being the nearest of kin; at the same time that Roganut-row, called also Ragobah, uncle to Mada-row himself, pretended to the paishwaship. On this account the latter was confined by Mada-row, but he imprudently released him a little before his death, and recommended to him in the most affectionate manner the care of his brother Narain-row, who was to succeed to the paishwaship. Rogonaut, notwithstanding this, murdered Narain-row, and then fled to Bombay, where, on promising a cession of territory, he was protected and encouraged in his pretensions. The Mahrattas remonstrated against his behaviour; but the English had determined to profit by the civil dissentions of the Indian powers, and paid little regard to the justice or injustice of their cause. The Mahrattas therefore not only made up their differences with Hyder Aly, but became determined enemies to the English, at the same time that a confederacy was formed among the most powerful princes of India to expel from that part of the world these western intruders.

The resentment of Hyder Aly was particularly directed against the presidency of Madras; he had also received fresh provocation by their causing a body of troops to march through his dominions without his leave, to the assistance of a prince for whom he had no friendship; as also by the capture of the French settlement of Mahie, on the coast of Malabar, which he said was within his dominions, and consequently that the French were under his protection. His troops were therefore assembled from every quarter, and the greatest preparations made for a powerful invasion. The presidency of Madras in the mean time spent their time in mutual altercations, neglecting even to secure the mountain passes, through which alone an invasion

could be made, until their active antagonist, having seized and guarded those passes, suddenly poured out through them 100,000 men, among whom was a large body of European troops under French officers, and commanded by colonel Lally, a man of great bravery and experience. The alarm was given on the 24th of July 1780, that Hyder Aly's horse were only nine miles from Madras. The inhabitants instantly deserted their houses, and fled into the fort; while the unresisted barbarian burnt the villages, reduced the inferior forts, and prepared to lay siege to the capital. It being now absolutely necessary to make some resistance, measures were taken for assembling the troops; in doing which, an express was sent to colonel Baillie, at that time at Gumeroponda, twenty-eight miles from Madras, to proceed thence directly to Conjeveram with the corps under his command. But the first regiment of cavalry posisively refused to move without money; and, as they persisted in their resolution, were at last made prisoners, and sent to Madras. The main army, then consisting of 1500 Europeans, and 4200 sepoys, under Sir Hector Munro, with their train of artillery, proceeded towards Conjeveram. On their arrival they found the town in flames, great bodies of the enemy's cavalry advancing on both flanks, and no appearance of colonel Baillie's detachment. The march of this body had been impeded by a small river, swelled by a sudden fall of rain. Hyder Aly having now raised the siege of Arcot, in which he had been employed, marched towards Conjeveram; in the neighbourhood of which he encamped, and in the course of several days, at different times, offered battle. On the 6th of September, he detached his son Tippoo Saib with the flower of his army to cut off the detachment under colonel Baillie, who was now at Perrambaukam, a small village distant about fifteen miles, he himself remaining in the neighbourhood of Conjeveram, to watch the motions of Sir Hector Munro. The detachment under Tippoo consisted of 30,000 horse, 8000 foot, and twelve pieces of cannon. Notwithstanding this superiority in number, however, they were bravely repulsed by colonel Baillie's troops; and a junction was effected with a detachment under Sir Robert Fletcher, sent by Sir Hector Munro. This was on the 9th of September, and next morning orders were given for the whole army to march; colonel Fletcher's detachment being dispersed in different parts of the line. About ten at night several guns began to open on the rear of the English, on which colonel Baillie detached captain Rumley with five companies of sepoy grenadiers to storm. This he could not accomplish, being interrupted by an unexpected torrent, which it was found impossible to ford. Next day Hyder Aly himself joined Tippoo, and suddenly opened on colonel Baillie's detachment the fire of from sixty to seventy pieces of cannon, with an innumerable quantity of rockets; and for a while Hyder's numerous cavalry, supported by his regular infantry and European troops, driven on by threats, encouraged by promises, and led on by his most distinguished officers, bore on our little army in different quarters, without, however, making the least impression. Our men, both Europeans and sepoys, repeatedly presented and recovered their fire-arms as if they had been manœuvring on a parade. The enemy were repulsed in every attack; numbers of their best cavalry were killed, and many more were wounded; even their infantry were forced to give way: and Hyder would have ordered a retreat, had it not been for the advice of general Lally, who informed him that it was now too late, as general Munro was most probably advancing on their rear from Conjeveram; for which reason nothing remained but to break the detachment by their artillery and cavalry. Tippoo Saib had by this time collected his party together, and renewed the cannonade; and, at the same time that the English were under the necessity of sustaining an attack both from the father and son, two of their tumbrils were blown up by Hyder's guns, and a large opening made in both lines. They had now no other ammunition than grape; their guns discontinued firing: and in this dreadful situation, under a terrible fire not only of guns but rockets, losing great numbers of officers and men, they remained from half-past seven till nine o'clock. Hyder Aly, now perceiving that the guns were quite silenced, came with his whole army round their right flank. The cavalry charged them in distinct columns, and in the intervals between these the infantry poured in vollies of musketry with dreadful effect. Mhiar Saib, with the Mogul and Sanoor cavalry, made the first impression. These were followed by the elephants and the Mysorean cavalry, which completed the overthrow of the detachment. Colonel Baillie, though grievously wounded, rallied the Europeans, and once more formed them into a square, and with this handful of men he gained an eminence, where, without ammunition, and most of the people wounded, he resisted and repulsed thirteen separate attacks: but, fresh bodies of cavalry continually pouring in, they were broken without giving way. Many of our men, desperately wounded, raising themselves from the ground received the enemy on their bayonets. Captain Lucas's battalion of sepoys, at the time when our men moved up to a rising ground, was stationed to the right of the European grenadiers; but that corps seeing the Europeans in motion, and misunderstanding perhaps this evolution for a retreat, broke in the utmost confusion. The Europeans, bravely sustaining their reputation, remained in this extremity of distress steady and undaunted, though surrounded by the French troops, and by Hyder's cavalry to the number of 40,000. They even expressed a desire, though their number did not exceed 400, of being led on to the attack. At length colonel Baillie, finding that there was no prospect of being relieved by general Munro, held up a flag of truce to one of the chiefs of Hyder's army. But this was treated with contempt, and the surdar endeavoured at the same time to cut off the colonel. A few minutes after, however, our men received orders to lay down their arms, with intimation that quarter would be given. This order was scarcely complied with, when the enemy rushed in upon them in the most savage and brutal manner; and, but for

the humane interposition of the French commanders, the gallant remains of our little army must have fallen a sacrifice to that savage thirst of blood with which the tyrant disgraced his victory. In this unfortunate action nearly 700 Europeans were killed on the spot: the loss on Hyder Aly's part was so great, that he industriously concealed it; being enraged that the conquest of such an inconsiderable body should cost him so many of his bravest troops. Ever after he seemed to consider the English with an extreme degree of terror; insomuch that, notwithstanding his present exultation on account of this victory, he no sooner heard a report of Sir Hector Munro's march to attack him, than he left his camp in the utmost confusion, abandoning great part of his tents and baggage, and all the wounded.

On the news of colonel Baillie's disaster, the supreme council of Bengal requested Sir Eyre Coote to take upon him the management of the war; and a large supply of men and money was instantly decreed. In the interim Sir Hector Munro had been greatly harassed on his march to Madras, whither he had retreated after colonel Baillie's disaster; the forces of Hyder Aly had infested all the places in that neighbourhood in such a manner, as in a great measure to cut off all supplies; and Arcot, the capital of the most faithful ally the British ever had, was taken by storm. But no sooner had Sir Eyre Coote taken upon him the command, than his antagonist changed his plan of operations. He detached large parties of his numerous forces to lay siege to the principal fortresses belonging to the company; while, with the bravest and best disciplined part, he kept the field against the British commander. On the very first appearance of our army, however, his resolution failed, and he abandoned the siege of every place he had invested, retiring to a considerable distance on the other side of the Palaar, without even disputing the passage of it. The next operation was to secure Pondicherry, whose inhabitants had revolted. But they were easily disarmed, their magazines seized, and all the boats in their possession destroyed; in consequence of which precaution, a French squadron that soon after appeared off Pondicherry, was obliged to depart without being furnished with necessaries. But in the mean time Hyder Aly, having drawn large reinforcements from all parts of his dominions, resolved to try his fortune in a pitched battle. His army, it is said, amounted to 200,000 men, 40,000 of whom were cavalry, and 15,000 well disciplined sepoys. Still, however, he durst not openly attack the British army, but took a strong post, whence he might harass them on their march. Sir Eyre Coote, was not backward to make the attack; and, on the other hand, Hyder Aly prepared to engage him with all possible advantage. The battle was fought on the 1st of July, 1781; and, notwithstanding the vast superiority of Hyder Aly's army, he was routed with great slaughter. The Indians, however, made a much more obstinate resistance than usual; the engagement lasted from 9 A. M. till 4 P. M.; and the deficiency of the English in cavalry prevented them from pursuing the advantage they had gained.

Hyder Aly was soon encouraged to venture another battle. This was fought on the 27th of August the same year, on the very spot where colonel Baillie had been defeated. It was more obstinately contested than even the former, being continued with great fury from 8 A. M. to near dusk. A number of brave officers and soldiers fell on the part of the British, owing chiefly to the terrible fire of the enemy's artillery, and the advantageous position of their troops. At last the Indian army was totally defeated, and driven from every post it had occupied; though, from the obstinate resistance made at this time, Hyder began to entertain hopes that his forces might, by a succession of such battles, be at last enabled to cope with the English. He therefore ventured a third battle some weeks after, but was defeated with greater loss than before. Undiscouraged by this bad success, however, he laid siege to Vellore; and, expecting that the relief of it would be attempted, seized a strong pass through which he knew the British army must direct their march. The British commander accordingly advanced, and found the enemy in possession of some very strong grounds on both sides of a marsh, through which he was obliged to pass. Here he was attacked on all sides, but chiefly on the rear, the enemy directing their force principally against the baggage and provisions. But their utmost efforts, were unsuccessful, and Sir Eyre Coote forced his way to Vellore. Hyder Aly did not fail to wait his return through the same pass; and, having exerted his utmost skill in posting his troops, attacked him with vigor: but though the English were assaulted in front and in both flanks at once, and a heavy cannonade was kept up during the whole time of the engagement, the Indians were at last defeated with great slaughter. By these successes the presidency of Madras were now allowed so much respite, that an enterprise was planned against the Dutch settlement of Negapatam, situated to the south of Madras. A very inconsiderable force, however, could yet be spared for this purpose, as Hyder Aly, though so often defeated, was still extremely formidable. Sir Hector Munro had the management of the expedition: and so furious was the attack of the British sailors, that the troops left to guard the avenues to the place were defeated at the very first onset. A regular siege ensued; which was of a very short duration, a breach being soon made, and the garrison surrendering prisoners of war. The loss of Negapatam was quickly followed by that of Trincomale.

Admiral Hughes, who had conveyed Sir Hector Munro with the land forces to the former place, and assisted him with his sailors, immediately after its surrender set sail for the latter, where he arrived about the middle of January 1782. Trincomale itself was quickly reduced; but the main strength of the settlement consisted in a fort named Ostenburgh, the principal place on the island, and by the capture of which the whole settlement could be reduced. The governor proving obstinate, this place was taken by storm,

with the loss of about sixty on the part of the British, and very little on that of the Dutch, the victors giving quarter the moment it was asked.

A more formidable enemy, however, now appeared on the coast of Coromandel. This was Suffrein the French admiral, who, setting out from France with eleven ships of the line and several stout frigates, had fallen in with the Hannibal of fifty guns, and taken her when separated from her consorts. This ship, along with three others, a seventy-four, a sixty-four, and a fifty, had been sent out to the assistance of Sir Edward Hughes; and the three last had the good fortune to join him before the arrival of Suffrein. The latter, supposing that he had not yet received this reinforcement, bore down upon the English squadron at Madras, to which place they had sailed immediately after the capture of Trincomale. Perceiving his mistake, however, he instantly bore away. The English admiral pursued, took six vessels, five of them English prizes, and the sixth a valuable transport laden with gunpowder and other military stores, besides having on board a number of land officers and about 300 regular troops. This brought on an engagement, in which M. Suffrein, perceiving the rear division of the British fleet unable to keep up with the rest, directed his force principally against it. The ships of admiral Hughes himself and commodore King sustained the most violent efforts of the French, having two, and sometimes three, vessels to contend with. Thus the commodore's ship was reduced almost to a wreck; but about 6 P. M., the wind becoming more favorable to the English, the squadron of the enemy were obliged to draw off. The loss of men on the part of the British amounted to little more than 130 killed and wounded, but, that of the French exceeded 250. After the battle Sir Edward returned to Madras; but hearing nothing of Suffrein there, he made the best of his way for Trincomale, being apprehensive of an attack upon that place, or of intercepting a convoy of stores and reinforcements then expected from England. Suffrein was actually at that time on his way to intercept it. This brought the hostile fleets again in sight of each other; and, the British admiral having been reinforced by two ships of the line, a desperate battle ensued, which continued till towards night, when the ships on both sides were so much shattered, that neither could renew the engagement next day. Though these engagements were not decisive, they were nevertheless of the utmost prejudice to the affairs of Hyder Aly, who was thus prevented from receiving the succours he had been promised from France; and he was still farther mortified by the defeat of his forces before Tellicherry, which he had blocked up since the commencement of hostilities.

This misfortune was the more sensibly felt, as an open passage was now left for the English into those countries best affected to Hyder. His bad success, here, however, was in some measure compensated by the entire defeat of about 2000 English infantry and 300 cavalry under colonel Braithwaite, a brave and experienced officer. This detachment, consisting of chosen troops from Sir Eyre Coote's army, lay encamped on the banks of the Coleroon, which forms the north boundary of Tanjour. Tippoo Saib, having procured exact intelligence of its situation, formed a design of attacking it, while no danger was suspected, on account of the distance of Hyder Aly's army. He set out on this design with an army of 15,000 horse and 5000 foot, accompanied by a body of French regulars; and, having crossed the Coleroon, suddenly surrounded the British forces. The colonel, perceiving his danger, formed his men into a square, distributing the artillery to the several fronts, and keeping his cavalry in the centre. He thus resisted for three days the utmost efforts of his numerous enemies, always compelling them to retreat with great loss. At last general Lally, rightly conjecturing that the strength of the English must be exhausted and their number thinned by such desperate service, proposed that the infantry, which was fresh and entire, should attack one of the fronts of the square, while the forces of Tippoo should do the same with the other three. This proved successful; the British forces were broken with great slaughter, which however was stopped by the humanity of the French commander; who even obtained from Tippoo Saib the care of the prisoners, and treated them with a degree of humanity which they certainly would not otherwise have experienced. A number of British officers, however, perished in the engagement, and only one remained unwounded.

In the mean time, the succours from France, so long expected by Hyder, arrived; and, as soon as a junction was formed, they proceeded, under the command of M. Duchemin, to invest Cuddalore; which, not being in a situation to stand a siege, was surrendered on capitulation. Some other places of less consequence were also reduced, until at last, being joined by Hyder's numerous forces, they determined to lay siege to Vandervash, a place of great importance, and the loss of which would have been extremely detrimental to the English. This quickly brought Sir Eyre Coote with his army to its relief; but Hyder Aly, notwithstanding his being reinforced by the French, durst not yet venture a battle in the open field. On this the British commander proceeded to attack Arnee, the principal deposit of his warlike stores and necessaries. Thus the latter was obliged to quit his advantageous ground; but he did so with such secrecy and speed, that he came upon the British army unawares, while preparing for its last march to Arnee, now only five miles distant. Perceiving that the march of the British was through low grounds, encompassed on most parts with high hills, he planted his cannon upon the latter; from which he kept a continual and heavy fire on the troops below, while his numerous cavalry attacked them on every side. Notwithstanding all disadvantages, however, the British commander at last closed in with the enemy; and after an obstinate dispute completely routed them on the 2d of June 1782.

Still Sir Eyre Coote, wanting cavalry, in which the enemy abounded, was obliged to move nearer Madras; soon after which he was obliged, on

account of his bad state of health, to relinquish the command of the army to general Stuart. Hyder Aly, now perceiving that he was likely to obtain no decided success by land, began to rest his hopes on the success of the French by sea. He therefore earnestly requested M. Suffrein, who possessed at that time a decisive superiority in the number of ships, to lose no time in attacking the British squadron before it could be joined by a reinforcement which was then on its way, and was reported to be very formidable. As the French commander was by no means deficient in courage a third engagement took place on the 5th of July 1783. At this time the British had the advantage of the wind, the battle was much more close, and the victory more plainly on their side; though it is said, that had not the wind fortunately shifted, a total defeat would have ensued. After the engagement, the French admiral proceeded to Cuddalore, having received intelligence that a large body of French troops in transports was arrived off the island of Ceylon, with three ships of the line. As this seemed to afford hopes of retaliation, he used such diligence in refitting his ships, that the fleet was able to put to sea in the beginning of August, to make an attempt on Trincomale; and so well were his designs conducted, that Sir Edward Hughes received no intelligence of the danger till it was too late; the place was not in a condition to resist a siege; and, the French batteries having silenced those of the fort in two days, a capitulation took place on the 31st of August. Sir Edward did not arrive at Trincomale before the 2d of September, when he had the mortification to see the forts in the hands of the French, and Suffrein in the harbour with fifteen sail of the line, while he had only twelve. He ventured an engagement, but the issue of the battle was only shattering the fleets, and killing and wounding a number of men on both sides. The superiority of the English, however, was very manifest; and in entering the harbour of Trincomale the French lost a seventy-four gun ship. The loss of Trincomale was severely felt by the English; for, while the French lay safely in the harbour refitting their squadron, the English were obliged, for that purpose, to sail to Madras. Here the fleet was assailed by one of the most dreadful storms ever known on that coast. Trading vessels, to the number of nearly 100, were wrecked, as well as those for Madras laden with rice, of which there was an extreme scarcity at that place. This now was augmented to a famine, which carried off vast numbers of the inhabitants, before supplies could arrive from Bengal. The continuance of the bad weather obliged Sir Edward, with his whole squadron, to sail to Bombay, where he arrived in the end of the year, when his squadron was so much shattered, that, in order to repair it with proper expedition, he was obliged to distribute it between the dockyards of Bombay and the Portuguese settlement at Goa.

In the mean time Sir Richard Bickerton arrived at Bombay from England with five men of war, having on board 5000 troops. It was the intention of France to signalise the campaign of this year by an immense force both by sea and land in India. The forces already on the coast of Coromandel were to be joined by 5000 regulars, from their islands on the African coast; and Suffrein was to be reinforced by several ships of the line, when it was hoped that a decided superiority at sea would be obtained over the English. To oppose these designs it was deemed necessary by the presidency of Bombay to make a powerful diversion on the coast of Malabar. Here was situated the kingdom of Mysore, the sovereignty of which had been usurped by Hyder Aly under the title of Dayva. It is nearly in the same parallel with Arcot. On the north was Canara, the favorite possession of Hyder Aly. The expedition had been set on foot as early as the end of 1781; a strong body of forces under colonel Humberstone had taken the cities of Calicut and Panyan, besides others of less note, and penetrated into the inland country. Having made himself master of a place called Mongarry Cotta, which commanded the entrance into the inner parts of the country, he proceeded to attack Palatacherry, a considerable town some miles distant; but, being suddenly environed with a numerous and hostile army, instead of making himself master of the place, it was with the utmost difficulty that he made his escape, after losing all his provisions and baggage. A force consisting of 20,000 foot and 10,000 horse, under Tippoo Saib, also advanced against him with such celerity, that the colonel had only time to retreat to Panyan, where he was superseded in the command by colonel Macleod, and soon after the place was invested by the forces of the enemy, among whom was general Lally with a considerable body of French. Two British frigates, however, having come to the assistance of the place, rendered all the attempts of the enemy to reduce it abortive. At last Tippoo, impatient of delay, made a vigorous effort against the British lines; but, though both the Indian and French commanders behaved with bravery, the attack not only proved unsuccessful, but they were repulsed with such loss as determined Tippoo to abandon the siege of the place, and retire beyond the Panyan. As soon as the presidency of Bombay were acquainted with the success of colonel Humberstone, general Matthews was despatched to his assistance with a powerful reinforcement. This expedition, which began the campaign of 1783 in Canara, has been related with circumstances so disgraceful, and so exceedingly contrary to the usual behaviour of British troops, that we cannot account for them. 'In the story of the conquest and recovery of Canara,' say the editors of the New Annual Register, 'the Spaniards may be said to be brought a second time upon the scene. The Spaniards of Britain were overtaken in the midst of their career; and he who is more of a man than an Englishman, will rejoice in the irregular and unmeasured, but at the same time the just and merited, vengeance that was inflicted upon them, by the prince whose dominions they were ravaging!' In support of this exclamation the following account is given of the expedition: general Matthews had formed a design of carrying the war into the heart of Hyder Aly's dominions. For this purpose, the

English invested the city of Onore, about 300 miles south of Bombay, and one of the principal places in Canara 'It was taken by assault,' says Dr. Andrews, 'with great slaughter, and plundered with circumstances of avarice and rapine that disgraced the victors; among whom, at the same time, great discontents arose concerning the division of the spoil.' 'No quarter,' say the editors of the Annual Register 'was given by the victorious English; every man they met was put to the sword. 'The carnage,' says one of the officers in a private letter, 'was great; we trampled thick on the bodies that were strewed in the way. It was rather shocking to humanity, but such are only secondary considerations, and to a soldier, whose bosom glows with heroic glory, they are thought only accidents of course; his zeal makes him aspire after farther victory.' This part of the peninsula had hitherto been untouched by the barbarous and unsparing hands of Europeans, and, of consequence, was full of riches and splendor. In the fortress of Onore were found sums of money to an unknown amount, besides jewels and diamonds. A considerable part of this appears to have been secured as private plunder by general Matthews. The complaints of the military were loud; they thought, and naturally, that the acquisition of riches was the fair and reasonable consequence of the perpetration of bloodshed. But their commander turned a deaf ear to their representations; and hastened, by adding new laurels to his fame, to hide the slander that might otherwise rest upon him.' From Onore the army proceeded to the nearest fortresses on the sea coast, More and Cundapour. Here they were joined by a reinforcement from Bombay, under colonel Macleod and Humberstone, with positive orders to proceed for Bidnore. On this general Matthews marched for the Ghauts, mountains where there is a pass three miles in length, though only eight feet wide, which was then strongly fortified, and defended by a vast number of the natives. 'The English,' say our authors, 'however, had already obtained a considerable reputation by their executions; and the use of the bayonet, the most fatal instrument of war, and which was employed by them on all occasions, created such an extreme terror in the enemy, as to enable them to surmount this otherwise impregnable defile.' The gaining of this pass laid open the way to Bidnore, the capital, to which a summons was now sent. An answer was returned, that the place was ready to submit, provided the inhabitants were not molested, and the governor was permitted to secure his property. The wealth of this city was undoubtedly great, but the estimates of its amount are very different. By the accounts of Bombay, it was stated only at £175,000, while the officers concerned in the expedition say that it was not less than £1,200,000 or even £1,920,000: and even this was only public property; that seized upon by the soldiers, and which belonged to private persons, was undoubtedly very considerable also. This treasure was at first shown by the general to his officers, and declared to belong to the army; but he afterwards told them that it was all the property of the Mahommedan governor, and had been secured to him by the terms of the surrender. It was therefore sent to Cundapour, under the convoy of lieutenant Matthews, brother to the general, to be thence transmitted to Bombay. The discontents of the army were now carried to the utmost height; and the contest became so serious, that colonels Macleod, Humberstone, and Shaw, quitted the service altogether, and returned to Bombay. The officers charged their general with the most insatiable and shameful avarice; while he, in return, accused his whole army of doing every thing disrespectful and injurious to him; of paying no regard to order and discipline, and of becoming loose and unfeeling as the most licentious freebooters. From Bidnore detachments were sent to reduce several fortresses, the principal of which was Annanpour, or Anantpore. Here orders were issued for a storm and no quarter. Every man in the place was put to death, except one horseman who made his escape after being wounded in three places. 'The women, unwilling to be separated from their relations, or exposed to the brutal licentiousness of the soldiery, threw themselves in multitudes into the moats with which the fort was surrounded: 400 beautiful females, pierced with the bayonet, and expiring in one another's arms, were in this situation treated by the British with every kind of outrage.' This exploit was succeeded by the reduction of Carwa and Mangalore, which completed the reduction of Canara, when general Matthews put his army into cantonments for the rainy season. This rapid success was owing to the death of Hyder Aly, which happened in the end of 1782.

8. *India, from the accession of Tippoo Saib, to his death.* His son, Tippoo Saib, however, having taken possession of the government, and settled his affairs as well as time would allow, instantly resumed his military operations. On the 7th of April, 1783, he appeared before Bidnore, so that general Matthews had scarcely time to collect a force of 2000 men, and to write to Bombay for a reinforcement. But the presidency were so much prejudiced against him by the reports of his officers, that they suspended him from his commission, appointing colonel Macleod to succeed to the command of the army. Tippoo Saib now advanced with a vast army, supposed not to be fewer than 150,000 men, covering the hills on each side of the metropolis as far as the eye could reach. The army of general Matthews, unable to cope with such a force, were quickly driven from the town, and forced to take refuge in the citadel. Tippoo having cut off their retreat, by gaining possession of the Ghauts, laid close siege to the fortress; which in less than a fortnight was obliged to capitulate. The terms proposed were, that all public property should remain in the fort; that the English should engage not to act against Tippoo for a stipulated time; that they should march out with the honors of war; that they should pile their arms, and have full liberty to proceed unmolested with their private property to the sea coast, from thence to embark for Bombay; and in this capitulation the garrisons of Annanpour and other inland fortresses were also included. But all these terms

were afterwards disregarded by Tippoo, who said that the British had forfeited their title to liberty, by a breach of the articles of capitulation, in embezzling and secreting the public money, which was all, in good faith, to be delivered up. That this was really the case seems to be universally acknowledged. By this circumstance the fate of the garrison was decided. General Matthews was sent for next morning to a conference. He was not, however, admitted to the presence of Tippoo, but immediately thrown into chains. Most of the other principal officers were, on various pretences, separated from the army. The general and his companions were conducted to Seringapatam, the capital of Mysore; and, after having experienced a variety of severities, were at last put to death by poison.

We now proceed to give some account of the war with the Mahrattas, begun by reason of the protection afforded to the assassin Rogobah Row. This man had formerly obliged the Mogul to take shelter in the English factory at Bengal; but, losing his credit among his own countrymen, was expelled. On his arrival at Bombay an alliance was formed between him and the English government; by which the latter engaged to replace him in the Mahratta regency, in consideration of some valuable cessions of territory. The supreme council of Bengal, however, disowned this treaty, and concluded one with the Mahrattas in March 1776; by which it was agreed, that they should provide for Ragobah's subsistence according to his rank, on condition of his residing in their country. This being not at all agreeable to Ragobah, he fled once more to Bombay, where a new confederacy was entered into for his restoration. The council of Bengal approved of this, on account of the approaching rupture with France; and a detachment was, in February 1778, ordered to march across the continent of India. By some mismanagement in this expedition, the whole army was obliged to capitulate with the Mahratta general on the 9th of January 1779. One of the terms of the capitulation was, that a body of troops which were advancing on the other side should be obliged to return to Bengal. But general Goddard, the commander of these forces, denying the right of the council of Bengal to remand him, proceeded on his march, and arrived on the 18th of February. Here he received orders to conclude a new treaty, if it could be obtained on easier terms than that of the capitulation, by which it had been engaged to cede all our acquisitions in the country of the Mahrattas. Such flagrant disregard to any stipulations that could be made greatly provoked the Mahrattas, and induced them to join in the confederacy with Hyder Aly. The war, however, was successfully begun by general Goddard, in January 1780. In three months he reduced the whole province of Guzerat. Madajee Sindia, the Mahratta general, advanced to oppose him; but, as he did not choose to venture a battle, the English general stormed his camp, and totally routed him. Other exploits were performed in the course of this campaign; during which Mr. Hastings, the governor-general, seeing no hopes of an accommodation, entered into a treaty with the rajah of Gohud, and with his consent major Popham reduced a fortress in his dominions, named Guallior, garrisoned by the Mahrattas, and hitherto reckoned impregnable. These successes were followed by the dreadful incursions of Hyder Aly above related, which put a stop to the conquests of general Goddard; all the forces he could spare being required to assist the army under Sir Eyre Coote. The last exploit of general Goddard was the reduction of the island of Salsette, and of a strong fortress near it, named Bassein. The army of Sindia, consisting of 30,000 men, was also defeated this year by colonel Carnac; and the Mahrattas, disheartened by their losses, consented to a separate peace with the British.

The expenses incurred by these wars were so great, that Mr. Hastings was reduced to the greatest difficulties. All the treasure of Bengal was exhausted, and it was found necessary to draw extraordinary contributions from the British allies. One of the most remarkable results was the revolt of Benares. The rajah of this country had formerly put himself under the protection of the English, who, on their part, agreed to secure his dominions to him, on condition of his paying an annual subsidy to the nabob of Oude. In 1770 the rajah died, and was succeeded by his son Cheit Sing, who held the sovereignty at the time we speak of. On the death of the nabob, in 1775, a new treaty was made with his successor, by which the sovereignty of Benares was transferred to the East India Company, an acquisition equivalent to £240,000 per annum; at the same time that the subsidy paid by Suja Dowla, and which by lord Clive had been fixed at £36,000, and afterwards raised to £220,000, was now augmented to £312,000 per annum. On receiving intelligence, in July 1778, that war had actually commenced between France and Britain, Cheit Sing was required to pay £50,000 as his share of the public burdens. This demand was met with extreme reluctance by a prince who already contributed £240,000, and probably thought that an abundant equivalent for the protection he enjoyed. The same requisition, however, was made the two succeeding years, but with a promise that the demand should cease when peace was restored. A body of troops was also quartered upon him, and he was obliged to pay for their maintenance, lest he should not voluntarily pay the additional £50,000. In November 1780, in addition to these requirements, he was also ordered to send into the field such a body of horse as he could spare; but this was never complied with. In July 1781, Mr. Hastings having, it is said, received some intelligence that the oppressed rajah meditated rebellion, set out on a visit to the nabob of Oude, and in his way proposed to clear up the misunderstanding. The method by which he intended to do this was to lay a fine upon the prince of £400,000 or £500,000; and as a reason for doing so, it was alleged, that the late rajah had left £1,000,000 sterling in his treasury; a sum which was continually increasing. Cheit Sing advanced to the borders of his territories to meet the governor-general, behaving with all imaginable submission; and, having received

private intelligence of what was meditated against him, offered to pay down £200,000. This was refused; and the governor-general, having reached the capital, forbid the rajah his presence, and by a letter acquainted him with his causes of complaint. Cheit Sing sent a respectful answer; but, as he endeavoured to exculpate himself, Mr. Hastings was so far from being satisfied, that he put the prince under arrest. Such an unheard-of proceeding excited the utmost surprise and resentment, in subjects accustomed to regard their sovereign with a degree of reverence little short of adoration. On the very day of the arrest they assembled tumultuously, cut in pieces the guard which had been set on the palace, and carried off their prince in triumph. It does not appear, however, that this was any other than a transitory tumult; for, though they could easily have cut off the governor-general, they made no attempt against him. Cheit Sing protested his innocence, and made the most unlimited offers of submission, but all in vain. His government was declared vacant, and the zemindary bestowed on the next heir; while the annual subsidy to the government of Bengal was augmented from £240,000 to £400,000 annually. The miserable rajah was forced to fly his country; and his mother, though promised leave to retire upon conditions, was attacked in her retreat, and plundered by the soldiers. After all his endeavours to procure money, however, Mr. Hastings found this adventure turn out much less profitable than he had expected; for the treasury of the fugitive prince was seized and retained by the soldiers.

With the nabob of Oude a new treaty was concluded; the design of which was evidently to ease him of some of the burdens to which he was at that time subjected. Part of the British troops were therefore withdrawn from his dominions. As Fizulla Khan, the most prosperous of his dependents, had been called upon to furnish a body of 5000 horse to join the nabob's army, and had not complied with the requisition, the guarantee of his treaty with the nabob, formerly executed, was withdrawn; but, it being afterwards discovered that his territory was not equivalent to the claims of the governor, the treaty was renewed on payment of a slight fine. As the widow of Sujah Dowla was suspected of favoring the late rajah Cheit Sing, the reigning prince was allowed to reclaim the treasures of his father in her possession, and likewise to deprive her of a small province she had in possession, on condition of paying her a certain stipulated allowance annually. The treasures were seized as payment of the debts of the prince to the company.

Hostilities continued in India between the French and British, till the year 1783 was far advanced, and long after tranquillity had been restored in other parts of the world. In the beginning of the season for action, the governor and council of Bengal determined to send an ample supply to the presidency of Madras, that so they might be enabled to put an end to the war, which Tippoo seemed willing to prosecute with even more vigor than his father had done. For this purpose Sir Eyre Coote, who, for his health, had gone to Bengal by sea, set sail once more for Madras, being entrusted with a large sum of money for the expenses of the war. In his passage he was chased for forty-eight hours by two French men of war. The solicitude and fatigue he underwent during this time, being almost constantly upon deck, occasioned a relapse, so that he died in two days after his arrival. The invasion of Tippoo's dominions having called him off from the Carnatic, general Stuart took the opportunity of attacking him in another quarter. Colonel Fullarton was despatched with a large body of troops to invade the province of Coimbatour. This he executed with great success. General Stuart, however, having still greater designs in view, was obliged to recall this gentleman in the midst of it. The siege of the strong fortress of Cuddalore was the operation which engaged his attention. It was now become the principal place of arms belonging to the French; was strongly fortified, and garrisoned by a numerous body of the best troops of France, as well as a considerable number of Tippoo's choicest forces. The siege therefore proved so difficult, that, though the British displayed the utmost valor and military skill, they were not able to reduce the place until hostilities were interrupted by the news of a general pacification having taken place in Europe. In this siege a corps of sepoy grenadiers encountered and overcame the French troops opposed to them with fixed bayonets. For this remarkable instance of valor, they not only received the highest applause at the time, but provision was made for themselves and families by the presidencies to which they belonged. After the reduction of Hydernagur, and the destruction of the army under general Matthews, the British possessed only three places of consequence in the kingdom of Canara. These were Mangalore, Onore, and Carwa. The siege of all these places was undertaken at once. Mangalore, the principal port in the country, was defended by a very numerous garrison under major Campbell. Tippoo sat down before it on the 19th of May; and the attack and defence were both conducted with the greatest spirit and activity. Notwithstanding the utmost efforts of the beseigers, however, and that the garrison were reduced to the last extremity for want of provisions, they held out in spite of every difficulty, until, peace being concluded, the place was afterwards delivered up. In other parts nothing more happened, than an indecisive engagement between M. Suffrein and admiral Hughes.

A combination of various causes contributed to produce the war of 1789. The splendid embassy sent by Tippoo to the court of France, soon after the peace of Mangalore in 1784, had given reason to suspect that some plan was concerted between that court and the tyrant of Mysore, for the annoyance of Great Britain; but this plan, whatever was its extent, was defeated by the French revolution. The Dutch were no less jealous of the increasing power of Tippoo, on account of the vicinity of their flourishing settlement at Cochin to the sultan's territories. They also possessed the forts of Crangamore and Acottah in this vicinity. To

procure possession of these forts, Tippoo marched a formidable force, in June 1789, towards Cranganore, of which the Dutch had taken possession, when in alliance with his father Hyder Aly. The Dutch afterwards sold them both to the rajah of Travancore, an ally of Britain; and thus, with their usual policy, placed Britain as a barrier against Tippoo's encroachments on their settlement at Cochin. The rajah gave farther offence to the sultan, by purchasing some territory from the rajah of Cochin, a tributary of Tippoo, without consulting him. Tippoo, therefore, made a direct attack upon the lines of Travancore, on the 29th of December 1789; but, on receiving a remonstrance from the British government at Fort George, he desisted, sent back the prisoners, and affirmed as an apology, that the rajah's people had first fired on his troops. On the 1st of May, 1790, the rajah attacked Tippoo, who had continued quiet from December 29th. For this step the rajah alleged in excuse the hostile preparations of Tippoo, in erecting batteries, &c. This attack was expected by the British, and some say concerted with them. The grand Carnatic army was instantly assembled, under general Meadows, in the southern provinces, and a plan of operations agreed on, between him and general Abercrombie, who had the command of the Bombay army, and colonel Kelly of the centre army; so named from its position between Madras and Mysore. The Nizam and the Poonah Mahrattas were appointed to penetrate into the territory of Tippoo across their respective frontiers, and Seringapatam was fixed on as the common centre. On the 24th of May general Meadows joined the grand army, and on the 15th of June entered Tippoo's dominions, when the fort of Carroor immediately surrendered. Seven days were spent in marching fifty-nine miles to Duraporum, where they found a supply of grain, and heard that Tippoo had ascended the Ghauts. On the 22d of July the army entered Coimbettore, which was evacuated, though it contained much grain and military stores. Several other forts were also reduced. In the end of August colonel Floyd reduced Sattimungalum, though garrisoned by a battalion, and well supplied with provisions. But on the 12th of September Tippoo began a smart cannonade on this detachment, who retreated to Coimbettore on the 13th; but, being closely pressed, repulsed the Mysorean troops on the 14th. On the 18th general Meadows marched to the east to offer Tippoo battle, but found he had retreated to Sattimungalum, on which he returned to Coimbettore.

On the 12th of October he heard that Tippoo had retaken Daraporum, and the British garrison arrived in camp on the 17th, speaking warmly of the honorable treatment they had received from Tippoo. General Meadows left Coimbettore on the 20th; and the history of the grand army is nothing but a journal of its marches in pursuit of the enemy till the 17th of November, when it formed a junction with the centre army at Poolamputty; and on the 18th they came in sight of the rear of Tippoo's cavalry. From this period the united armies under general Meadows took their course back to Trichinopoly to procure supplies, but did not arrive till the 8th of December, the weather being bad. Here they learned that Tippoo had arrived at Munsurput, on the Coleroone, opposite Trichinopoly, on the 28th of November, where he continued encamped till the 6th of December, but without attacking that city. Meantime a detachment from the Bombay army, under lieutenant-colonel Hartley, rendered great service to the rajah of Travancore; and on the 5th general Abercrombie, with the remainder of the forces from Bombay, arrived at Tellicherry. On the 14th Sir Ralph marched to attack Cannanore, which, with the garrison, surrendered on the 17th, and the troops engaged not to serve against the British during the war. About the same time colonel Hartley took Ferokabad, the capital of the Malabar coast. On the 27th Barragurry and Cootahpoor surrendered; so that the whole coast, from the Billipatam to Cape Comorin, was now in possession of the British and their allies.

On the 15th of January, 1791, the army under general Meadows left Trichinopoly, and proceeded to Madras, where lord Cornwallis had arrived on the 13th of December. On the 29th his lordship joined the grand army at Vellont, which proceeded early in February to Vellore; and, having deceived Tippoo by a feint, passed the Muglee on the 22d of February with all its stores and baggage. On the 24th lord Cornwallis proceeded for Bangalore. On the 6th March the town was stormed and taken, with the loss of 100 men. On the 12th batteries were opened on the fort, and on the 17th and 21st Tippoo drew out his army, but without effect. The fort was stormed on the evening of the 21st, with a dreadful carnage, though with little loss on the British side. Not less than 1000 fell, it is supposed, by the bayonet, and 300, mostly wounded, were taken. The army remained at Bangalore till the 28th of March, when they proceeded towards Chinna-Balabaram; and on the 7th of April were joined by 15,000 of the nizam's troops. On the 17th colonel Oldham joined them with 700 Europeans, 4500 Indians, and a supply of provisions.

On the 3d of May they set out for Seringapatam, and on the 13th arrived at Arakeery, whence they had a view of Tippoo's capital, nine miles distant, and observed the main body of his army crossing from the island to the north side of the Cavery. Mean time lord Cornwallis, having received intelligence that general Abercrombie had ascended the Ghauts on the Malabar side, resolved to form a junction of their forces, but finding it impracticable to make a ford across the Cavery, determined to march round the ridge of mountains on the right. On the morning of the 15th the enemy's line was seen in a strong position. The British army was then formed into two divisions under colonel Maxwell and general Meadows. The former having successfully stormed a height occupied by Tippoo's troops, the action became general along the front. Colonel Maxwell then advanced rapidly to gain another height on the enemy's left flank, while the cavalry under colonel Floyd attacked their right; on which Tippoo was forced to give way,

though his retreat was gradual and masterly. Four guns were taken, and the enemy were pursued, till the fire from the island batteries obliged the British to desist, and encamp partly on the field of battle. After destroying his battering train, and sending orders to general Abercrombie, who had obtained possession of Periapatam, to return with all speed, lord Cornwallis moved from his encampment to return to Bangalore; and on the 28th was joined by 30,000 Mahrattas, with a supply of provisions. In their route they took several forts, and on the 18th of July Ousoor, with the forts near it, submitted. On the 30th the combined troops encamped six miles from Bangalore. General Abercrombie, having also destroyed his battering train, was obliged to lead back a sick and dispirited army, over those almost impassable mountains they had so lately passed.

While the army lay encamped near Seringapatam, a present of fruit had been sent by Tippoo to lord Cornwallis, with some overtures for a separate peace. The present, however, was returned, and the sultan assured, that no peace could be granted unless the allies were included. Tippoo next sent a vakeel with full powers to treat, but still the mission proved unsuccessful. During the winter months lord Cornwallis omitted nothing that tended to ensure the success of the next campaign. After reducing the hill forts north-east of Bangalore, Nundydroog, the capital of a large district, was besieged; and, being built upon the top of a mountain 1700 feet high, three-fourths of which were inaccessible, it stood a siege from the 22d of September to the 18th of October, when a breach was made. The carnage which would have followed was prevented, partly by a number of the garrison escaping over a low part of the wall, but chiefly by the humane and laudable exertions of captain Robertson, who commanded the storming party. On the 31st of October colonel Maxwell took Fort Penagra by storm, but one half of the garrison was put to the sword. At Kistnaghery he met with a more serious resistance. The lower fort was easily reduced, but the garrison in the upper fort defended it with great obstinacy. Immense rocks and showers of stones were hurled down; the scaling ladders were broken, and, after two hours of vigorous assault, colonel Maxwell desisted from the attempt. In September Coimbettore was besieged by a detachment sent by Tippoo, and was so bravely defended by lieutenant Chalmers, that the Indians were obliged to raise the siege. But being again besieged by a fresh party sent by Tippoo, and a detachment sent to its relief by lord Cornwallis, under major Cuppage, being defeated by the Cawn, lieutenant Chalmers was obliged to capitulate on the 2d of November, and the garrison marched out with the honors of war.

On the 10th of December colonel Stewart encamped within three miles of the celebrated fortress of Severndroog, on the north side; on the 17th he opened two batteries, at 700 and 1000 yards' distance; and on the 19th another within 250 yards, which, on the 21st, effected a breach at 11 A. M. when the assault was made, and in an hour the valor of the British troops made them masters of a fortress hitherto deemed impregnable. On the 4th of December Outredroog, another fort twelve miles distant, was also taken by storm. Several other forts were now reduced, and Gumuncondah was blocked up by Hafez Jee, one of the nizam's best generals. It was relieved, however, by Hyder Saib, Tippoo's eldest son, who took Hafez Jee and great part of his troops prisoners. Early in November general Abercrombie returned to Tellicherry, and, on the 5th of the next month, he proceeded on his march through the Ghauts towards the Mysore country; while the Mahrattas, under Purseram Bhow, reduced several forts on the Tam and the Budra, which gave them access to a fertile district, that afforded seasonable supplies. The grand object, the reduction of Tippoo's capital, was now to be attempted. The allied armies on the 1st of February, 1792, commenced their march, and on the 5th arrived within sight of Seringapatam, under the walls of which Tippoo was strongly posted. His front line was situated on the north side of the Cavery, behind a strong hedge, and defended by heavy cannon in the redoubts. In the front there were at least 100 pieces of cannon; and in the fort and island which formed his second line there were three times as many. The allies encamped six miles from Tippoo, in two divisions separated by the small river Lockarry. The British army formed the front line: the reserve was about a mile in the rear, where the armies of the nizam and Mahrattas were also posted at a further distance. On the 6th of February orders were issued to attack Tippoo's camp and lines at 7 P. M. The right division, consisting of 3300 infantry, was commanded by general Meadows; the centre, consisting of 3700, by lord Cornwallis; and the left, of only 1700 men, by colonel Maxwell. At eight o'clock the whole body was under arms, the evening was serene, and the troops moved on in silence by the light of the moon. While they were on their march colonel Duff's camp was struck, which gave the first notice of the intended attack to the allies, who were astonished when they found that lord Cornwallis had ventured on this desperate enterprise with only a part of his infantry unsupported by artillery, between ten and eleven at night; the centre column, within a mile of the hedge, touched upon Tippoo's grand guard of cavalry, who were coming with rockets, &c., to disturb the British camp, but immediately galloped off to the lines. Finding themselves thus discovered, the column advanced with the utmost rapidity, and entered the enemy's lines within fifteen minutes after the news could have reached them. The right column, having met with more impediments, was later in reaching the hedge than the centre column; but it entered the lines about eleven, when the battle became general; the enemy at last gave way, and at day-break general Meadows found himself complete master of the field.. The chief object of the centre column being to gain possession of the island, the front division dispersed the enemy, and passing Tippoo's tent, which had been abandoned, pressed forward to the river, in two parties, The first under captain Monson

crossed the ford under the walls without opposition, and proceeded to the east gate of the city, but, finding it shut, marched to an extensive market-place, where they made a great slaughter of the enemy. They were followed by the other party, under colonel Knox, who proceeded to the rajah's garden, and thence to the suburb Shaher-Gangam, the gates of which they forced open, and drove the enemy from all their batteries. The centre division advanced to the sultan's redoubt, which they found abandoned, and afterwards co-operated with colonel Maxwell in defeating Tippoo's right wing. Lord Cornwallis, with the reserve, remained close by the hedge, where the column had first entered, and two hours before day-break was joined by captain Hunter's party; soon after which they were attacked by a strong body of troops, part of Tippoo's centre and left, who, being now recovered from their panic, rallied with redoubled resolution.

The conflict was carried on with inflexible courage on both sides, and it was near day-light, before the enemy was repulsed. Lord Cornwallis then retired to the Pagoda Hill, where he was met by general Meadows. Mean time the left division under colonel Maxwell, after ascending the Carighaut Hill, with little resistance, and marching down to the river, where they were much galled by the firing from Tippoo's right line, crossed the ford and joined the victorious parties, who had got possession of the east extremity of the island. The battle was continued in different parts during the whole of the 7th of February. The most desperate conflict was at the sultan's redoubt, which was defended by a small party under colonel Kelly, against three rigorous attacks, seconded by a heavy cannonade from the forts. The enemy being driven from every post on the north side of the river, the camp was advanced as near to the hedge as the firing from the fort would permit; and a chain of posts along the north and east faces of the fort was formed, so as to invest Seringapatam on its two principal sides. Thus pressed on every quarter, and his whole power reduced within the narrow limits of a citadel, the sultan became anxious to procure peace. He therefore released lieutenants Chalmers and Nash, who had been captured at Coimbettore, and had been well treated, presented the former with 500 rupees and two shawls, and sent a letter by him to lord Cornwallis, requesting he would return with the answer. On the 16th of February the Bombay army, under general Abercrombie, after a fatiguing march, wherein they were much harassed by detached parties of the enemy, joined lord Cornwallis, and afforded a reinforcement of about 2000 Europeans and 4000 natives. Vigorous preparations were therefore made to attack the fort on the north side; where trenches were opened and batteries constructed. Meanme, to draw off the attention of the enemy om these operations, major Dalrymple and aptain Robertson, with the seventy-first regiient and thirteenth battalion of sepoys, were sent attack his cavalry, encamped on the south de of the river. They entered the camp unscovered, killed with the bayonet above 100 men and 200 horses, and returned without losing a man. On the night of the 19th a parallel and redoubt were completed near the walls of the fort, on the opposite side of the river; which the sultan, next day, in vain attempted to overthrow. He then endeavoured to deprive the camp of water, by altering the course of a large canal, but in this attempt too he was disappointed, a party being despatched under captain Wahab, who soon dislodged the enemy and repaired the canal.

On the 19th the grand operation of the siege commenced by opening the trenches, and by a heavy discharge from all the batteries: in the mean time the Bombay army crossed the river to invest the west side of the capital. But, in consequence of the application through lieutenant Chalmers, lord Cornwallis agreed to receive Tippoo's envoys to treat of peace. On the 15th, 16th, 19th, and 21st, Sir J. Kennaway and Mr. Cherry, assisted by vakeels, or envoys, from the nizam and Hurry Punt the Mahratta chief, met with Tippoo's vakeels, to treat of peace, but little progress was made in the negociation. The siege continued without intermission, and general Abercrombie, on the 22nd, took possession of a redoubt and grove between his camp and the fort, but with the loss of 104 men. During the night of the 22nd and 23rd new batteries were erected, and Purseram Bhow, with 20,000 horse, several thousand foot, and thirty cannon, was daily expected. In the mean time, Tippoo had been obliged to send off all his cavalry and camp followers to Mysore, and was in want of every thing, while the British army was well supplied. In this hopeless situation, he was compelled to accept of any terms proposed by lord Cornwallis. These, all things considered, were moderate. Preliminaries of peace were signed on the 23rd of February, on the following terms: 1. That Tippoo should cede one-half of his dominions to the allied powers; 2. That he should pay three crores, and thirty lacks of rupees; 3. That all prisoners should be restored; And, 4, That two of his eldest sons should become hostages for the performance of the treaty. On the 24th hostilities ceased, and on the 26th the two princes, Abdul Calick aged about ten, and Mooza Ud Deen about eight, mounted each on an elephant richly caparisoned, arrived in the British camp, and were received with kindness by lord Cornwallis. On the 19th of March the definitive treaty was finally adjusted and signed.

For seven years the affairs of India continued in a state of doubtful tranquillity. But from 1796, the sultan of Mysore is accused of having constantly excited the jealousy of the British government. This was in no small degree increased by a proclamation of the French governor of the Isle of France in 1798, which openly mentioned an alliance formed between Tippoo and the French republic, for the destruction of the British power in India. It was also alleged, that Tippoo had sent an embassy to Zemaun Shah, to encourage him in his threatened invasion of Hindostan. Mean time Tippoo professed the most friendly intentions of preserving concord and harmony. The British governor-general, however, giving little credit to these profes-

sions, began to strengthen his alliances with the nizam and the paishwa, and in September concluded a subsidiary treaty with the former. In consequence of this, the French army at Hyderabad was surrounded by the English and the nizam's troops, the sepoys were disarmed, and the French officers sent prisoners to Bengal. Matters were in this state, when the news arrived of the French invasion of Egypt, and of lord Nelson's victory. The governor-general, on this, wrote a letter to Tippoo, dated 3rd of November, acquainting him of his knowledge of his connexion with the French republic, and proposing to send major Doveton to adjust all differences. On the 10th of December he sent another letter to the same purpose; and on the 15th received a reply from the sultan, wherein he expressed the utmost surprise at the military preparations on foot, conscious as he was of having observed the treaty with the most inviolable fidelity. On the 25th he sent another letter to the governor, wherein he congratulates his lordship on the victory over the French; explains the nature of the pretended embassy to the Isle of France, which he says was a mere mercantile adventure, and supposes the French had taken the advantage of it, to spread reports to disturb the union between the two states. To this letter the governor-general returned an answer, again proposing a negociation, and urging the sultan not to delay his reply beyond one day. To this no answer was received till the 13th of February, when a letter without a date arrived, stating, that he was setting out on a hunting expedition, and begging his lordship to send major Doveton slightly attended. Meantime the governor-general, fearing the approach of the monsoon, had ordered lieutenant-general Harris to enter Mysore with his army, and, in his reply to Tippoo, informed him, that general Harris was now the only person authorised to receive his communications, with a view to the restoration of peace.

The reduction of the fort of Seringapatam was in fact the object of general Harris, whose first movement was on the 11th of February. The nizam's contingent, consisting of 12,000 foot, and 6000 cavalry, joined the British army on the 18th, and next day general Harris forwarded the governor's letter to the sultan, published his lordship's declaration in name of the allies, and began hostilities by sending a detachment against the hill forts of Neeldurgum and Auchitty, which surrendered without resistance. On the 7th of March Odeadurgum surrendered to colonel Oliver, and next day Fort Ruttingheri was taken after a slight resistance. The army under general Harris consisted of 31,000 men, besides the nizam's cavalry, all completely equipped. That under general Stuart, on the Malabar coast, was equally efficient. Between the 9th and the 14th of March the army under general Harris changed its positions from Kelamungalum, to Callacondapilly, Anicul, and Bangalore; near which last place about 4000 of Tippoo's horse appeared, but, after a few shots from the British field pieces, drew off. On the 16th the army took the rout of Cankanelli; and on the 20th and 21st encamped seven miles north of it. They now learned that Tippoo was within fifteen miles; and on the 23rd, as they approached Sultanpettah, a cloud of dust showed that he was in motion. He had in fact quitted his position on the bank of the Maddoor (where he might have disputed the passage) and encamped at Mallavelly. Instead of opposing the British in this quarter, he on the 6th of March passed his own frontier, and attacked a part of the Bombay army under general Stuart, not exceeding 6000 men; who, notwithstanding Tippoo's force consisted of 11,800 of his best troops, repulsed him with considerable loss.

Upon this he retreated to Seringapatam, and on the 14th advanced to meet general Harris. On the 25th the British army encamped five miles east of Mallavelly; and on the 27th came within sight of the sultan's. A general engagement took place, but was of short duration, the enemy retiring with their guns to the next height. Their loss was estimated at about 1000, while that of the British did not exceed seventy. On the 3rd of April the army came within sight of Seringapatam, and took its position on the 5th about 3500 yards from the west face. That night an attack was made on the outposts, and on the 6th the principal ones were in possession of the British. On the 9th general Harris received a letter from Tippoo, declaring, that he adhered firmly to the treaties, and demanding the reason of the advance of the English army, and of the recurrence of hostilities? The general replied by referring to the marquis of Wellesley's letters. Matters continued in a state of mutual preparation from this period to the 13th, when suddenly a heavy fire commenced from the fort and batteries. Next day generals Floyd and Stuart arrived, and took their ground in the rear.

On the 16th the Bombay army crossed the Cauvery, which was almost dry, and took a strong position which on the 22nd was attacked at all its posts by 6000 of the enemy's infantry, and Lally's corps of Frenchmen, who behaved with their usual bravery; but they were as bravely repulsed, and compelled to retire with the loss of about 700 men. On the 20th general Harris had received an overture of peace from Tippoo, and on the 22nd it was answered by a draft of preliminaries. The terms proposed were, To cede half his territories in perpetuity to the allies: to pay two crores of rupees; to renounce the alliance of the French for ever; to dismiss every native of France from his service; to receive ambassadors from each of the allies; and to give as hostages four of his sons and four of the principal officers. The enemy's guns on the west face were silenced on the 24th, as well as those of two round towers on the 26th. On the 28th Tippoo acknowledged the receipt of general Harris's proposals, and stated that the points in question were weighty and important, and without ambassadors could not be brought to a conclusion; that therefore he was about to send two gentlemen, who would explain themselves to him. The British general briefly replied, by referring to the terms in his last, as the only conditions of treating. On the 2nd of May, the works being completed, the British batteries began to open, and in the course of the day a breach was made in the fausse-braye wall; the

main rampart was shattered; and, to complete the misfortune of the besieged, a shot having struck their magazine, it blew up with a dreadful explosion. The breach being thought practicable, on the night of the 4th of May 4000 men were stationed in the trenches before daybreak. The assault was led on by general Baird, and began at one o'clock. In six minutes the forlorn hope had reached the summit of the breach, where the British colors were instantly erected. In a few minutes the breach, which was 100 feet wide, was crowded with men. After a short conflict the panic became general in the fort; thousands quitted it, and others laid down their arms. A flag of truce was soon after sent to the palace of the sultan, offering protection to him and his friends upon surrendering unconditionally. The young prince surrendered to general Baird, but Tippoo was not to be found. After much entreaty, enforced even by threats, the killedar affirmed, that the sultan was not in the palace, but had been wounded during the assault, and lay in the gateway on the north face of the fort. There, among heaps of slain, the body of the unfortunate monarch was found, still warm, and covered with wounds.

His dominions were now partitioned among his conquerors, and the Mahrattas were admitted to a share, from motives of policy, though they had taken no part in the war. To the East India Company were allotted the districts of Combatoor and Daraporum, the province of Canara, all the territory between the British possessions in the Carnatic and those of Malabar, with the forts and ports forming the heads of all the passes above the Ghauts on the Table Land, and the fort, city, and island of Seringapatam. To the nizam were assigned the districts of Gooty and Gurrumconda, together with a tract of country along the line of Chitteldroog, Sera, Nundidroog, and Colar. To the Mahrattas were given Harponelly, Chitteldroog, Soondo, Anagoondy, and a part of Biddenore, except the forts on the frontiers. A descendant of the ancient rajahs of Mysore, about five years old, was sought out and placed on the throne with great ceremony (under certain conditions): and the sons and relations of Tippoo were removed into the Carnatic. Thus terminated one of the most important of our Indian wars with equal glory to the British arms, and advantage to the British interests in India; by securing them, at least for some time, against the re-appearance of a formidable enemy.

9. *Of British India during the wars with the Mahrattas and to the peace of* 1805.—We have alluded to the rise and early form of the Mahratta power in India. In 1795 died the young peishwa Madhurow, and the government was for a length of time distracted by the internal dissensions which followed this event—Bajeerow and Chimnajee, the surviving sons of Ragobah, a fortunate usurper of the middle of the last century, being alternately raised to the throne. At this time the peishwa's authority extended no further than the Poonah Sait branch of the Mahratta state, comprising most of the original country of that tribe, but none of their conquests. Yet this branch was recognised as the head of the other Mahratta states. After many vicissitudes the eldest brother, Bajeerow, was at last fixed on the throne by the assistance of Dowlet Row Scindia, who only, however, permitted him to enjoy a nominal sovereignty.

With the peishwa all the British treaties had been concluded without reference to any of the subordinate Mahratta chiefs. Neither Scindia, therefore, who held previously to this time the whole of Candeish, nor Bhoorsle, the rajah of Berar, were consulted with regard to them, and the former soon manifested a sense of his new importance; in fact, while we were enriching their nominal chief with the spoils of our hard-earned conquest of Tippoo, several Mahratta chiefs were afterwards found to have corresponded with and assisted him to the last.

Under these circumstances the marquis Wellesley, in 1802, endeavoured by negociation to effect an improved system of alliance with the court of Poonah. It was at this time engaged in a war with Jeswunt Row Holkar, who possessed the fertile province of Malwa; and on the 25th of October, 1802, the army of Dowlet Row Scindia, combined with that of the peishwa, was totally defeated by Holkar near Poonah; on the same day he fled towards Severndroog, in the Concan, where he embarked for Bassein, which he reached on the 1st of December; and on the 31st of that month a treaty of perpetual friendship and alliance was concluded between the peishwa and the British government; by the conditions of which the friends and enemies of the one were to be considered in the same relation to the other.

The peishwa now agreed to receive into his dominions a subsidiary force of 6000 infantry, with their usual proportion of field pieces and European artillerymen attached; for the payment of which he assigned districts in the southern quarter of his country. Such was the treaty of Bassein, executed on the 31st of December, 1802, and formally ratified in the ensuing spring.

In the interim Holkar had occupied the capital of the peishwa, Poonah, and major-general Sir Arthur Wellesley, brother of the governor general, was directed in virtue of the late treaty to move on that capital. When he had advanced within sixty miles of Poonah, he heard of the enemy's intention to plunder the city on his approach; he therefore astonished all India by performing this journey at the head of his cavalry and over an almost impassable road in thirty-two hours, and was welcomed by the city as a deliverer.

But Scindia proved a treacherous ally, and to general Wellesley was confided in the course of the summer full power to treat with or declare war against him and the rajah of Berar, as he should find them disposed. In the army of the former was a French officer of great experience, M. Perron, who had procured an important assignment of territory from Scindia, on the right bank of the Jumna; which he had in fact formed into a small French state. This was the period of the peace of Amiens, in virtue of which also Pondicherry became restored to France; but lord Wellesley under the existing circumstances determined not to deliver it up,

and, before any enquiry could be instituted into his reasons, intelligence arrived of the renewal of the war between England and France.

It was now evident that three at least of the Mahratta chieftains were hostilely disposed to the British, and an extensive plan of warlike operations was combined, while negociations were for four months very steadily and earnestly entered upon with each of them. In the course of August the governor general put in motion in various parts of the British frontier 54,918 men. Sir Arthur Wellesley, finding no other alternative, took the field on the 8th of that month, and invested and carried in succession Ahmednughur and Aurungabad. He came up with the allied forces of Scindia and Bhoonsla on the 23rd of September, and, though not at this time at the head of more than 4500 men, he did not hesitate to attack the enemy, who mustered between 30,000 and 40,000, one-third of whom were commanded by European officers, and gained a most complete victory.

General Lake, the commander-in-chief, attacked, near Coel, in the Douab, that part of Scindia's army which was under the command of M. Perron, who rapidly retreated before him, leaving Coel in our possession. The British also stormed and took the important fort of Ally Ghen on the 4th of September, in which were M. Perron and his grand depôt of stores; and immediately pushed forward to Secundra and Jehna Nullah, within six miles of Delhi. Here was fought the celebrated battle of Delhi, in which General Lake exhibited that union of talent, courage, and coolness, for which he was distinguished, and the immediate consequences of which were the possession of that ancient capital, and of the person of the unfortunate Shah Alum, the descendant and representative of the Moguls.

We cannot detail the less important operations. In Bundlecund the forces of Shumshere Bahadur, a chief nearly independent but nominally acknowledging the peishwa, were defeated by colonel Powell, and the whole province submitted to our arms. Agra was ultimately taken by general Lake, and Sir Arthur Wellesley followed up his recent victory, by chasing before him Bhoonsla; while colonel Stephenson took the important fortresses of Boorhampoor and Asseer Gheer. The battle of Laswaree followed on the part of general Lake, in which he engaged and defeated 9000 infantry and 5000 horse, and terminated the campaign. In December both Scindia and Boohnsla were anxious to make peace; the former ceding the whole of the Douab, all his territories north of Jeypoor and Judpoer, Baroach in the Guzerat, and Ahmednughur in the Deccan: and the latter the province of Cuttack, including the fort and district of Balasore, to the British; who thus, in a brilliant campaign of five months, dissolved a formidable confederacy of the native powers, and obtained every object of the war.

But military operations were continued against Holkar, who, in fact, was the soul and strength of the late confederacy. He was, on the peace above mentioned, offered the liberty of retiring unmolested to his own states; but he immediately began to plunder the Jeynaghur territory. It was not until late in 1804, however, that active operations were commenced against him. On the 13th of November in that year general Fraser attacked and defeated a force of this chief's amounting to twenty-four battalions of infantry, a body of irregular horse, and 160 pieces of ordnance, but at the expense of the valuable life of the British general; and lord Lake advanced upon the great body of Holkar's cavalry, which was posted at Furruckabad, and totally defeated it; Holkar himself escaping with difficulty. At this period, however, a new treachery on the part of the British allies, that of the rajah of Bhurtpore, unexpectedly prolonged the war. This chief suddenly received and supplied Holkar with whatever of military power he possessed for further depredations, until in April, 1805, a separate peace was made with him, and Holkar fled.

Such was the situation of British India, at the period of the marquis Wellesley's return to Europe; he had conducted our affairs in this quarter of the globe with an oriental magnificence of design, and perhaps of expenditure; but he seems fairly to claim the merit of having crushed in a most masterly manner the alarming combinations of Mahratta and French enmity, and entirely to have laid the basis of the measures which lord Cornwallis only arrived in India to complete.

This was in July, 1805. Holkar was without ally or territory, but still in arms; and Scindia, dissatisfied with the late peace, had imprisoned our resident, and was apparently only waiting an opportunity to break out into hostilities. The finances of the Indian government were also in great disorder.

Lord Cornwallis scarcely lived to act in his new and arduous office of fully restoring tranquillity and confidence. He had indeed taken a masterly view of the general state of affairs, suggested various retrenchments, and provided for the existing wants of the troops; but on travelling towards the army he only reached Gazypoor, in Benares, where he died October the 5th. Sir George Barlow, the second in command, who had accompanied him, happily pursued his suggestions, and 22nd of November a satisfactory arrangement was made with Scindia, and on the 24th of the following month with Holkar.

10. *British India from* 1805 *to the end of the Burmese war in* 1826.—The peace, concluded under the directions of lord Cornwallis, lasted without any open rupture until the end of the year 1814.

The following year was occupied with the Nepaulese war, and several reverses at first attended the British operations in the hill country. But the perseverance of general Sir David Ochterlony soon brought this dispute to a close; and obtained as the result the cession of the whole country from Kemaoon to the Sutlege.

This year, at the opposite extremity of the peninsula, the king of Kandy was likewise made to submit to British prowess, and the whole of Ceylon became annexed to our Indian empire. See the article CEYLON.

In October 1815, and March 1816, two expeditions of the Pindarees, a predatory band of native robbers, disturbed the peace of the Madras presidency. They were a species of Cossack, or light cavalry, formerly attached to the native armies, and having their horses well trained to long marches and hard fare. Armed with a bamboo spear, from twelve to eighteen feet long, every fifteenth man carried a matchlock; about 400 out of every 1000 were well mounted; of the remaining 600, 400 were indifferently mounted, and the rest were slaves and camp-followers, keeping up with the corps as they best could. About the year 1814 these bands comprised about 40,000 horse, who subsisted wholly on plunder.

On the first of their present expeditions they crossed the Nerbuddah in a north-west direction, and, dividing into parties, penetrated to the Kishna. They were only deterred at this time from crossing into the presidency by the swollen state of the river; but, in their return along the line of the Godavery and the Wurda, they passed the British positions, making good their retreat with an immense booty.

The second expedition crossed the Nerbuddah, on the western frontier of the district of Masulipatam, under the Madras presidency, on the 10th of March. Next day they marched thirty-eight miles southward, plundering ninety-two villages, with almost unheard of cruelty, and, on the 12th, they marched thirty-eight miles, plundering fifty-four villages. By the middle of May they had all recrossed the Nerbuddah, loaded with spoil, and with very little loss. During twelve days, which they had remained within the British territories, it was found that 182 persons had been put to a cruel death, 505 were severely wounded, and 3603 had been put to various descriptions of torture. A defensive line of posts was now therefore extended along the Nerbuddah, and across the country for about 150 miles, and, when this was penetrated by new expeditions, a very different account was soon sent homeward. By the activity of the British corps employed, almost all of these expeditions were intercepted, and very few of the plunderers made good their retreat.

It was resolved however, in the year 1817, to commence offensive operations—to hunt the enemy into their native holds, and either to exterminate them, or to drive them from the position which they occupied, in the very centre of India. By the end of the rainy season of that year a numerous army took the field for this purpose. The plan was, that the armies of the different presidencies should advance southward, and, gradually converging to a common centre, hem in, on every side, the territory of the robbers.

While the Indian government was occupied with this plan, their old enemies were not idle. Bajee Rao, the existing peishwa of Poonah, made a fresh attempt on our forbearance. When all the British troops had moved southward, with the exception of a brigade, he first declared himself by attacking this small body. He was however repulsed at all points. This was on the 5th of November. On the 13th the brigade was joined by general Smith's division, which had advanced on the Godavery. The enemy's camp was attacked next day, but it was found deserted, and that general had to undertake a sort of personal pursuit of the peishwa, who was hunted from place to place, until he at length surrendered —was deposed—and resigned the whole practical government of his dominions to the British.

Appa Saheb, the rajah of Nagpoor, and Holkar, pursued similar plans, and the result was the same. In November and December both were overcome; and placed their territories under British protection: nor was the main object of the British plans materially delayed by these occurrences; the Pindarees were driven first out of the province of Malwa, and, retiring as the British advanced, were at length hemmed in, and the greater part of them destroyed. The rest were humbled to complete submission, and their three most influential chiefs surrendered, on condition of being spared a military execution.

We have noticed under the article BURMHAN EMPIRE our first dispute with that important native power. The late rupture was of a far more serious character. It arose in an unfounded claim of the court of Ava to the island of Shapuree; in pursuit of which the Burmese chiefs in Arracan attacked and drove off the island a small party of British troops, stationed there for police purposes. An explanation being demanded and refused, and further agressions being made on the states of Cachar and Jynteea, then under British protection, the governor-general declared hostilities to have commenced in the spring of 1824. Rangoon soon submitted to a British expedition; then the islands of Cheduba and Negreis; and before the close of the campaign we were masters of Tavoy and Mergui, the most valuable possessions of the Burmese on the Tenasserim coast. A slight check was experienced by our army, however, at Rameo, on the Chittagong frontier; and a mutiny took place among the native troops at Barrackpore, which at first excited considerable alarm. But the prompt and able measures of general Dalzel and his officers soon terminated this last interruption; twelve ringleaders of the mutiny were executed, and the regiment in which it occurred broke up. The general results of the war in 1824 were decidedly in our favor.

Throughout the year 1825 hostilities were continued against the Burmese, and with considerable, but not decisive success. The fort and pagoda of Syriam fell early in the year; then the defences of the enemy on the Lyng, Donabew, Prome, and the whole of Arracan. In September an armistice was concluded, and negociations for peace were opened, in the course of which the prisoners on each side were exchanged, and the armistice continued until the 2d of November. The Burmese had at this time an army of 60,000 men in the field; and their system of laying waste the country subjected our troops to considerable difficulty in obtaining provisions.

In the terms of peace proposed, the ministers of the king of Ava principally objected to the cession of territory, and the indemnification in

money demanded by the British commanders. when his majesty of the Golden Foot, as the head of the Burmhan empire is styled, heard of these proposals, he is said to have broke out into the most furious burst of passion, and gave orders for the immediate renewal of hostilities. The whole Burmese army now advanced along the Irawaddy against Prome, which it gradually surrounded, and repulsed an advance of two brigades of native infantry, under colonel M' Dowgal. On the 1st of December, however, Sir Archibald Campbell was prepared to commence operations on the immense but unorganised masses of the enemy; and drove the whole of them before him to Melloone, on the right bank of the Irrawaddy. Here they concentrated, and again entered into negociations with the British, the result of which was the signature of a treaty ceding Arracan and the provinces of Mergui, Tavoy, and Zea, to the company, and agreeing that Assem, Cachar, Zeating, and Munnipoor, should be placed under princes to be nominated by the British. The court of Ava was further to pay to the company a crore of rupees by instalments, as an indemnification for the expenses of the war. This treaty was signed on the 3d of January 1826, and fifteen days were allowed for its ratification by the court; but it afterwards appeared that it never was sent thither, and the British army continued to advance on the capital. When it was within four days' march of that place the Burmese government appeared to think seriously that it must make these important concessions for a peace; and Dr. Price, an American missionary, was the bearer of the first instalment of the money stipulated, and brought with him all the prisoners that had been detained at Ava. He also, after some further delay, produced the ratified treaty. On the 5th of March the troops who had so nobly maintained this unequal warfare, and marched from victory to victory into the very heart of an immense hostile empire, began their retreat to Rangoon.

We believe the Burmese have since continued to pay, though with no small tokens of reluctance, the instalments specified.

This year was also signalised by the taking of the town and fortress of Bhurtpore (see that article)and the suppression of a revolt against the rajah, who had placed himself under our protection.

India Company, East. It was not until the close of the sixteenth century, and after the Portuguese had been established for nearly 100 years in the east, that Great Britain appeared as her competitor in this part of the world. But in 1577 Sir Francis Drake sailed to India by Cape Horn, and returned by the Cape of Good Hope: he was succeeded by less celebrated adventurers, who all agreeing with him in the favorable accounts they brought home of the commerce and inhabitants, in 1599 the first regular company for trading hither was formed. In 1583 queen Elizabeth had given introductory letters to the princes of India to two adventurers, Newberry and Filch, and others in 1596 to Allot and Bromfield, all of whom proceeded to the court of the great Mogul by land, and were well received there.

The company we have mentioned subscribed a capital of £30,000 in 101 shares, varying in amount from £100 to £3000; and on the 30th of December the queen granted them letters patent as a Society of Merchants of London trading to the East Indies. They equipped a squadron, which arrived at Achen in 1602, and met with a favorable reception from the king: hence it proceeded to Java; established a factory at Bantam; and, loading the ships with pepper, returned to England. Eight other successful voyages were performed between this period and 1613, yielding a profit of from 100 to 200 per cent.

The first English expeditions were entirely of a commercial nature, and the establishments they formed were with the consent of the native princes: such were Masulapatam and Calicut, where they had factories a few years after their first appearance in India. It was, however, soon found that this pacific conduct would not permit them to compete with the Portuguese and Dutch, who possessed fortified places and secure ports, while we were dependent for the bare permission to trade on the caprice of the natives.

When our merchants endeavoured to obtain admission to Surat, in 1611, the Portuguese threatened to burn all the towns of that coast if they were received. The squadrons of the two nations met off Surat, and the English, under Middleton, were obliged to retire. The following year captain Brest, arriving off the same port with a stronger force, twice defeated the Portuguese fleet, though much superior; and in 1613 concluded a treaty of commerce with the Mogul, by which a free trade to all parts of his dominions was granted to the English. In the same year James I. sent an ambassador to Achen, who procured permission to establish a factory in that city, with considerable commercial privileges; and between 1613 and 1629 the English had also formed settlements at Priaman and Ticoo, on the west coast of Sumatra; while the Dutch had established factories at Padang, &c. But both nations were shortly after driven entirely from the island by the king of Achen, now grown jealous of the encroachments of those new visitors.

Though, during the reign of James I., the English Company received little support from the government, by activity, perseverance, and the prudent choice of its servants, it had gradually acquired strength and solidity in India; when the Dutch, feeling that their own success depended on the ruin of their rivals, attacked them in every part of India; and, as they now possessed the same advantages over the English that the Portuguese did over them on their first arrival, it is not to be wondered at if they were every where successful.

After the Indian seas had been dyed with the blood of both nations, the Dutch remained victorious; and would probably have entirely driven the English from these seas had not the companies at home interposed. One of the chief objects of contention between the two nations was the commerce of the Spice Islands, of which the English claimed a share. The companies, in order to accommodate this difference, concluded a treaty in 1619, by which the produce of these

islands was to be divided between them in the proportion of two-thirds to the Dutch and one-third to the English, each contributing a like proportion towards the expenses of the establishments. This treaty, however, did not satisfy the Dutch in India, and, on pretence that the English had formed a conspiracy against them, they seized all the persons of the English factory at Amboyna in 1622, and, after inflicting unparalleled tortures on them, put them publicly to death. It is impossible to see in this atrocious massacre any thing but the effect of avidity without bounds; for it would be absurd to suppose that ten factors and eleven soldiers, the number of persons composing the English factory, should form a design to get possession of a fort garrisoned by 200 Dutch. The English king was, however, too deeply immersed in theological controversy to pay much attention to the rights of his subjects, and no vengeance was taken for the massacre of Amboyna, but the Dutch were permitted quietly to enjoy the fruits of their iniquity; and, in order to secure them more efficiently, they prevailed on the kings of Ternate and Tidor, the two most powerful princes of the Moluccas, in consideration of the payment of £3000 a year, to cause all the clove and nutmeg trees in their respective islands to be destroyed annually. By this means the culture of the clove was confined to Amboyna, and that of the nutmeg to the Banda Islands, of which the Dutch had the entire and undisputed possession.

The affairs of the English still continued to decline in India, and the civil wars which deluged the mother country with blood, during the latter part of the life of Charles I., accelerated their down-hill career, so that, at the death of that ill-fated monarch, the East India Company was an empty shadow, and its trade reduced to insignificance.

Cromwell, irritated against the Dutch for assisting the unfortunate Stuarts, and affording an asylum to their proscribed adherents, commenced a maritime war against Holland, which was successful in every part of the world, and the republic was at length obliged to sue for peace. Though Cromwell might have dictated his own terms with respect to India, he contented himself with securing a free trade to the English, obliging the Dutch government to disavow the massacre of Amboyna, and to make some compensation to the descendants of the victims. The Island of Ron was also to be restored to the English; but from this island, which is little better than a rock, and without any harbour, the Dutch had previously extirpated all the nutmeg trees; nevertheless the English returned to it, but were again driven from it by their rivals in 1666.

The security of its trade, however, restored the affairs of the English Company, which went on successfully for some years, until it received a check from a rivalry to which that success had given rise. Charles II., whose sole object throughout his reign was to raise money for his dissolute pleasures, sold permission to private merchants to trade to India, in direct violation of the company's charter, while he at the same time made the company pay for permission to prosecute the interlopers; the natural consequence was a kind of civil war for some years between the two parties in the Indian seas. The Dutch also still harassed the English whenever an opportunity presented itself; and in 1682, by their intrigues, they procured the monopoly of the pepper of Bantam, and obliged the English to withdraw their factory thence.

The English Company determined to revenge this aggression, and for that purpose fitted out a fleet of twenty-three vessels, on board which were embarked 8000 troops; but, at the moment this formidable armament was on the point of sailing, the king directed its departure to be postponed. Charles doubtless expected to receive a large sum from the company to revoke his order; but, being disappointed, he did not hesitate to sell the honor of the nation and the interests of his subjects to their enemies, and for the sum of £1,000,000 sterling, paid him by the Dutch, the expedition was ordered to be entirely laid aside.

The English, driven from Java, once more turned their views towards Sumatra, and in 1684 an envoy was sent from Madras to Achen, to demand permission to erect a fort there. This was, however, refused; but a free trade was granted them, and liberty to erect a wooden factory, which was immediately constructed.

While the English envoys were at Achen the rajahs of Priaman and other places on the west coast of Sumatra were there also, soliciting assistance of the Achenese against the Dutch, who had usurped their territories and otherwise injured them.

These chiefs, seizing the idea of opposing the two European nations to each other, offered the English envoys the monopoly of their pepper, and the liberty to build forts, provided they would rid them of the Dutch. On this condition a treaty was concluded between the Madras government and the Sumatra chiefs in 1685, and vessels were immediately despatched to Sumatra, where the establishment of Bencoolen was formed. In spite of the intrigues of the Dutch, the English obtained a firm footing in the island while the influence of their rivals declined, and at the close of the seventeenth century was almost entirely destroyed.

But, while the English were thus extending their establishments on the east, they had nearly lost one of their chief settlements on the west. The expenses of the fleet which the company had equipped to chastise the Dutch had so greatly exhausted its resources, that it was obliged to send its ships to India without funds, to procure cargoes on credit if possible, and, from the good faith which had hitherto marked its dealings, merchandise to the value of £280,000 was thus procured. The means resorted to, to acquit this debt, were disgraceful to the English name, and were nearly productive of the total destruction of the English commerce in Western India. It appears that Sir Josiah Child, the chairman of the court of directors, unknown to his colleagues, sent instructions to his brother, the governor of Bombay (which had been given to Charles II. as the marriage portion of his queen Catherine) to

make such demands of the Mogul government of Surat as he knew must be refused. These demands were accordingly made, and, as foreseen, were rejected with contempt, when Child, on pretence that this rejection was tantamount to a declaration of war, seized all the vessels belonging to the subjects of the Mogul, to an immense value. Aurungzebe, who then swayed the sceptre of Hindostan, lost no time in preparing to punish the authors of this unprovoked robbery. In 1689 his generals landed 20,000 men on the island of Bombay, defeated the English who opposed them, and obliged them to shut themselves up in the citadel, where they were closely besieged. Child, now as cowardly as he had before been treacherous, despatched a deputation to the Mogul emperor, to demand grace, and the English envoys were led into his presence with their hands tied behind them. The monarch, however, feeling the advantages that his subjects derived from their commerce with the English, was not inflexible, but after insisting on the dismission of Child, and on a compensation to his subjects who had been robbed, he restored to the English the privilege of a free trade throughout his dominions.

The loss sustained by the company, through this iniquity of its servants, was irretrievable, and the revolution and war that succeeded it accelerated the ruin of its affairs. A general outcry was at this time also raised against the injustice of monopolies, and against that of the East India Company in particular. The business was at last brought before parliament, in which it was determined that a new company should be established under its sanction, on advancing £2,000,000 to government at eight per cent. interest, and that the old company, which derived its privileges from the crown alone, should be permitted to continue its trade till the expiration of its charter, which was not far distant.

After the old and new companies had endeavoured to ruin each other for some time, they wisely put an end to hostilities by a union in 1702. In 1708 the company lent a farther sum of £1,200,000 to government without interest, which reduced the interest of the whole debt due to it to five per cent., and for this advance the charter was extended, and it received the title of the United Company of Merchants trading to the East Indies.

The English first sent ships to China in 1634, and in 1677 were permitted to establish a factory at Amoy, and to trade to Canton.

The company's charter, granted in 1708, was prolonged from time to time, and in 1730 it was renewed for thirty-three years, on consideration of the reduction of the interest of the debt due to it by government, from five to three per cent., by the means of another loan without interest. In 1744 the war between England and France reduced the commerce of the latter in India for a time, but peace again restored the French affairs, which became more flourishing than ever.

At this period we may date the first commencement of the British dominion in India, which now, like a mighty Colossus, rests either foot on the utmost limits of the East. As early as the year 1640 the English received permission to build a factory at Hoogly, but they were prohibited from fortifying it in any manner, and an ensign and thirty soldiers, as an honorary guard to the factors, was the only military force allowed them. Their defenceless situation exposing them to the exactions of the natives, in 1686 they attempted to establish a defensive post by force of arms, which entirely failed; but in 1689 they received permission to establish a factory at Sootenutty, ten miles below Hoogly, and about the same time they were allowed a free trade, on payment of an annual sum in lieu of customs. In 1696 the petty princes on the west side of the Hoogly took up arms against the nabob of Bengal, and made a rapid progress, taking Hoogly, and other towns of consequence. On this occasion all the European factors in Bengal declared for the nabob, and, demanded permission to put their factories in a state of defence against the common enemy, and the nabob in general terms desiring them to provide for their own safety, they immediately fortified their own factories; the Dutch at Chinsurah, the French at Chandernagore, and the English built Fort William, close to their factory at Sootenutty, to which they have given the name of Calcutta, and which, together with a small territory round it, they were permitted to purchase from the zemindar or Indian proprietor. Such was the slender foundation of the immense fabric of British dominion in India.

From the invasion of Nadir Shah in 1738, the Mogul empire was torn in pieces, as we have intimated, by different factions and pretenders to the crown, until it was at length reduced to a state of total debility in 1753. During these troubles we have also seen that both the French and English had gradually extended their influence on the continent, and in 1747 the latter had obtained the revenues of Bengal, Bahar, and Orissa. It was not to be expected that the rival European nations would long remain tranquil under the observation of each other's increasing power. In the war of 1756 Chandernagore and all its dependencies were taken from the French, the loss of Masulapatam, Mahé, and Carrical followed, while the French captured the English settlements on Sumatra. The adverse squadrons had also frequent but indecisive engagements, but the French were at last obliged to quit the Coromandel coast, and leave the English masters of the navigation of the Bay of Bengal. Pondicherry was taken in 1761, and at the same time all the natives of France found in the Carnatic were sent to Europe.

By the peace of 1763 all the French possessions in India were restored, on condition of constructing no fortification in Bengal; but their power in India had received too severe a shock to be ever able to recover itself.

From the commencement of the eighteenth century, Holland being at peace, except during the latter part of the American war, the Dutch retained their possessions, and carried on their commerce in the Indian seas undisturbed, until the French revolution drew them into its vortex. The Cape of Good Hope, Ceylon, Malacca, and the Spice Islands, were captured by the English

in 1795, at the same time that they lost all the settlements on the continent of India. By the peace of Amiens their establishments were restored, except Ceylon, which was confirmed to the English. In the late war the Dutch again lost all their settlements in India, but recovered them, with the exception of the Cape of Good Hope, by the peace of Paris.

It is sufficient to observe further that, with the exception of the capture of Calcutta by the nabob Surajah Dowla, in 1756, but which was recovered the following year, the progress of our territorial power in India has been uninterrupted; and that in 1765 we were quietly in possession of Bengal, Bahar, and Orissa, nominally indeed as tributaries to the Mogul, but who was a mere puppet in the hands of the British; and that since that period the company has been engaged in almost continual wars with the native princes, from whom it has acquired the absolute dominion of above one-half of the peninsula. See HINDOSTAN.

IN'DIAN ARROW-ROOT, *n. s.* Latin *maranta.* A root. A sovereign remedy for the bite of wasps, and the poison of the manchineel tree. This root the Indians apply to extract the venom of their arrows.—*Miller.*

IN'DIAN CRESS, *n. s.* Lat. *acriviola.* A plant.

IN'DIAN FIG, *n. s.* Lat. *opuntia.* A plant.

IN'DIAN RED, *n. s.* Is a species of ochre; a very fine purple earth, and of a firm compact texture, and great weight.

INDIANA, one of the United States of North America, formed in 1816. It is bounded north by the north-west territory, Michigan Lake and territory; east by the state of Ohio; south by Ohio River, which separates it from Kentucky; and west by the state of Illinois. Long. 84° 42′ to 87°49′ W., lat. 37° 45′ to 41° 52′ N. It is 284 miles long from north to south, and 155 from east to west; containing about 37,000 square miles. There are no slaves in this State. In 1810 it contained four counties and twenty-seven townships. The number of militia, in 1815, amounted to 15,171.

The counties, chief towns, and population, in 1815, are thus exhibited:—

Counties.	Pop.	Chief Towns.
Clark	7000	Charlestown.
*Crawford		
Dearborn	4426	Lawrenceburg.
*Davis		
*Dubois		
Franklin	7970	Brookville.
Gibson	5330	Princeton.
Harrison	6769	Corydon.
*Jackson		Brownstown
Jefferson	4093	Madison.
*Jennings		Vernon.
Knox	6800	Vincennes.
*Lawrence		
*Monroe		
*Orange		Paoli.
Perry	3000	Troy.
Posey	3000	Harmony.
*Sullivan		Fort Harrison.
Switzerland	3500	Vevay.
Warwick	6606	Darlington
Washington	3000	Salem.
Wayne	6290	Salisbury.
Total	67784	

* Formed since the census of 1815.

Corydon, is the seat of government, and Vincennes the largest town. The other most considerable towns are Vevay, Brookville, Jeffersonville, and Madison. All these, with the exception of Vincennes are new, and have risen suddenly into notice. There are many others recently established, some of which are very flourishing.

The legislature is composed of a senate and house of representatives. The representatives are elected annually, and the members of the senate once in three years. The governor and lieutenant-governor are elected for three years, and may be re-elected once, The legislature meets on the first Monday in September.

The principal rivers are the Ohio, Wabash, White River, Whitewater, Tippecanoe, Illinois, Plein, Theakiki, St. Joseph's, and St. Mary's

There are no mountains in Indiana; the country, however, is more hilly than the territory of Illinois, particularly towards Ohio River. A range of hills, called the Knobs, extends from the falls of the Ohio to the Wabash, in a south-west direction, which in many places produces a broken and uneven surface. North of these hills lie the flat woods, seventy miles wide. Bordering on all the principal streams, except the Ohio, there are strips of bottom and prairie land; both together from three to six miles in width. Between the Wabash and lake Michigan the country is mostly champaign, abounding alternately with woodlands, prairies, lakes, and swamps.

A range of hills runs parallel with the Ohio, from the mouth of the Great Miami to Blue River, alternately approaching to within a few rods, and receding to the distance of two miles. Immediately below Blue River the hills disappear, and there is presented to view an immense tract of level land, covered with a heavy growth of timber. North of the Wabash, between Tippecanoe and Ouitanan, the banks of the streams are high, abrupt, and broken, and the land, except the prairies, is well timbered. Between the Plein and Theakiki the country is flat, wet, and swampy, interspersed with prairies of an inferior soil. The sources of rivers are generally in swamps or lakes, and the country around them is low, and too wet for cultivation.

There are two kinds of prairies, the river and the upland prairies: the former are bottoms destitute of timber, and are said to exhibit vestiges of former cultivation; the latter are from thirty to 100 feet more elevated, and are far more numerous and extensive. Some of them are not larger than a common field, while others extend farther than the eye can reach. They are usually bounded by heavy timbered forests, and not unfrequently

adorned with copses of small trees. In spring and summer they are covered with a luxuriant growth of grass and fragrant flowers, from six to eight feet high. The soil of these plains is often as deep and fertile as the best bottoms. The prairies bordering on the Wabash are particularly rich. Wells have been dug in them, where the vegetable soil was twenty-two feet deep, under which was a stratum of fine white sand. The ordinary depth is from two to five feet. The principal productions are wheat, Indian corn, rye, oats, barley, buck-wheat, potatoes, pulse, beef, pork, butter, whiskey, and peach-brandy.

The climate is generally healthy and pleasant. The Wabash is frozen over in the winter, so that it may be safely crossed on the ice. More than one-half of the land in this state yet remains in the possession of the Indians.

Not far from Big Blue River there is a large cave, the entrance of which is on the side of a hill, that is about 400 feet high. Here are found great quantities of sulphate of magnesia, or Epsom salt, and of nitre, &c.

IN'DICANT, *adj.* IN'DICATE, *v. a.* INDICA'TION, *n. s.* INDIC'ATIVE, *adj.* INDIC'ATIVELY, *adv.* INDIC'TION, *n. s.* INDICT', *v. a.* } Fr. *indication*; Lat. *indico*. That which points out: indicate, to direct a point to: indication, mark; token; sign; symptom; discovery; or explanation: indicative, showing; informing: a certain modification of a verb, expressing affirmation or indication: indiction, declaration or proclamation. Indict. See INDITE.

These be the things that govern nature principally, and without which you cannot make any true analysis, and *indication* of the proceedings of nature.
Bacon's Natural History.

After a legation ad res repetendas, and a refusal, and a denunciation and *indiction* of a war, the war is left at large. *Bacon.*

These images, formed in the brain, are *indicatively* of the same species with those of sense. *Grew.*

The frequent stops they make in the most convenient places, are a plain *indication* of their weariness.
Addison.

The verb is formed in a certain manner to affirm, deny, or interrogate; which formation, from the principal use of it, is called the *indicative* mood.
Clarke's Latin Grammar.

We think that our successes are a plain *indication* of the divine favour towards us. *Atterbury.*

The depravation of the instruments of mastication is a natural *indication* of a liquid diet. *Arbuthnot.*

If a person that had a fair estate in reversion should be assured by some skilful physician, that he would inevitably fall into a disease that would totally deprive him of his understanding and memory; if, I say, upon a certain belief of this *indication*, the man should appear overjoyed at the news, would not all that saw him conclude that the distemper had seized him? *Bentley.*

Through the waved branches, o'er the greensward glancing,
'Midst other *indications* of festivity,
Seeing a troop of his domestics dancing
Like dervises who turn as on a pivot.
Byron. Don Juan.

As an accomplishment, therefore, and as an agreeable *indication* of youthful gaiety, it must no doubt be considered. *Canning's Microcosm.*

INDICATION, in medicine (indicatio; from indico, to show). An indication is that which demonstrates in a disease what ought to be done. It is three-fold; preservative, which preserves health; curative, which expels a present disease; and vital, which respects the powers and reasons of diet. The scope from which indications are taken, or determined, is comprehended in this distich:

—— Ars, ætas, regio, complexio, virtus,
Mos et symptoma, repletio, tempus, et usus.

The INDICTION, in chronology, instituted by Constantine the Great, is properly a cycle of tributes, orderly disposed, for fifteen years, and by it accounts of that kind were kept. Afterwards, in memory of the great victory obtained by Constantine over Mezentius, 8 Cal. October 312, by which an entire freedom was given to Christianity, the Council of Nice, for the honor of Constantine, ordained that the accounts of years should be no longer kept by the Olympiads, which till that time had been done; but that, instead thereof, the indiction should be made use of, by which to reckon and date their years, which hath its epocha A. D. 313, January 1.

INDICTMENT, in English law, is a written accusation of one or more persons of a crime or misdemeanor, preferred to, and presented upon oath by, a grand jury. 'To this end,' says Blackstone, 'The sheriff of every county is bound to return to every session of the peace, and every commission of oyer and terminer, and of general gaol delivery, twenty-four good and lawful men of the county, some out of every hundred, to enquire, present, do, and execute all those things, which on the part of our lord the king shall then and there be commanded them. They ought to be freeholders; but to what amount is uncertain. As many as appear upon this pannel are sworn upon the grand jury, to the amount of twelve at the least, and not more than twenty-three; that twelve may be a majority. Which number, as well as the constitution itself, we find exactly described so early as the laws of king Ethelred: Exeant seniores duodecim Thani, et præfectus cum eis, ut jurent super sanctuarium quod eis in manus datur, quod nolint ullum innocentem accusare, nec aliquem noxium celare. In the time of king Richard I. (according to Hoveden) the process of electing the grand jury, ordained by that prince, was as follows:—Four knights were to be taken from the county at large, who chose two more out of every hundred; which two associated to themselves ten other principal freemen, and those twelve were to answer concerning all particulars relative to their own district. This number was probably found too large and inconvenient; but the traces of this institution still remain, in that some of the jury must be summoned out of every hundred. The grand jury are previously instructed in the articles of their enquiry by a charge from the judge who presides upon the bench. They then withdraw to sit and receive indictments, which are preferred to them in the name of the king, but at the suit of any private prosecutor; and they are only to hear evidence on behalf of the pro-

secution: for the finding of an indictment is only in the nature of an enquiry or accusation, which is afterwards to be tried and determined; and the grand jury are only to enquire upon their oaths, whether there be sufficient cause to call upon the party to answer it. A grand jury, however, ought to be thoroughly persuaded of the truth of an indictment, so far as their evidence goes; and not to rest satisfied merely with remote probabilities: a doctrine that might be applied to very oppressive purposes. The grand jury are sworn to enquire only for the body of the county, pro corpore comitatus; and therefore they cannot regularly enquire of a fact done out of that county for which they are sworn, unless particularly enabled by act of parliament; and to such a point was this anciently carried, that, where a man was wounded in one county and died in another, the offender was at common law indictable in neither, because no complete act of felony was done in any one of them: but by stat. 2 and 3 Edw. VI. he is now indictable in the county where the party died. And, by stat. 2 Geo. II., if the stroke or poisoning be in England, and the death upon the sea or out of England, or vice versâ, the offenders and their accessories, may be indicted in the county where either the death, poisoning, or stroke, shall happen. And so in some other cases; as particularly where treason is committed out of the realm, it may be enquired of in any county within the realm, as the king shall direct, in pursuance of statutes 26 Hen. VIII. and Edw. VI. And counterfeiters, washers, or minishers of the current coin, together with all manner of felons and their accessories, may, by stat. 26 Hen. VIII. (confirmed and explained by 34 and 35 Hen. VIII.), be indicted and tried for those offences, if committed in any part of Wales, before the justices of gaol delivery and of the peace, in the next adjoining county of England, where the king's writ runneth. Murders also, whether committed in England or in foreign parts, may, by virtue of the stat. 33 Hen. VIII., be enquired of and tried by the king's special commission in any shire or place in the kingdom. By stat. 10 and 11 W. III. all robberies and other capital crimes committed in Newfoundland may be enquired of and tried in any county of England. Offences against the black act, 9 Geo. I., may be enquired of and tried in any county of England, at the option of the prosecutor. So felonies, in destroying turnpikes, or works upon navigable rivers, erected by authority of parliament, may, by statutes 8 Geo. II. and 13 Geo. III., be enquired of and tried in any adjacent county. By stat. 26 Geo. II. plundering or stealing from any vessel in distress or wrecked, or breaking any ship contrary to stat. 12 Ann., may be prosecuted either in the county where the fact is committed, or in any county next adjoining; and, if committed in Wales, then in the next adjoining English county. Felonies committed out of the realm, in burning or destroying the king's ships, magazines, or stores, may, by stat. 12 Geo. III., be enquired of and tried in any county of England, or in the place where the offence is committed. By stat. 13 Geo. III. misdemeanors committed in India may be tried upon information or indictment in the court of king's bench in England; and a mode is marked out for examining witnesses by commission, and transmitting their depositions to the court. But, in general, all offences must be enquired into, as well as tried, in the county where the fact is committed. Yet if larceny be committed in one county, and the goods carried into another, the offender may be indicted in either; for the offence is complete in both. Or he may be indicted in England for larceny in Scotland, and carrying the goods with him into England, or vice versâ; or for receiving in one part of the united kingdom goods that have been stolen in another. But for robbery, burglary, and the like, he can only be indicted where the fact was actually committed: for though the carrying away and keeping of the goods is a continuation of the original taking, and is therefore larceny in the second county, yet it is not a robbery or burglary in that jurisdiction. The grand jury are to find the whole of the bill or no part: they are in no manner to amend it.

When the grand jury have heard the evidence, if they think it a groundless accusation, they used formerly to indorse on the back of the bill ignoramus; or we know nothing of it: intimating that, though the facts might possibly be true, that truth did not appear to them. But now they assert in English more absolutely, Not a true bill; or Not found: and then the party is discharged without farther answer. But a fresh bill may afterwards be preferred to a subsequent grand jury. If they are satisfied of the truth of the accusation, they then endorse upon it, A true bill; anciently, Billa vera. The indictment is then said to be found, and the party stands indicted. But, to find a bill, there must at least twelve of the jury agree; for so tender is the law of England of the lives of the subjects, that no man can be convicted at the suit of the king of any capital offence, unless by the unanimous voice of twenty-four of his equals and neighbours; that is, by twelve at least of the grand jury, in the first place, assenting to the accusation; and afterwards by the whole petit jury, of twelve more, finding him guilty upon his trial. But if twelve of the grand jury assent it is a good presentment, though some of the rest disagree. And the indictment, when so found, is publicly delivered into court.

Indictments must have a precise and sufficient certainty. By stat. 1 Hen. V. all indictments must set forth the Christian name, surname, addition of the state and degree, mystery, town, or place, and the county of the offender; and all this to identify his person. The time and place are also to be ascertained, by naming the day and township in which the fact was committed: though a mistake in these points is in general not held to be material, provided the time be laid previous to the finding of the indictment, and the place to be within the jurisdiction of the court; unless where the place is laid, not merely as a venue, but as part of the description of the fact. But sometimes the time may be very material, where there is any limitation in point of time assigned for the prosecution of offenders; as by the stat. 7 W. III., which enacts

that no prosecution shall be had for any of the treasons or misprisions therein mentioned (except an assassination designed or attempted on the person of the king), unless the bill of indictment be found within three years after the offence committed: and, in case of murder, the time of the death must be laid within a year and a day after the mortal stroke was given. The offence itself must also be set forth with clearness and certainty; and in some crimes particular words of art must be used, which are so appropriated by the law, to express the precise idea which it entertains of the offence, that no other words, however synonymous they may seem, are capable of doing it. Thus, in treason, the facts must be laid to be done 'treasonably, and against his allegiance; anciently, proditorie et contra ligeantiæ suæ debitum;' else the indictment is void. In indictments for murder it is necessary to say that the party indicted 'murdered,' not 'killed' or 'slew,' the other; which, till the late statute, was expressed in Latin by the word murdravit. In all indictments for felonies the adverb 'feloniously,' felonicè, must be used; and for burglaries, also, burglariter, or, in English, 'burglariously:' and all these to ascertain the intent. In rapes the word rapuit, or 'ravished,' is necessary, and must not be expressed by any periphrasis, in order to render the crime certain. So in larcenies, also, the words felonicè cepit et asportavit, 'feloniously took or carried away,' are necessary to every indictment: for these only can express the very offence. Also, in indictments for murder, the length and depth of the wound should in general be expressed, in order that it may appear to the court to have been of a mortal nature: but, if it goes through the body, then its dimensions are immaterial; for that is apparently sufficient to have been the cause of the death. Also, where a limb, or the like, is absolutely cut off, such description is needless. Lastly, in indictments, the value of the thing which is the subject or instrument of the offence must sometimes be expressed. In indictments for larcenies this is necessary, that it may appear whether it be grand or petit larceny; and whether entitled or not to the benefit of clergy. In homicides of all sorts it is necessary; as the weapon with which it is committed is forfeited to the king as a deodand.

INDIES, WEST, a denomination under which is comprehended a large chain of islands extended in a curve from the Florida shore on the northern peninsula of America to the gulf of Venezuela on the southern. Columbus gave this name to them under the notion that they formed part of the Indian continent, which it was his object in his first voyage to find. The following are the principal of these islands:—Curazao, Trinidad, Tobago, Grenada, St. Vincent, Barbadoes, Martinico, Dominica, Mary Galante, Guadaloupe, Antigua, Barbuda, St. Christopher, St. Eustatius, St. Bartholomew, St. Martin, Anguilla, St. Thomas, Porto-Rico, St. Domingo, Jamaica, Cuba, and the Bahamas; a full description of which will be found under their respective denominations.

INDIF'FERENCE, *n. s.* } Fr. *indifference;*
INDIF'FERENCY, *n. s.* } Lat. *in* and *differo.*
INDIF'FERENT, *adj.* } Neutrality; equipoise from motives
INDIF'FERENTLY, *adv.* }

on either side; impartiality; negligence; unconcern; indifferent, not to have such difference as that the one is preferable to the other; disinterested. Passable; having mediocrity; of a middling state; neither good nor worst: this is an improper and colloquial use, especially when applied to persons. Indifferently, without distinction; not well; tolerably; passably; middlingly, &c.

Metcalfe was partial to none, but *indifferent* to all; a master for the whole, and a father to every one. *Ascham.*

The nature of things *indifferent* is neither to be commanded nor forbidden, but left free and arbitrary. *Hooker.*

The choice is left to our discretion, except a principal bond of some higher duty remove the *indifference* that such things have in themselves: their *indifference* is removed, if we take away our own liberty. *Id.*

Doth his majesty
Incline to it or no?
—He seems *indifferent.* *Shakspeare.*

I am a most poor woman and a stranger,
Born out of your dominions; having here
No judge *indifferent*, and no more assurance
Of equal friendship and proceeding. *Id.*

Set honour in one eye, and death i' the' other,
And I will look on death *indifferently.* *Id.*

I am myself *indifferent* honest; but yet I could accuse me of such things, that it were better that my mother had not born me. *Id. Hamlet.*

In choice of committees it is better to chuse *indifferent* persons, than to make an *indifferency* by putting in those that are strong on both sides. *Bacon's Essays.*

Customs, which of themselves are *indifferent* in other kingdoms, became exceeding evil in this realm, by reason of the inconveniences which followed thereupon. *Davies.*

There can hardly be an *indifferent* trial had between the king and the subject, or between party and party, by reason of this general kindred and consanguinity. *Id.*

A moyle will draw *indifferently* well, and carry great burthens. *Carew.*

Some things admit of mediocrity:
A counsellor, or pleader at the bar,
May want Messala's powerful eloquence,
Or be less read than deep Casselius;
Yet this *indifferent* lawyer is esteemed.
Roscommon.

One thing was all to you, and your fondness made you *indifferent* to every thing else. *Temple.*

They live too long, who happiness out-live!
For life and death and things *indifferent*,
Each to be chose as either brings content.
Dryden.

A perfect *indifferency* in the mind, not determinable by its last judgment, would be as great an imperfection as the want of *indifferency* to act, or not to act, till determined by the will. *Locke.*

Being *indifferent*, we should receive and embrace opinions according as evidence gives the attestation of truth. *Id.*

This I mention only as my conjecture, it being *indifferent* to the matter which way the learned shall determine. *Id.*

Though at first it was free, and in my choice, whether or no I should publish these discourses; yet, the publication being once resolved, the dedication was not so *indifferent.* *South.*

Let guilt or fear
Disturb man's rest; Cato knows neither of them:
Indifferent in his choice to sleep or die. *Addison.*

It was a law of Solon, that any person who in the civil commotions of the republick remained neuter, or an *indifferent* spectator of the contending parties, should be condemned to perpetual banishment. *Id. Freeholder.*

Were pardon extended *indifferently* to all, which of them would think himself under any particular obligation? *Addison.*

There is not one of these subjects that would not sell a very *indifferent* paper, could I think of gratifying the publick by such mean and base methods. *Id.*

I hope it may *indifferently* entertain your lordship at an unbending hour. *Rowe.*

This has obliged me to publish an *indifferent* collection of poems, for fear of being thought the author of a worse. *Prior.*

Whiteness is a mean between all colours, having itself *indifferently* to them all, so as with equal facility to be tinged with any of them. *Newton.*

But how *indifferent* soever man may be to eternal happiness, yet surely to eternal misery none can be *indifferent*. *Rogers.*

A place which we must pass through, not only with the *indifference* of strangers, but with the vigilance of those who travel through the country of an enemy. *Id.*

The people of England should be frighted with the French king and the pretender once a year; the want of observing this necessary precept, has produced great *indifference* in the vulgar. *Arbuthnot.*

Indifference, clad in wisdom's guise,
All fortitude of mind supplies;
For how can stony bowels melt,
In those who never pity felt? *Swift.*

He will let you know he has got a clap with as much *indifferency* as he would a piece of public news. *Id.*

Messenger of grief
Perhaps to thousands, and of joy to some,
To him *indifferent* whether grief or joy. *Cowper.*

He speaks not—scarce regards me—not a word—
Nor looks; yet he was soft of voice and aspect,
Indifferent not austere. *Byron. Sardanapalus.*

Besides these, a friend of mine, a great etymologist, has assured me, that bombast and bombasin originally sprung from the same root; and fustian, every body knows, is a term applied *indifferently* to passages in poetry, or materials for a pair of breeches. *Canning.*

IN'DIGENCE, *n. s.* } Fr. *indigence*; Lat.
IN'DIGENCY, *n. s.* } *indigentia.* Penury;
IN'DIGENT, *adj.* } poverty; want: indigent, poor; needy; necessitous; void; empty; in want, used with the particle *of*.

Herken what is the sentence of the wise,
Bet is to dien than have *indigence*.
Thy selve neighebour wol thee despise;
If thou be poure, farewel, thy reverence.
Chaucer. The Man of Lawes Tale.

Such bodies have the tangible parts *indigent of* moisture. *Bacon.*

For ev'n that *indigence*, that brings me low,
Makes me myself, and him above to know. *Dryden.*

Rejoice, O Albion, severed from the world,
By nature's wise indulgence; *indigent*
Of nothing from without. *Phillips.*

Where there is happiness there must not be *indigency*, or want of any due comforts of life. *Burnet's Theory.*

Charity consists in relieving the *indigent*. *Addison.*

Athens worshipped God with temples and sacrifices, as if he needed habitation and sustenance, and that the heathens had such an apprehension about the *indigency* of their gods, appears from Aristophanes and Lucian. *Bentley.*

How low, how little are the proud;
How *indigent* the great. *Gray. Ode to Spring.*

INDIG'ENOUS, *adj.* Fr. *indigene*; Lat. *indigena.* Native to a country; originally produced or born in a region.

Negroes were all transported from Africa, and are not *indigenous* or proper natives of America. *Browne.*

It is wonderful to observe one creature, that is mankind, *indigenous* to so many climates. *Arbuthnot.*

INDIGEST', *adj.* } Fr. *indigeste*; Lat. *indi-*
INDIGES'TED, *adj.* } *gestus.* Not separated
INDIGES'TIBLE, *adv.* } into orders; not ar-
INDIGES'TION, *n. s.* } ranged; not formed, shaped, or methodised; not concocted in the stomach; not brought to suppuration: indigestible, not capable of being digested; not convertible to nutriment: indigestion, a morbid debility in the stomach; want of concoctive power; the state of meats unconcocted.

By irksome deformities, through endless and senseless effusions of *undigested* prayers, they oftentimes disgrace the worthiest part of Christian duty towards God. *Hooker.*

Hence, heap of wrath, foul *indigested* lump;
As crooked in thy manners as thy shape. *Shakspeare.*

Set a form upon that *indigest* project,
So shapeless and so rude. *Id. King John.*

This mass, or *indigested* matter, or chaos, created in the beginning, was without the proper form, which it afterwards acquired. *Raleigh.*

The fumes of *indigestion* may indispose men to thought, as well as to diseases of danger and pain. *Temple.*

Before the seas, and this terrestrial ball,
One was the face of nature, if a face;
Rather a rude and *indigested* mass. *Dryden.*

Dreams are bred
From rising fumes of *indigested* food. *Id.*

Eggs are the most nourishing and exalted of all animal food, and most *indigestible*: nobody can digest the same quantity of them as of other food. *Arbuthnot on Diet.*

His wound was *indigested* and inflamed. *Wiseman.*

The political creed of the high-principled men sets the protestant succession upon a firmer foundation than all the *indigested* schemes of those who profess revolution principles. *Swift.*

And *indigestion's* grand multiplication
Requires arithmetic beyond my forces. *Byron. Don Juan.*

INDIG'ITATE, *v. a.* } Lat. *indigito.* To
INDIGITA'TION, *n. s.* } point out; to show by the fingers: the act of pointing out or directing.

Antiquity expressed numbers by the fingers: the depressing this finger, which in the left hand implied but six, in the right hand *indigitated* six hundred. *Browne's Vulgar Errours.*

As though there were a seminality of urine, we foolishly conceive we behold therein the anatomy of every particle, and can thereby *indigitate* their affections. *Id.*

We are not to *indigitate* the parts transmittent. *Harvey.*

Which things I conceive no obscure *indigitation* of providence. *More against Atheism.*

INDIGN', *adj.* INDIGNANT, *adj.* INDIGNA'TION, *n. s.* INDIG'NITY, *n s.* } Fr. *indigne;* Lat. *indignus, indignor.* Indign, unworthy; undeserving; disgraceful: indignant, angry; raging with passion; a union of wrath and disdain: indignation, anger with contempt; the wrath of a superior being; the effect of anger: indignity, contumelious treatment; violation of right, attended with insult.

There was great *indignation* against Israel.
2 *Kings.*

Wondering upon this thing, quaking for drede,
She saide 'Lord!' *indigne* and unworthy
Am I to thilke honour, that ye me bedie;
But as ye wol yourself right so wol I,
And here I swere that never willingly
In work ne thought I nill you disobeie,
For to be ded, through me, were both to deie.
Chaucer. The Clerkes Tale.

And Malèbouche gan, first, the talè tel,
To sclaunder Trouth of *indignacion.*
Id. Complaint of the Blacke Knight.

But he so full of *indignation* was,
That to his prayer nought he would incline.
Spenser. Faerie Queene.

Bishops and prelates could not but have bleeding hearts to behold a person of so great place and worth constrained to endure so foul *indignities.* *Hooker.*

If heavens have any grievous plague in store,
Let them hurl down their *indignation*
On thee thou troubler of the world. *Shakspeare.*

And all *indign* and base adversities
Make head against my estimation. *Id.*

Where there is a kingdom that is altogether unable or *indign* to govern, is it just for another nation, that is civil or policed, to subdue them? *Bacon.*

No emotion of passion transported me, by the *indignity* of his carriage, to any thing unbeseeming myself. *King Charles.*

From those officers, warm with *indignation* at the insolences of that vile rabble, came words of great contempt. *Clarendon.*

Man he made, and for him built
Magnificent this world, and earth his seat,
Him lord pronounced; and, O *indignity!*
Subjected to his service angel-wings,
And flaming ministers to watch and tend
Their earthly charge. *Milton.*

He scourged with many a stroke the *indignant* waves. *Id.*

But keep this swelling *indignation* down,
And let your cooler reason now prevail. *Rowe.*

What rage that hour did Albion's soul possess,
Let chiefs imagine, and let lovers guess!
He strides *indignant,* and with haughty cries
To single fight the fairy prince defies. *Tickel.*

The lustful monster fled, pursued by the valorous and *indignant* Martin. *Arbuthnot to Pope.*

He does not see how that mighty passion for the church can well consist with those *indignities* and that contempt men bestow on the clergy. *Swift.*

The more the bold, the bustling, and the bad,
Press to usurp the reins of power, the more
Behoves it virtue with *indignant* zeal
To check their combination. *Thomson.*

——————; even the oak
Thrives by the rude concussion of the storm:
He seems indeed *indignant,* and to feel
The impression of the blast with proud disdain.
Cowper.

Nor be thy generous *indignation* checked,
Nor checked the tender tear to misery given;
From guilt's contagious power shall that protect,
This soften and refine the soul for heaven.
Beattie.

By leaving the quantity of beating indeterminate, he gives every reader the liberty to administer it, in exact proportion, to the sum of *indignation* which he may have conceived against his hero.
Canning. Microcosm.

IN'DIGO, *n. s.* Lat. *Indicum.* A plant, by the Americans called anil. In the middle of the flower is the style, which afterwards becomes a jointed pod, containing one cylindrical seed in one partition, from which indigo is made, which is used in dyeing for a blue color.—*Miller.*

INDIGO is a dye prepared from the leaves and small branches of the indigofera tinctoria. The plants when gathered are thrown into the steeping-vat, which is a large tub filled with water, in which they undergo a fermentation, which in twenty-four hours at furthest is completed. A cock is then turned, to let the water run into the mortar or pounding tub. The steeping vat is then cleaned out, that fresh plants may be thrown in: and thus the work is continued without interruption. The water which has run into the pounding tub is found impregnated with a very subtile earth, which constitutes the dregs or blue substance that is the object of this process, and which must be separated from the useless salt of the plant, because this makes the dregs swim on the surface. To effect this, the water is forcibly agitated with wooden buckets, full of holes, and fixed to a long handle. This part of the process requires great caution. If the agitation be discontinued too soon, the part that is used in dyeing, not being sufficiently separated from the salt, would be lost. If, on the other hand, the dye were to be agitated too long after the complete separation, the parts would be brought together again, and form a new combination; and the salt, reacting on the dregs, would excite a second fermentation, that would alter the dye, spoil its color, and make what is called burnt indigo. These accidents are prevented by a close attention to the least alterations that the dye undergoes, and by the precaution which the workmen take to draw out a little of it from time to time in a clean vessel. When they perceive that the colored particles collect by separating from the rest of the liquor, they leave off shaking the buckets, to allow time to the blue dregs to precipitate to the bottom of the tub, where they are left to settle till the water is quite clear. Holes made in the tub, at different heights, are then opened one after another, and thus useless water is let out. The blue dregs remaining at the bottom having acquired the consistence of a thick muddy liquid, cocks are then opened, which draw it off into the settler. After it is still more cleared of much superfluous water, in its third and last tub, it is drained into sacks; whence, when water no longer filters through the cloth, this matter, now become of a thicker consistence, is put into chests, where it entirely loses its moisture. In three months the indigo is fit for sale. It is used in washing, to give a bluish color to linen: painters also employ it in their water colors; and dyers cannot make fine blue without it. The ancients

procured it from the East Indies; in modern times it has been transplanted into America and the West Indies. There are two kinds of indigo prepared in the East Indies, particularly on the coast of Coromandel, at Pondicherry, &c. Of these the worst kind is used for giving the body of color to the dyed substance, the other being employed only to give it a gloss afterwards.

Bergmann mixed one part of well pulverised indigo with eight parts of colorless sulphuric acid, of the specific gravity of 1·900, in a glass vessel slightly closed. The acid very quickly acted upon the indigo, and excited much heat. After a digestion of twenty-four hours the solution was effected; but the mixture was opaque and black. If the sulphuric acid be first diluted in water, it attacks only the earthy principle which is mixed with the indigo, and some of the mucilaginous parts. The fixed alkalies, saturated with carbonic acid, separate a very fine blue powder from the solution of indigo, which is deposited very slowly. The concentrated nitric acid attacks indigo with so much activity as to set it on fire. The muriatic acid by digestion, and even boiling upon indigo, takes up only the earthy matter, the iron, and a little of the extractive matter, which gives it a brown color, but in no respect attacks the blue color. Pure or caustic fixed alkali dissolves some matters foreign to the coloring matter of the indigo, but acts very little on the coloring particles. Pure volatile alkali has nearly the same effect.

Bergmann concludes, from his analysis, that 100 parts of good indigo contain of mucilaginous matter 12, resinous matter 6, earthy matter 22, oxide of iron 13.

There remain forty-seven parts, which are the coloring matter, nearly in a state of purity, and afford by distillation carbonic acid 2, alkaline liquor 8, empyreumatic oil 9, coal 23.

M. Chevreul has given the following results of his very elaborate analysis of Guatimala indigo:

By water	Ammonia	12
	Disoxygenised indigo	
	Green matter	
	Bitter matter	
By alcohol	Green matter	30
	Red matter	
	Indigo	
By muriatic acid	Red matter	6
	Carbonate of lime	2
	Oxide of iron and alumina	2
	Silica	3
	Pure indigo	45
		100

When commercial indigo is exposed to a heat of about 400° Fahrenheit, it evolves a beautiful crimson smoke, which may be condensed in crystalline needles, which are supposed to be pure indigo. The blue vat of the dyer contains indigo deoxidised by protoxide of iron, and rendered soluble in its yellow-green state by lime water. If a portion of this solution be exposed to the air, in a shallow vessel, the indigo will speedily absorb oxygen, and precipitate in its usual state of an insoluble blue powder. This, being dried and digested in a mixture of alcohol and muriatic acid, becomes also pure indigo by the abstraction of all the resin and lime. In this state it is a soft powder, of an intensely deep blue, verging sometimes on purple. It is unchangeable by the air. If into the sulphate of indigo, above described, a few pieces of iron or zinc are put, the nascent hydrogen seizes its oxygen, and discolors it. Sulphuric acid, rendered smoking by a little sulphurous acid, is a better solvent of indigo than pure oil of vitriol. By boiling a little sulphur in this, its solvent power is improved.

In order to find the value of any sample of indigo, Mr. Dalton directs us to take one grain, carefully weighed, from a mass finely pulverised. Put this into a wine glass, and drop two or three grains of concentrated sulphuric acid upon it. Having triturated them well, pour in water, and transfer the colored liquid into a tall cylindrical jar, about one inch inside diameter. When the mixture is diluted with water, so as to show the flame of a candle through it, mix the liquid solution of oxymuriate of lime with it, agitating it slowly, and never putting any more in till the smell of the preceding portion has vanished. The liquid soon becomes transparent, and of a beautiful greenish-yellow appearance. After the dross has subsided, the clear liquid may be passed off, and a little more water put into the sediment, with a few drops of oxymuriate of lime, and a drop of dilute sulphuric acid; if more yellow liquid is produced, it arises from particles of indigo which have escaped the action of the oxymuriate before, and must be added to the rest. The value of the indigo is in proportion to the quantity of real oxymuriate of lime necessary to destroy its color. The value may also be well estimated by the quantity and intensity of the amber-colored liquid which the indigo produces, independently of any valuation of the oxymuriate of lime.

Another method of trying the goodness of this substance is by fire; for the pure indigo will be entirely consumed, while the extraneous particles will remain. The pounded indigo is much more subject to adulteration than such as is sold in cakes or tablets; as the ashes or dirt with which it is mixed are very apt to separate from the pure coloring substance when standing in a liquid state, as it must always do before the moisture is evaporated: whence, on breaking indigo so adulterated, the extraneous matter will be perceived in strata of a different color.

Indigo is commonly divided, from the color which it exhibits upon breaking, into three kinds, copper-colored, purple, and blue. It is said that the dyers use chiefly the first, and the calico-printers the last. On what particular circumstances these different appearances depend, we know not; nor is it certainly known whether the real quality of the indigo has any connexion with them. The deepest and liveliest blue indigo, rubbed with the nail, appears like polished copper; and solutions of all the sorts, made in alkaline lixivia, assume alike a copper-colored skin upon the surface.

INDIGOFERA, the indigo plant, a genus of the decandria order, and diadelphia class of plants, natural order thirty-second, papilionaceæ:

CAL. patent: COR. carina, furnished with a tubulated patulous spur on each side; the legume is linear. There are several species, the most remarkable is the

I. tinctoria, a native of the warm parts of Asia, Africa, and America, and from which indigo is made. The root is three or four lines thick, and more than a foot long, of a faint smell something like parsley. From this root issues a single stem, nearly of the same thickness, about two feet high, straight, hard, almost woody, covered with a bark slightly split, of a gray ash color towards the bottom, green in the middle, reddish at the extremity, and without appearance of pith in the inside. The leaves, ranged in pairs around the stalk, are of an oval form, smooth, soft to the touch, furrowed above, of a deep green on the under side, and connected by a very short peduncle. From about one-third of the stem to the extremity there are ears that are loaded with very small flowers, from twelve to fifteen, but destitute of smell. The pistil, which is in the midst of each flower, changes into a pod, in which the seeds are enclosed. This plant, says Mr. Loudon, is one of the most profitable articles of culture in Hindostan, because an immense extent of land being required to produce but a moderate bulk of the dye, few undertake to raise it but large capitalists, and because the whole manufacture may be carried on without even the aid of a house. The first step in the culture of the plant is to render the ground, which should be friable and rich, dry, and perfectly free from weeds. The seeds are then sown in shallow drills about a foot apart. The rainy season must be chosen for sowing, otherwise, if the seed is deposited in dry soil, it heats, corrupts, and is lost. The crop, being kept free from weeds, is fit for cutting in two or three months, and this may be repeated in rainy seasons every six weeks. The plants must not be allowed to come into flower, as the leaves in that case become dry and hard, and the indigo produced is of less value; nor must they be cut in dry weather, as they would not spring again. A crop generally lasts two years. The indigo is, however, one of the most precarious of oriental crops; being liable to be destroyed by hail, which does comparatively little injury to the sugar-cane and other plants. As this plant soon exhausts the soil, because it does not absorb a sufficient quantity of air and dew to moisten the earth, the planter should have a vast space which may remain covered with trees, till it becomes necessary to fell them, to make room for the indigo.

INDIRECT', *adj.* } Fr. *indirect*; Lat. *in-*
INDIREC'TION, *n. s.* } *directus*. Not straight; not
INDIRECT'LY, *adv.* } rectilinear; not tending
INDIRECT'NESS, *n. s.* } otherwise than obliquely or consequentially to a purpose; as, an indirect accusation; wrong; improper; not fair or honest. Indirection, oblique means; dishonest practice. Indirectly, obliquely; unfairly. Indirectness, fraudulent art.

Those things which they do know they may, upon sundry *indirect* considerations, let pass; and although themselves do not err, yet may they deceive others. *Hooker.*

And thus do we, of wisdom and of reach,
With windlaces, and with essays of byas,
By *indirections* find directions out.
Shakspeare. Hamlet.

The tender prince
Would fain have come with me to meet your grace;
But by his mother was per force with-held.
—Fy, what an *indirect* and peevish course
Is this of her's? *Id. Richard III.*

He bids you then resign
Your crown and kingdom, *indirectly* held
From him the true challenger. *Id. Henry V.*

I had rather coin my heart than wring
From the hard hands of peasants their vile trash,
By any *indirection*. *Id. Julius Cæsar.*

Think you, that any means under the sun
Can assecure so *indirect* a course? *Daniel.*

He that takes any thing from his neighbour, which was justly forfeited, to satisfy his own revenge or avarice, is tied to repentance, but not to restitution; because I took the forfeiture *indirectly*, I am answerable to God for my unhandsome, unjust, or uncharitable circumstances. *Taylor.*

O pity and shame! that they who to live well
Entered so fair, should turn aside, to tread
Paths *indirect*. *Milton.*

Indirect dealing will be discovered one time or other, and then he loses his reputation. *Tillotson.*

Still she suppresses the name, which continues his doubts and hopes; and at last she *indirectly* mentions it. *Broome.*

INDISCERN'IBLE, *adj.* } Lat. *in, de, cerno.*
INDISCERN'IBLY, *adv.* } Not perceptible or discoverable: in a manner not to be perceived.

Speculation, which, to my dark soul,
Deprived of reason, is as *indiscernible*
As colours to my body, wanting sight. *Denham.*

INDISCERPTIBLE, *adj.* } Lat. and *indis-*
INDISCERPTIBIL'ITY, *n. s.* } *cerpo*. Not to be separated; incapable of being broken or destroyed.

INDISCOV'ERY, *n. s.* In and discovery. Fr. *découvrir*. The state of being hidden. An unusual word.

The ground of this assertion was the magnifying esteem of the ancients, arising from the *indiscovery* of its head. *Browne.*

INDISCREET', *adj.* } Fr. *indiscret*; Lat. *in*
INDISCREET'LY, *adv.* } *discretio*; Greek δια-
INDISCRE'TION, *n. s.* } κρισις. Imprudent; incautious; inconsiderate; rash: want of due foresight and prudence.

If thou be among the *indiscreet*, observe the time; but be continually among men of understanding. *Ecclesiastes.*

Job on justice hath aspersions flung,
And spoken *indiscreetly* with his tongue.
Sandys.

Why then
Are mortal men so fond and *indiscreet*,
So evil gold to seek unto their aid;
And having not complain, and having it upbraid?
Spenser.

Indiscretion sometimes serves us well,
When our deep plots do fail.
Shakspeare. Hamlet.

Let a great personage undertake an action passionately, let him manage it *indiscreetly*, and he shall have enough to flatter him. *Taylor.*

Loose papers have been obtained from us by the importunity and divulged by the *indiscretion* of friends, although restrained by promises. *Swift.*

Past *indiscretion* is a venial crime,
And if the youth, unmellowed yet by time,
Bore on his branch, luxuriant then and rude,
Fruits of a blighted size, austere and crude.
Cowper.

INDISCRIM'INATE, *adj.* } Latin, *indis-*
INDISCRIM'INATELY, *adv.* } *criminatus.* Undistinguishable: not with any mark of distinction.

Liquors, strong of acid salts, destroy the blueness of the infusion of our wood; and liquors *indiscriminately*, that abound with sulphureous salts, restore it. *Boyle.*

Others use defamatory discourse purely for love of talk; whose speech, like a flowing current, bears away *indiscriminately* whatever lies in its way.
Government of the Tongue.

But I must not be understood to praise the whole *indiscriminately*. *Beattie.*

There are in Turkey a body of men, against whom universal contempt is *indiscriminately*, as well as undeservedly, directed; and these are the worshipful company of Grocers. *Canning. Microcosm.*

INDISPEN'SABLE, *adj.* } Lat. *in* and *dis-*
INDISPEN'SABLENESS, *n. s.* } *penso.* Not to be
INDISPEN'SABLY, *adv.* } remitted; not to be spared; necessary state of not being to be spared.

Every one must look upon himself as *indispensably* obliged to the practice of duty. *Addison.*

Rocks, mountains, and caverns, against which these exceptions are made, are of *indispensable* use and necessity, as well to earth as to man. *Woodward.*

The love of truth is natural to man; and adherence to it his *indispensable* duty. *Beattie.*

INDISPOSE', *v. a.* } Fr. *indisposer*; Lat.
INDISPO'SEDNESS, *n. s.* } *in* and *dispositus.* To
INDISPOSIT'ION, *n. s.* } place in an unfavorable position, with reference to something else: to make unfit; to disincline; disorder; disqualify. Indisposedness, a disordered state of mind. Indisposition, disorder of health; sickness; disinclination; dislike.

The *indisposition* of the church of Rome to reform herself, must be no stay unto us from performing our duty to God. *Hooker.*

The king did complain of a continual infirmity of body, yet rather as an *indisposition* in health than any set sickness. *Hayward.*

It is not any innate harshness in piety that renders the first essays of it unpleasant; that is owing only to the *indisposedness* of our own hearts.
Decay of Piety.

The king was sufficiently *indisposed towards* the persons or the principles of Calvin's disciples.
Clarendon.

The soul is not now hindered in its actings by the distemperature of *indisposed* organs. *Glanville.*

Though it weakened, yet it made him rather *indisposed* than sick, and did no ways disable him from studying. *Walton.*

I have known a great fleet lose great occasions, by an *indisposition* of the admiral, while he was neither well enough to exercise, nor ill enough to leave the command. *Temple.*

Wisdom is still looking forward, from the first *indispositions* into the progress of the disease.
L'Estrange.

It has a strange efficacy to *indispose* the heart to religion. *South's Sermons.*

His life seems to have been prolonged beyond its natural term, under those *indispositions* which hung upon the latter part of it. *Addison's Freeholder.*

The mind, by every degree of affected unbelief, contracts more and more of a general *indisposition towards* believing. *Atterbury.*

Nothing can be reckoned good or bad to us in this life, any farther than it prepares or *indisposes* us for the enjoyments of another. *Id.*

A mind unnerved, or *indisposed* to bear
The weight of subjects worthiest of her care.
Cowper.

INDIS'PUTABLE, *adj.* } Lat. *in* and *dis-*
INDIS'PUTABLENESS, *n. s.* } *puto.* Uncontrover-
INDIS'PUTABLY, *adv.* } tible; evident; certain: a state of actual certainty: without controversy or opposition.

They questioned a duty that had been *indisputably* granted to so many preceding kings. *Howel.*

The thing itself is questionable, nor is it *indisputably* certain what death she died. *Browne.*

There is no maxim in politicks more *indisputable*, than that a nation should have many honours to reserve for those who do national services. *Addison.*

The apostle asserts a clear *indisputable* conclusion, which could admit of no question. *Rogers.*

That it is a character drawn faithfully from nature, by the hand of a master, most accurately delineated, and most exquisitely finished, is indeed *indisputable.*
Canning. Microcosm.

INDISSOL'VABLE, *adj.* } Lat. *in* and *dis-*
INDISSOL'UBILITY, *n. s.* } *solvo*; Fr. *indis-*
INDIS'SOLUBLE, *adj.* } *soluble.* Not sepa-
INDIS'SOLUBLENESS, *n. s.* } rable as to its
INDIS'SOLUBLY, *adv.* } parts; obligatory; binding for ever. Indissolubility, resistance to a dissolving power; perpetuity of obligation. Indissolubly, in a manner resisting all separation.

Far more comfort it were for us, to be joined with you in bands of *indissoluble* love and unity, to live as if, our persons being many, our souls were but one.
Hooker.

There is the supreme and *indissoluble* consanguinity between men, of which the heathen poet saith we are all his generation. *Bacon's Holy War.*

On they move
Indissolubly firm; nor obvious hill,
Nor strait'ning vale, nor wood, nor stream divide
Their perfect ranks. *Milton.*

Adam, though consisting of a composition intrinsically dissolvable, might have held, by the Divine Will, a state of immortality and *indissolubleness* of his composition. *Hale.*

When common gold and lead are mingled, the lead may be severed almost unaltered; yet if, instead of the gold, a tantillum of the red elixir be mingled with the saturn, their union will be so *indissoluble*, that there is no possible way of separating the diffused elixir from the fixed lead. *Boyle*

The remaining ashes, by a further degree of fire, may be *indissolubly* united into glass. *Id.*

What hoops hold this mass of matter in so close a pressure together from whence steel has its firmness, and the parts of a diamond their hardness and *indissolubility*? *Locke.*

They might justly wonder, that men so taught, so obliged to be kind to all, should behave themselves so contrary to such heavenly instructions, such *indissoluble* obligations. *South.*

Metals, corroded with a little acid, turn into rust, which is an earth tasteless and *indissolvable* in water;

and this earth, imbibed with more acid, becomes a metallick salt. *Newton.*

They willingly unite,
Indissolubly firm: from Dubris south
To northern Orcades. *Phillips.*

Deposition and degradation are without hope of any remission, and therefore the law stiles them an *indissolvable* bond; but a censure, a dissolvable bond. *Ayliffe's Parergon.*

Wit, like every other power, has its boundaries. Its success depends on the aptitude of others to receive impressions; and as some bodies, *indissoluble* by heat, can set the furnace and crucible at defiance, there are minds upon which the rays of fancy may be pointed without effect, and which no fire of sentiment can agitate or exalt. *Johnson's Rambler.*

INDISTINCT', *adj.* INDISTINC'TION, *n. s.* INDISTINCT'LY, *adv.* INDISTINCT'NESS, *n. s.* Fr. *indistinct*; Lat. *in* and *distinguor*. Confused; not plainly marked; not exactly discerning; having a character of illegibility: uncertainty; omission; obscurity; a want of clearness.

We throw out our eyes for brave Othello,
Even till we make the main and the aerial blue
An *indistinct* regard. *Shakspeare.*

That which is now a horse, even with a thought,
The rack dislimns, and makes it *indistinct*
As water is in water. *Id.*

Making trial thereof, both the liquors soaked *indistinctly* through the bowl. *Browne's Vulgar Errours.*

The *indistinction* of many of the same name, or the misapplication of the act of one unto another, hath made some doubt. *Id.*

She warbled in her throat,
And tuned her voice to many a mery note:
But *indistinct*, and neither sweet nor clear. *Dryden.*

An *indistinction* of all persons, or equality of all orders, is far from being agreeable to the will of God. *Sprat.*

There is unevenness or *indistinctness* in the style of these places, concerning the origin and form of the earth. *Burnet's Theory.*

In its sides it was bounded distinctly, but on its ends confusedly and *indistinctly*, the light there vanishing by degrees. *Newton's Opticks.*

Old age makes the cornea and coat of the chrystaline humour grow flatter; so that the light, for want of sufficient refraction, will not converge to the bottom of the eye, but beyond it, and by consequence paint in the bottom of the eye a confused picture; and according to the *indistinctness* of this picture, the object will appear confused. *Newton.*

When we speak of the infinite divisibility of matter, we keep a very clear and distinct idea of division and divisibility; but when we come to parts too small for our senses, our ideas of these little bodies become obscure and *indistinct*. *Watts.*

INDISTUR'BANCE, *n. s.* In and disturb. Calmness: freedom from disturbance.

What is called by the Stoicks apathy, and by the Scepticks *indisturbance*, seems all but to mean, great tranquillity of mind. *Temple.*

INDIVID'UAL, *adj.* INDIVIDUAL'ITY, *n. s.* INDIVID'UALLY, *adv.* INDIVID'UATE, *v. a.* INDIVIDUA'TION, *n. s.* INDIVIDU'ITY, *n. s.* INDIVISIBIL'ITY, *n. s.* INDIVIS'IBLENESS, *n. s.* INDIVIS'IBLE, *adj.* INDIVIS'IBLY, *adv.* Fr. *individu*; Lat. *in* and *divido*. One person separate from all others: undivided; not to be disjoined: individuality, separate existence: individually, numerically; incommunicab.y: individuate, to distinguish or make single: individuation, that which makes an individual: individuity, the state of being an individual: indivisible, what cannot be broken into parts; so small as that it cannot be smaller; having reached the last degree of divisibility: indivisibly, so as to be incapable of separation or division.

How should that subsist solitarily by itself, which hath no substance, but *individually* the very same whereby others subsist with it? *Hooker.*

Neither is it enough to consult, secundum genera, what the kind and character of the person should be; for the most judgment is shewn in the choice of *individuals*. *Bacon.*

I dare not pronounce him omniscious, that being an attribute *individually* proper to the god-head, and incommunicable to any created substance. *Hakewill.*

To give thee being, I lent
Out of my side to thee, nearest my heart,
Substantial life, to have thee by my side
Henceforth an *individual* solace dear. *Milton.*

Long eternity shall greet our bliss
With an *individual* kiss. *Id.*

Under his great vicegerent reign abide
United, as one *individual* soul,
For ever happy. *Milton.*

Here is but one *indivisible* point of time observed, but one action performed; yet the eye cannot comprehend at once the whole object. *Dryden.*

They present us with images more perfect than the life in any *individual*. *Id. Dufresnoy.*

No man is capable of translating poetry, who, besides a genius to that art, is not a master both of his author's language and of his own; nor must we understand the language only of the poet, but his particular turn of thoughts and expression, which are the characters that distinguish and *individuate* him from all other writers. *Dryden.*

A pestle and mortar will as soon bring any particle of matter to *indivisibility* as the acutest thought of a mathematician. *Locke.*

Must the whole man, amazing thought! return
To the cold marble, or contracted urn!
And never shall those particles agree,
That were in life this *individual* he? *Prior.*

He would tell his instructor, that all men were not singular; that *individuality* could hardly be predicated of any man; for it was commonly said, that a man is not the same he was, and that madmen are beside themselves. *Arbuthnot.*

We see each circumstance of art and *individual* of nature summoned together by the extent and fecundity of his imagination.' *Pope's Preface to the Iliad.*

Know all the good that *individuals* find,
Lies in three words, health, peace, and competence. *Pope.*

It would be wise in them, as *individual* and private mortals, to look back a little upon the storms they have raised, as well as those they have escaped. *Swift.*

What is the principle of *individuation*? Or what is it that makes any one thing the same as it was before? *Watts.*

The object of any particular idea is called an *individual*: so Peter is an *individual* man, London is an *individual* city. *Id.*

It is long before we are convinced of the small proportion which every *individual* bears to the collective body of mankind. *Johnson.*

An *individual* is a sacred mark,
Not to be pierced in play, or in the dark.
Cowper.

There are certain forms and etiquettes in life, which, though the neglect of them does not amount to the commission of a crime, or the violation of a duty, are yet so established by example, and sanctioned by custom, as to pass into statutes, equally acknowledged by society, and almost equally binding to *individuals*, with the laws of the land, or the precepts of morality. *Beattie.*

Just so at the beginning of the French Revolution: the first work of the reformers was to loosen every established political relation, every legal holding of man to men, to destroy every corporation, to dissolve every subsisting class of society, and to reduce the nation into *individuals*, in order, afterwards, to congregate them into mobs. *Canning.*

I say collectively, Sir, because *individually* we are allowed to have no existence; the waggery of the world, judging nine weavers and nine taylors requisite to the formation of a man. *Id. Microcosm.*

INDIVISIBILITY OF MATTER. See MATTER.

INDOC'IBLE, *adj.* } Fr. *indocile*; Lat. *in-*
INDOC'ILE, *adj.* } *docilis*, *in* and *doceo*. Un-
INDOCIL'ITY, *n. s.* } teachable; insusceptible of instruction: refusal of instruction.

These certainly are the fools in the text, *indocil*, intractable fools, whose solidity can baffle all arguments, and is proof against demonstration itself. *Bentley's Sermons.*

INDOC'TRINATE, *v. a.* } Fr. *endoctriner*;
INDOCTRINA'TION, *n. s.* } Lat. *doctrina*. To instruct in any science or opinion. Indoctrination, instruction or information.

Under a master that discoursed excellently, and took much delight in *indoctrinating* his young unexperienced favourite, Buckingham had obtained a quick conception of speaking very gracefully and pertinently. *Clarendon.*

They that never peeped beyond the common belief, in which their easy understandings were at first *indoctrinated*, are strongly assured of the truth of their conceptions. *Glanville.*

Although postulates are very accommodable unto junior *indoctrinations*, yet are these authorities not to be embraced beyond the minority of our intellectuals. *Browne.*

IN'DOLENCE, *n. s.* } Fr. *indolence*; Lat.
IN'DOLENCY, *n. s.* } *in* and *dolco*. Freedom
IN'DOLENT, *adj.* } from pain; laziness; in-
IN'DOLENTLY, *adv.* } attention; ennui. Indolent, applicable to tumors; free from pain, and in a chronic state; careless; listless; inattentive.

Let Epicurus give *indolency* as an attribute to his gods, and place it in the happiness of the blest; the Divinity which we worship has given us not only a precept against it, but his own example to the contrary. *Dryden.*

As there must be *indolency* where there is happiness, so there must not be indigency. *Burnet.*

While lulled by sound, and undisturbed by wit,
Calm and serene you *indolently* sit. *Addison.*

And thus in *indolence* she lies,
A giddy wasp around her flies.
Gay's Fables.

I have ease, if it may not father be called *indolence*. *Hough.*

Ill fits a chief
To waste long nights in *indolent* repose.
Pope's Iliad.

The Spanish nation, roused from their ancient *indolence* and ignorance, seem now to improve trade. *Bolingbroke.*

Ah! in what perils is vain life engaged!
What slight neglects, what trivial faults destroy
The hardiest frame! of *indolence*, of toil,
We die; of want, of superfluity. *Armstrong.*

Indolence is therefore one of the vices from which those whom it once infects are seldom reformed. *Johnson's Rambler.*

Flutters thy breath with fear, or pants for fame,
Or pines, to *indolence* and spleen a prey,
Or avarice a fiend more fierce than they?
Flee to the shade of Academus grove;
Where cares molest not, discord melts away
In harmony, and the pure passions prove
How sweet the words of Truth, breathed from the lips of Love. *Beattie.*

Awake! for shame! or ere thy nobler sense
Sink in the oblivious pool of *Indolence*. *Canning.*

INDORE, a city of the province of Malwah, Hindostan, capital of the dominion of the Mahratta chief Mulhar Row Holkar. It is large but ill built, and stands in long. 76° 10′ E., lat. 22° 51′ N.

To INDOW', *v. a.* Lat. *indotare*. To portion; to enrich with gifts, whether of fortune or nature. See ENDOW.

IN'DRAUGHT, *n. s.* In and draught. An opening in the land into which the sea flows.

Ebbs and floods there could be none, when there were no *indraughts*, bays, or gulphs to receive a flood. *Raleigh.*

Inlet; passage inwards.

Navigable rivers are *indraughts* to obtain wealth. *Bacon.*

INDRE, a river of France, which rises N. N.W. of Boussac, in the department of the Creuse; passes by St. Severe, Chatre, Chateauroux, Chatillon (where it is navigable), Loches, Cormery, Array, &c., and joins the Loire at Rigny, between Tours and Saumur. It has a course of about ninety miles.

INDRE, a small department of France, so named from the above river, which runs through it from south-east to north-west, comprehending part of the ci-devant province of Berry. It is bounded on the north by the department of Loire and Cher; east by that of Cher; south by the Creuse and Upper Vienne; and west by the departments of Vienne and Indre et Loire. It is fifty-four miles long from north to south, and forty-five broad from east to west. Chateauroux is the capital. Population 295,000.

INDRE-ET-LOIRE, a central department of France, consists of the whole of the former province of Touraine, and takes its name from the rivers Loire and Indre, which run through it; the former flowing from east to west, and the latter from south-east to north-west. The principal place is Tours. It is divided into three arrondissements or sub-prefectures; Tours containing 129,808 inhabitants; Chinon 94,194; and Loches 59,370; twenty-four justiciaries of the peace, or cantons; and 302 communes: its total population is about 282,372. It yields a territorial revenue of 14,078,000 francs, and is a part of the fourth military division; it has a royal court at Orleans, and a bishopric at Tours. It is divided into two electoral arrondissements,

and sends four members to the chamber of deputies.

This department is bounded on the north-east by that of the Loire et Chere; on the north-west by that of the Sarthi; on the south-east by that of the Indre; on the south-west by that of Vienne; and on the west by that of the Maine et Loire. The soil is so agreeably varied, and the climate so mild and delightful, that this country has always been justly called the garden of France. It is, however, far from being equally fertile in all parts, nor does it produce sufficient corn for the consumption of its inhabitants; the valleys formed by the great rivers that cross it are indeed very fruitful, as well as the hills which surround it; but, as you recede from these valleys, you find a great quantity of land uncultivated. The part of the country situated between the Loire and the Cher, which is known by the name of Varennes, is covered with a sandy, light, and very fertile soil, which is always productive, owing to its continual culture and the labor and manuring that is bestowed on it; so that it is generally considered as the best land in the department. The hills which skirt the banks of the Loire, containing a great number of habitations dug into the rock, as well as those which border the Cher, abound in vines, from which are made red and white wines of a tolerably good quality. The Loire, the Cher, the Indre, the Creuse, and the Vienne, which water and fertilise the most beautifu. plains and smiling meadows; the great number of villages, chateaus, and country houses, built on both sides of the Loire; the beauty of the heavens, the softness of the climate, all unite to make this part of France one of the most delightful residences that can be found. The land is mostly chalky, cultivated partly with horses, and partly with the hoe and the spade; there are about 73,605 hectars of forests of elm, ash, beech, oak, and chestnut-trees, and 36,000 hectars of vineyards, each hectar of cultivated ground producing on an average twenty-one francs eighteen centimes.

This country yields every species of corn, maize, millet, chestnuts; excellent fruits, such as walnuts, almonds, and very choice prunes, which, when dried, are known by the name of Tours prunes; vegetables, anise, coriander, liquorice, angelica, sengreen, hemp, mulberries, red and white wines of good quality, and a considerable quantity of wood. There are fine meadows, nurseries of fruit trees, great and small game, such as stags, roebucks, wild boars, hares, &c.; fish in abundance, as shad, lampreys, salmon, pike, &c., silk-worms, and bees. There are also some iron mines, quarries of calcareous freestone, mill stones, stones for lithographical purposes, brown freestone, marble fossils, and fullers' earth, potters' clay, pipe-clay, and sand.

In this department are carried on some manufactures of coarse cloths, and silk furniture stuffs. Ribands, laces, home-spun linen, silk, millinery, cotton, and floss silk are also made here; as well as carpets, pipes, brandy, iron, steel, files, red-lead, and shots. There are also some factories for the spinning of woollen and cotton yarn, refining houses for sugar and beet-root, starch manufactories, brass foundries, potteries, paper-mills, and tan-yards. Powder is also made and refined here. A considerable commerce is carried on in corn, wine, dried fruits, prunes (for which it is much celebrated), dried herbs, melons, honey, wax, nut oil, wool, gauze, silk, coarse cloths, hemp, mill-stones, leather, iron, and steel.

The chief rivers that water this department are the Loire, the Vienne, the Cher, and the Creuse, which are navigable; the Bienne, the Indre, the Indroye, and the Claise. Various great roads run through it from Poitiers, Chateauroux, Orleans, Chartres, le Mans, Bourbon, Vendée, and Nantes.

To INDRENCH', *v. a.* From drench. To soak; to drown.

My hopes lie drowned; in many fathoms deep
They lie *indrenched.*
Shakspeare. Troilus and Cressida.

INDU'BIOUS, *adj.* } Lat. *in, dubito, dubi-*
INDU'BITABLE, *adj.* } *tabilis.* That is not,
INDU'BITABLY, *adv.* } and cannot be doubted;
INDU'BITATE, *adj.* } not suspecting; unquestionable; certain; apparent.

If he stood upon his own title of the house of Lancaster, he knew it was condemned by parliament, and tended directly to the disinherison of the line of York, held then the *indubitable* heirs of the crown.
Bacon's Henry VII.

I have been tempted to wonder how, among the jealousies of state and court, Edgar Atheling could subsist, being then the apparent and *indubitate* heir to the Saxon line. *Wotton.*

If we transport these proportions from audible to visible objects, there will *indubitably* result from either a graceful and harmonious contentment.
Id. Architecture.

Hence appears the vulgar vanity of reposing an *indubious* confidence in those antipestilential spirits.
Harvey.

The patriarchs were *indubitably* invested with both these authorities. *Sprat.*

I appeal to all sober judges, whether our souls may be only a mere echo from clashing atoms; or rather *indubitably* must proceed from a spiritual substance.
Bentley.

When general observations are drawn from so many particulars as to become certain and *indubitable*, these are jewels of knowledge. *Watts on the Mind.*

To INDUCE', *v. a.* Fr. *induire*; Lat. *induco.* To influence to any thing; to persuade: of persons.

The self-same argument in this kind, which doth but *induce* the vulgar sort to like, may constrain the wiser to yield. *Hooker.*

Desire with thee still longer to converse
Induced me. *Bacon.*

This lady, albeit she was furnished with many excellent endowments, both of nature and education, yet would she never be *induced* to entertain marriage with any. *Hayward.*

Let not the covetous design of growing rich *induce* you to ruin your reputation, but rather satisfy yourself with a moderate fortune; and let your thoughts be wholly taken up with acquiring to yourself a glorious name. *Dryden.*

To produce by persuasion or influence: of things.

Let the vanity of the times be restrained, which the neighbourhood of other nations have *induced*, and we strive apace to exceed our pattern. *Bacon.*

As belief is absolutely necessary to all mankind, the evidence for *inducing* it must be of that nature as to accommodate itself to all species of men. *Forbes.*

To offer by way of induction, or consequential reasoning.

They play much upon the simile, or illustrative argumentation, to *induce* their enthymemes unto the people, and take up popular conceits. *Browne.*

To inculcate; to enforce.

This *induces* a general change of opinion, concerning the person or party like to be obeyed by the greatest or strongest part of the people. *Temple.*

To cause extrinsically; to produce; to effect.

Sour things *induce* a contraction in the nerves, placed in the mouth of the stomach, which is a great cause of appetite. *Bacon.*

Acidity, as it is not the natural state of the animal fluids, but *induced* by aliment, is to be cured by aliment with the contrary qualities. *Arbuthnot.*

To introduce; to bring into view.

To exprobate their stupidity, he *induceth* the providence of storks: now, if the bird had been unknown, the illustration had been obscure, and the exprobration not so proper. *Browne.*

The poet may be seen *inducing* his personages in the first Iliad, where he discovers their humours, interests, and designs. *Pope.*

To bring on; to superinduce; to effect gradually.

Now Night her course began, and over heaven
Inducing darkness, graceful truce imposed,
And silence on the odious din of war.
Milton. Paradise Lost.

Schism is marked out by the apostle as a kind of petrifying crime, which *induces* that induration to which the fearful expectation of wrath is consequent. *Decay of Piety.*

INDUCE'MENT, *n. s.* From induce. Motive to any thing; that which allures or persuades to any thing.

The former *inducements* do now much more prevail, when the very thing hath ministered further reason. *Hooker.*

Many *inducements*, besides Scripture, may lead me to that, which if Scripture be against, they are of no value, yet otherwise are strongly effectual to persuade. *Id.*

That moved me to't,
Then mark the' *inducement*.
Shakspeare. Henry VIII.

He lives
Higher degree of life: *inducement* strong
For us. *Milton.*

My *inducement* hither,
Was not at present here to find my son. *Id.*

Instances occur of oppression, to which there appears no *inducement* from the circumstances of the actors. *Rogers.*

INDU'CER, *n. s.* From induce. A persuader; one that influences.

INDUCT', *v. a.* } Fr. *induction;* Lat. *in-*
INDUC'TION, *n. s.* } *ductus.* To introduce; to
INDUC'TIVE, *adj.* } put in actual possession of a benefice: induction, introduction or entrance; in reasoning, induction is when, from several particular propositions, we infer one general: as, the doctrine of the Socinians cannot be proved from the gospels, it cannot be proved from the acts of the apostles, it cannot be proved from the epistles, nor the book of revelation; therefore it cannot be proved from the New Testament.—Watts's Logic. The act of taking possession of a benefice: inductive, leading to; persuasive; capable to infer; a produce; proceeding, not by demonstration but by induction.

The ceremonies in the gathering were first *inducted* by the Venetians. *Sandys' Travels.*

These promises are fair, the parties sure,
And our *induction* full of prosperous hope.
Shakspeare.

The inquisition by *induction* is wonderful hard; for the things reported are full of fables, and new experiments can hardly be made but with extreme caution. *Bacon.*

Abatements may take away infallible concludency in these evidences of fact, yet they may be probable and *inductive* of credibility, though not of science. *Hale's Origin of Mankind.*

A brutish vice,
Inductive mainly to the sin of Eve. *Milton.*

Mathematical things are only capable of clear demonstration: conclusions in natural philosophy are proved by *induction* of experiments, things moral by moral arguments, and matters of fact by credible testimony. *Tillotson.*

Although the arguing from experiments and observations by *induction* be no demonstration of general conclusions, yet it is the best way of arguing which the nature of things admits of, and may be looked upon as so much the stronger by how much the *induction* is more general: and, if no exception occur from phœnomena, the conclusion may be general. *Newton's Opticks.*

If a person thus instituted, though not *inducted*, takes a second benefice, it shall make the first void. *Ayliffe's Parergon.*

He brought in a new way of arguing from *induction*, and that grounded upon observation and experiments. *Baker.*

INDUCTION, in law. See PARSON. Induction is performed by a mandate from the bishop to the archdeacon, who usually issues out a precept to other clergymen to perform it for him. It is a form required by law, with intent to give all the parishioners due notice and sufficient certainty of their new minister, to whom their tythes are to be paid. The usual form of induction is as follows:—The inductor takes the clerk by the hand, and placing it on the key of the church, which must be then in the door, says, 'By virtue of this instrument, I induct you in the real, actual, and corporeal possession of the rectory or vicarage of A—, with all its fruits, profits, members, and appurtenances.' This done, he opens the door, puts the clerk in possession of the church, and shuts the door upon him; who, after he has tolled a bell (if there be any), to give the parishioners due notice of their new minister, comes out, and desires the inductor to indorse a certificate of his induction on the archdeacon's warrant, and all present signify it under their hands. Within two months after this the clerk must read the thirty-nine articles, in the parish church of his benefice, and in the time of common prayer, and declare his assent and consent: he must also then read the ordinary's certificate, in which is the declaration of his conformity, and of all this he must have two or three good

witnesses, who must sign that they heard him do it, and be ready to attest it, viva voce, if required; and, within six months after induction, he must also take the oaths of allegiance, supremacy, and abjuration, at the quarter-sessions, or in some one of the courts at Westminster Hall. This therefore is the investiture of the temporal part of the benefice, as institution is of the spiritual. And when a clerk is thus presented, instituted, and inducted into a rectory, he is then, and not before, in full and complete possession; and is called in law persona impersonata, or parson imparsonee.

INDUE', *v. a.* Lat. *induo.* To invest; to clothe. It seems sometimes to be, even by good writers, confounded with endow or indow, to furnish or enrich with any quality or excellence.

The angel, by whom God *indued* the waters of Bethesda with supernatural virtue was not seen; yet the angel's presence was known by the waters. *Hooker.*

His powers, with dreadful strength *indued.* *Chapman.*

One first matter all,
Indued with various forms. *Milton.*

INDULGE', *v. a.* & *v. n.* Latin *indulgeo.*
INDUL'GENCE, *n. s.*
INDUL'GENCY, *n. s.*
INDUL'GENT, *adj.*
INDUL'GENTLY, *adv.*
To encourage by compliance; to fondle; to favor; to gratify with concession; to foster. If the matter of indulgence be a single thing it has *with* before it; if it be a habit it has *in*: as, he indulged himself with a draught of wine; and, he indulged himself in shameful drunkenness. To grant, not of right but favor; to be favorable: indulgence, fondness; forbearance: tenderness, favor granted; grant of the church of Rome to remit certain temporal penalties; indulgent; kind; gentle; mild; gratifying: indulgently, without severity; without censure or self-reproach.

He is wel worthy to have pardon and forgevenessse of his sinne, that excuseth not his sinne, but knowlecheth and repenteth him, axing *indulgence.* *Chaucer. The Tale of Melibeus.*

Thou, that givest whores *indulgencies* to sin,
I'll canvass thee. *Shakspeare. Henry VI.*

They err, that through *indulgence* to others, or fondness to any sin in themselves, substitute for repentance any thing less. *Hammond on Fundamentals.*

He that not only commits some act of sin, but lives *indulgently* in it, is never to be counted a regenerate man. *Hammond.*

Ancient privileges, *indulged* by former kings to their people, must not without high reason be revoked by their successors. *Taylor.*

In purgatory, *indulgences*, and supererogation, the asserters seem to be unanimous in nothing but profit. *Decay of Piety.*

Restraint she will not brook,
And left to herself, if evil thence ensue,
She first his weak *indulgence* will accuse. *Milton.*

Indulgences, dispenses, pardons, bulls,
The sport of winds. *Id.*

Hereafter such in thy behalf shall be
The *indulgent* censure of posterity. *Waller.*

The lazy glutton safe at home will keep;
Indulge his sloth, and fatten with his sleep. *Dryden.*

The glories of our isle,
Which yet like golden ore, unripe in beds,
Expect the warm *indulgency* of heaven. *Id.*

The virgin entering bright, *indulged* the day
To the brown cave, and brushed the dreams away. *Id.*

But since among mankind so few there are,
Who will conform to philosophick fare,
This much I will *indulge* thee for thy ease,
And mingle something of our times to please. *Id.*

A mother was wont to *indulge* her daughters with dogs, squirrels, or birds; but then they must keep them well. *Locke.*

He must, by *indulging to* one sort of reprovable discourse himself, defeat his endeavours against the rest. *Government of the Tongue.*

Talk not of comfort, 'tis for lighter ills;
I will *indulge* my sorrows, and give way
To all the pangs and fury of despair. *Addison's Cato.*

God has done all for us that the most *indulgent* Creator could do for the work of his hands. *Rogers.*

If all these gracious *indulgencies* are without any effect on us, we must perish in our own folly. *Id.*

Leo X. is deservedly infamous for his base prostitution of *indulgencies.* *Atterbury.*

To live like those that have their hope in another life, implies that we *indulge* ourselves in the gratifications of this life very sparingly. *Id.*

In known images of life, I guess
The labour greater, as the *indulgence* less. *Pope.*

My friend, *indulge* one labour more,
And seek Atrides. *Id. Odyssey.*

Yet, yet a moment, one dim ray of light
Indulge, dread chaos and eternal night! *Pope.*

Truth, goodness, harmony, and love,
The richest bounty of *indulgent* Heaven. *Thomson.*

Beyond the sense
Of light reflection, at the genial board
Indulge not often. *Armstrong.*

The desire of ease acts equally at all hours, and the longer it is *indulged* is the more increased. *Johnson's Rambler.*

That she is rigid in denouncing death
On petty robbers, and *indulges* life
And liberty, and ofttimes honour too,
To peculators of the public gold. *Cowper.*

To *indulge* a pious emotion, to keep it in our minds, to meditate on its object, and with reverence and in due season to give it vocal expression, cannot fail to strengthen it. *Beattie.*

They who have nothing more to fear may well
Indulge a smile at that which once appalled,
As children at discovered bugbears. *Byron.*

What gamester, who reduced himself from opulence to beggary, by the intemperate *indulgence* of a mad infatuation, does not after sitting down and venting his execrations for half an hour against his ill fortune and his folly, get up again greatly relieved by so happy an expedient. *Canning. Microcosm.*

INDULGENCE, in the Romish church, the remission of the punishment due to sins, granted by the church, and supposed to save the sinner from purgatory. According to the Romish doctrine, all the good works of the saints, over and above those which were necessary towards their own justification, are deposited, together with the infinite merits of Jesus Christ, in one inexhaustible treasury. The keys of this were com-

mitted to St. Peter, and to his successors the popes, who may open it at pleasure, and by transferring a portion of this superabundant merit to any particular person, for a sum of money, may convey to him either the pardon of his own sins, or a release for any one in whom he is interested, from the pains of purgatory. Indulgences were first invented in the eleventh century, by Urban II., as a recompense for those who went in person upon the glorious enterprise of conquering the Holy Land. They were afterwards granted to those who hired a soldier for that purpose; and, in process of time, were bestowed on such as gave money for accomplishing any pious work enjoined by the pope. This power of granting indulgences has been greatly abused. Pope Leo X., in order to carry on the magnificent structure of St. Peter's at Rome, published indulgences, and plenary remission, to all who should contribute money towards it. Finding the project take, he granted to Albert, elector of Mentz, and archbishop of Magdeburg, the benefit of the indulgences of Saxony and the neighbouring parts, and farmed out those of other countries to the highest bidders; who, to make the best of their bargain, procured the ablest preachers to cry up the value of the ware. The form of these indulgences was as follows: 'May our Lord Jesus Christ have mercy upon thee, and absolve thee by the merits of his most holy passion. And I, by his authority, that of his blessed apostles Peter and Paul, and of the most holy pope, granted and committed to me in these parts, do absolve thee, first from all ecclesiastical censures, in whatever manner they have been incurred; then from all thy sins, transgressions, and excesses, how enormous soever they may be, even from such as are reserved for the cognizance of the holy see, and as far as the keys of the holy church extend, the crime of heresy excepted. I remit to you all punishment which you deserve in purgatory on their account; and I restore you to the holy sacraments of the church, to the unity of the faithful, and to that innocence and purity which you possessed at baptism; so that when you die the gates of punishment shall be shut, and the gates of the paradise of delight shall be opened: and, if you shall not die at present, this grace shall remain in full force when you are at the point of death. In the name of the Father, and of the Son, and of the Holy Ghost.' The terms in which the retailers of indulgences described their benefits, and the necessity of purchasing them, are so extravagant, that they appear almost incredible.

'If any man,' said they, 'purchases letters of indulgence, his soul may rest secure with respect to its salvation. The souls confined in purgatory, for whose redemption indulgences are purchased, as soon as the money tinkles in the chest, instantly escape from that place of torment, and ascend into heaven. That the efficacy of indulgences was so great, that the most heinous sins, even if one should violate (which was impossible) the mother of God, would be remitted and expiated by them, and the person be freed both from punishment and guilt. That this was the unspeakable gift of God, in order to reconcile men to himself. Lo! the heavens are open; if you enter not now, when will you enter? For twelve pence you may redeem the soul of your father out of purgatory; and are you so ungrateful, that you will not rescue your parent from torment? If you had but one coat, you ought to strip yourself instantly and sell it, in order to purchase such benefits, &c.' This monstrous abuse of indulgences contributed greatly to the reformation of religion in Germany, where Martin Luther first began to declaim against the preachers of them, and afterwards against indulgences themselves. Since that period, the popes have been more sparing in the exercise of this power: however, they still carry on a great trade in them. 'Happy times for sinners,' says a modern writer, 'their crimes were rated, and the remission of them set up by auction. The apostolic chamber taxed sins at a pretty reasonable rate; it cost but ninety livres and a few ducats for crimes which people on this side the Alps punished with death.' The prices are specified in a book of rates called the tax-book of the holy apostolic chancery, first printed at Rome in the year 1514, and ascribed by some to pope Innocent VIII. From a correct edition of this book, printed by L. Banck, professor at Norkopin, in Gothland, in 1651, it appears that the price of absolution for fornication, attended with the most heionus circumstances, was six grossi or groats; for a layman's murdering a layman five groats; for laying violent hands on a priest, without shedding blood, nine groats; for committing incest five groats; for a priest's keeping a concubine seven groats; for forging the pope's hand-writing seventeen or eighteen groats.

The following account of the existing mode of procuring indulgences in Spain, by the Rev. Joseph Blanco White, late a Catholic priest in that country, will give to our readers a sufficient idea of their nature and effect:—'The Spanish government,' says this respectable writer, 'has two or three paltry fortresses on the coast of Africa, which are employed as places of punishment for criminals. The existence of a few soldiers in these garrisons is construed into a perpetual war against the infidels, with whom, in the mean time, the king of Spain is mostly at peace, from inability to oppose to them an effectual resistance. The see of Rome, which wants but a slight pretext to spiritualise whatever may open a market for its wares, calls this state of things, between the Spaniards and the Africans, a perpetual war against the infidels; which being according to the principles of that see, a meritorious Christian act, deserves a pastoral encouragement. For this purpose every year are printed summaries of a papal bull, which the Spaniards purchase at different prices, according to their rank and wealth, in order to enjoy the indulgences and privileges granted by the pope in exchange for their alms. The benefits to be derived from the possession of one of these bulls are several plenary indulgences, and leave to eat, during Lent, milk, eggs, and butter, which are otherwise forbidden, under pain of mortal sin, at that season. The sale of these privileges having been found most valuable and extensive, a second, third, and even a fourth

bull, of a similar kind, were devised. The flesh bull, as it is called in Spain, allows the purchasers to eat meat during Lent every Sunday, Monday, Tuesday, and Thursday, except in passion week. The third bull is called the compounding bull. By possessing one of these documents, and giving a certain sum, at the discretion of any priest authorised to hear confessions, to the fund of the holy crusades; any property may be kept which, having been obtained by robbery and extortion, cannot be traced to its right owners for restitution. This composition with the pope and the king is made by depositing the sum appointed by the confessor in an iron chest, fixed outside the doors of churches: a comfortable resource indeed for the tender consciences of peculators and extortioners, two very numerous classes in Spain. The fourth bull is to be purchased for the benefit of the deceased, and is called the defunct bull. The name of any dead person being entered on the bull, a plenary indulgence is by this means believed to be conveyed to his soul, if suffering in purgatory. To secure, however, a double sale, the three latter bulls are made of no effect, unless the original summary of the crusade be possessed by the person who wishes to enjoy the dispensations and privileges therein set forth. It is also a very common practice to bury these bulls with the corpses of those whom they are intended to benefit.'

INDULT', or IDDUL'TO, *n.s.* Ital. and Fr. Privilege or exemption.

INDULT, in the church of Rome, is the power of presenting to benefices granted to certain persons by the pope. Of this kind is the indult of kings and sovereign princes in the Romish communion, and that of the parliament of Paris, granted by several popes. By the concordat for the abolition of the Pragmatic sanction, made between Francis I. and Leo X. in 1516, the French king had the power of nominating to bishoprics, and other consistorial benefices, within his realm. At the same time, by a particular bull, the pope granted him the privilege of nominating to the churches of Brittany and Provence. In 1648 pope Alexander VIII., and in 1668 Clement IX., granted the king an indult for the bishopric of Metz, Toul, and Verdun, which had been yielded to him by the treaty of Munster; and in 1668 the same pope Clement IX. granted him an indult for the benefices in the counties of Rousillon, Artois, and the Netherlands. The cardinals likewise have an indult granted them by agreement between pope Paul IV. and the sacred college in 1555, which is always confirmed by the popes at the time of their election. By this treaty the cardinals have the free disposal of all the benefices depending on them, and are empowered likewise to bestow a benefice in commendam.

IN'DURATE, *v.a.* & *v.n.* } Lat. *induro*. To
INDURA'TION, *n.s.* } make hard; to grow hard; to harden, whether substances or feelings; to sear the conscience; obduracy; hardness of heart.

Yet forgate I to maken rehersaile
Of waters corosif, and of limaile;
And of bodies mollification,
And also of hir *induration*.
Chaucer. The Chanones Yemannes Tale.

Stones within the earth at first are but rude earth or clay; and so minerals come at first of juices concrete, which afterwards *indurate*.
Bacon's Natural History.

This is a notable instance of condensation and *induration*, by burial under earth, in caves for a long time. *Bacon.*

That plants and ligneous bodies may *indurate* under water without approachment of air, we have experiments in coralines. *Browne's Vulgar Errours.*

INDUS, also known as the Nilab and Sinde, is an important river, having its source in a range of the mountains of Tartary, between 38° and 39° of N. lat. After passing Lahdack, in Thibet, it takes a south-westerly course through the mountains called the Hindoo Koh, and enters Hindostan in about 35° of N. lat. It has always been considered as the western barrier of Hindostan. Sixty miles from its source it is joined by the Cabul, when it is no longer fordable. It is confined by hills at the fort of Attock, and is here less than 300 yards wide, but both deep and rapid. In lat. 33° it enters the valley of Isa Kheel, and is divided by islands into several streams. In lat. 28° 20′ it is joined by the Punjnud, and, declining to the south-east, it enters the province of Sinde, between 25° and 26° of lat. Here we find it again divided into two considerable branches; the principal or western divides into numerous streams, which form a Delta similar to that of the Nile or Ganges: they are, however, very shallow, and only navigable by boats: although the tide enters with great violence, it does not run up above seventy miles. This river is said to be 1350 miles in length, and some parts of it are capable of bearing vessels of 200 tons. But there is very little commerce transported by it. Its water is very wholesome.

INDUS'TRIOUS, *adj.* } Fr. *industrieux*;
INDUS'TRIOUSLY, *adv.* } Span., Port., Italian,
IN'DUSTRY, *n. s.* } and Latin, *industria*. Diligent, as opposed to slothful; laborious; designed; done for the purpose. Industriously, in a diligent, assiduous, laborious manner; designedly. Industry, habitual exertion.

Let our just censures
Attend the true event, and put we on
Industrious soldiership. *Shakspeare.*

Great Britain was never before united under one king, notwithstanding that the uniting had been *industriously* attempted both by war and peace. *Bacon.*

His thoughts were low:
To vice *industrious*; but to nobler deeds
Timorous and slothful. *Milton.*

Frugal and *industrious* men are commonly friendly to the established government. *Temple.*

Rich *industry* sits smiling on the plains,
And peace and plenty tell a Stuart reigns.
Pope. Windsor Forest.

I am not under the necessity of declaring myself, and I *industriously* conceal my name, which wholly exempts me from any hopes and fears. *Swift.*

Friends, books, a garden, and perhaps his per,
Delightful *industry* enjoyed at home. *Cowper.*

True, thou art rich, art powerful—through thine isle
Industrious Skill, contented Labour smile:
Far seas are studded with thy countless sails;
What wind but wafts them, and what shore but hails?
Canning.

INEBRIANT, in medicine is a term applied to any thing that affects the nerves, so as through them to alter and disturb the functions of the mind, and produce intoxication. Inebriants are divided into natural and artificial; the former chiefly in use among the oriental and other nations, the latter principally throughout Europe. Artificial inebriants are fermented liquors from farinaceous seeds, wines, and spirits, drawn by distillation. Natural inebriants are opium; in use all over the East, and of which the Turks, through custom, swallow large quantities. Peganum harmala, Syrian rue. The seeds of which are sold in Turkey for this purpose; and with these, as Bellonius relates, the Turkish emperor Solyman kept himself in a continual state of intoxication. Maslac of the Turks, or bangue of the Persians, prepared from the dust of the male-flower of hemp, or from the leaves. Bangue of the Indians, from the leaves of the hibiscus sabdariffa. Pinang, or betel of the Indians. Leaves of millfoil are used by the Dalecarlians to render their beer intoxicating. Tobacco, and several others less material, may also be enumerated in the list of natural inebriants.

INE'BRIATE, *v. a.* & *v. n.* } Lat. *inebrio.*
INEBRIA'TION, *n. s.* } To intoxicate; to make drunk; to grow drunk; a state of drunkenness or intoxication.

Fish, entering far in and meeting with the fresh water, as if *inebriated*, turn up their bellies and are taken.
Sandys.

Wine sugared *inebriateth* less than wine pure; sops in wine, quantity for quantity, *inebriate* more than wine of itself. *Bacon.*

That cornelians and bloodstones may be of virtue, experience will make us grant; but not that an amethyst prevents *inebriation*. *Browne.*

INEFFABI'LITY, *n. s.* } French *ineffable*;
INEF'FABLE, *adj.* } Span. *inefable*; Lat.
INEF'FABLY, *adv.* } *ineffabilis.* Not to be expressed in words; unutterable: almost always used in a good sense; in a manner not to be expressed.

To whom the Son, with calm aspect, and clear,
Light'ning divine, *ineffable*, serene!
Made answer. *Milton.*

He all his father full expressed,
Ineffably into his face received. *Id.*

Reflect upon a clear, unblotted, acquitted conscience, and feed upon the *ineffable* comforts of the memorial of a conquered temptation. *South.*

But I lose
Myself in Him, in light *ineffable*.
Thomson's Seasons.

INEFFEC'TIVE, *adj.* } Fr. *ineffectif, inefficace*; Lat. *ineffectus, inefficax.* That can produce no effect, as weak and deficient in power; unable to produce effects; weak; feeble. Ineffectual rather denotes an actual failure; and inefficacious, an habitual impotence to any effect.
INEFFEC'TUAL, *adj.*
INEFFEC'TUALLY, *adv.*
INEFFEC'TUALNESS, *n. s.*
INEFFICA'CIOUS, *adj.*
INEF'FICACY, *n. s.*

The publick reading of the Apocrypha they condemn as a thing effectual unto evil: the bare reading even of Scriptures themselves they mislike, as a thing *ineffectual* to do good. *Hooker.*

As the body, without blood, is a dead and lifeless trunk; so is the word of God, without the spirit, a dead and *ineffective* letter. *Taylor.*

He that assures himself he never errs, will always err; and his presumptions will render all attempts to inform him *ineffective*. *Glanville.*

Is not that better than always to have the rod in hand, and, by frequent use, misapply and render *inefficacious* this useful remedy? *Locke.*

Faint are his gleams, and *ineffectual* shoot
His straggling rays in horizontal lines
Through the thick air.
Thomson's Seasons. Winter.

INEL'EGANCE, *n. s.* } Lat. *inelegans, in, eligo.* These words imply absence of beauty, and are applicable to the motions of the body, the language, and the attire.
INEL'EGANCY, *n. s.*
INEL'EGANT, *adj.*

This very variety of sea and land, hill and dale, which is here reputed so *inelegant* and unbecoming, is indeed extremely charming and agreeable.
Woodward.

Modern criticks, having never read Homer, but in low and *inelegant* translations, impute the meanness of the translation to the poet. *Broome.*

INEL'OQUENT, *adj.* Lat. *in* and *eloquens.* Not persuasive; not oratorical; opposite to eloquent.

INEPT', *adj.* } Lat. *ineptus.* Trifling; foolish; unfit for any purpose: more correctly inaptitude, and then derived from Lat. *in* and *aptus.*
INEPT'LY, *n. s.*
INEP'TITUDE, *adv.*

All things were at first disposed by an omniscient intellect, that cannot contrive *ineptly*. *Glanville.*

The works of Nature, being neither useless nor *inept*, must be guided by some principle of knowledge.
More.

None of them are made foolishly or *ineptly*. *Id.*

When the upper and vegetative stratum was once washed off by rains, the hills would have become barren, the strata below yielding only mere sterile matter, such as was wholly *inept* and improper for the formation of vegetables. *Woodward.*

There is an *ineptitude* to motion from too great laxity, and an *ineptitude* to motion from too great tension. *Arbuthnot.*

INEQUALITY, *n. s.* Fr. *inegalité*, from Lat. *inæqualitas* and *inæqualis.* Difference of comparative quantity.

The thridde houre *inequal* that Palamon
Began to Venus temple for to gon,
Up rose the sonne, and up rose Emilie.
Chaucer. The Knightes Tale.

There is so great an *inequality* in the length of our legs and arms, as makes it impossible for us to walk on all four. *Ray.*

Unevenness; interchange of higher and lower parts.

The country is cut into so many hills and *inequalities* as renders it defensible. *Addison on Italy.*

The glass seemed well wrought; yet, when it was quicksilvered, the reflexion discovered innumerable *inequalities* all over the glass. *Newton's Opticks.*

If there were no *inequalities* in the surface of the earth, nor in the seasons of the year, we should lose a considerable share of the vegetable kingdom.
Bentley.

Disproportion to any office or purpose; state of not being adequate; inadequateness.

The great *inequality* of all things to the appetites of a rational soul appears from this, that in all worldly things a man finds not half the pleasure in the actual possession that he proposed in the expectation. *South.*

Change of state; unlikeness of a thing to itself; difference of temper or quality.

In some places, by the nature of the earth, and by the situation of woods and hills, the air is more unequal than in others; and *inequality* of air is ever an enemy to health. *Bacon.*

Difference of rank or station.

If so small *inequality* between man and man make in them modesty a commendable virtue, who, respecting superiors as superiors, can neither speak nor stand before them without fear. *Hooker.*

INERRABIL'ITY, *n. s.* Lat. *in* and *erro.* INER'RABLE, *adj.* INER'RABLENESS, *n. s.* INER'RABLY, *adv.* INER'RINGLY, *adv.* Exemption from error; infallibility: old words, now obsolete.

I connot allow their wisdom such a completeness and *inerrability* as to exclude myself from judging. *King Charles.*

That divers limners at a distance, without copy, should draw the same picture, is more conceivable, than that matter should frame itself so *inerringly* according to the idea of its kind. *Glanville.*

We have conviction from reason, or decisions from the *inerrable* and requisite conditions of sense. *Browne.*

INERT', *adj.* Lat. *iners.* Dull; sluggish; INERT'LY, *adv.* without energy.

Body alone, *inert* and brute, you'll find;
The cause of all things is by you assigned. *Blackmore.*

Ye powers,
Suspend a while your force *inertly* strong. *Dunciad.*

Were brute unlively mass, *inert* and dead. *Thomson.*

INESCA'TION, *n. s.* Lat. *in* and *esca.* The act of baiting.

INES'TIMABLE, *adj.* Fr. *inestimable;* Lat. *inestimabilis.* Too valuable to be rated; transcending all price.

I thought I saw a thousand fearful wrecks,
A thousand men that fishes gnawed upon;
Wedges of gold, great anchors, heaps of pearl,
Inestimable stones, unvalued jewels. *Shakspeare. Richard III.*

And shall this prize, the' *inestimable* prize,
On that rapacious hand for ever blaze? *Pope.*

Thus, with indulgence most severe, she cheats
Us spendthrifts of *inestimable* time;
Unnoted notes each moment misapplied. *Young.*

INEV'IDENT, *adj.* Fr. *inevident.* In and evident. Not plain; obscure. Not in use.

The habit of faith in divinity is an argument of things unseen, and a stable assent unto things *inevident*, upon authority of the divine revealer. *Browne.*

INEV'ITABILITY, *n. s.* INEV'ITABLE, *adj.* INEV'ITABLY, *adv.* Fr. Span. and Port. *inevitable;* Ital. *inevitabile;* Lat. *in, evito.* Impossibility to be avoided; certainty: without possibility of escape; not to be shunned.

I had a pass with him: he gives me the stuckin with such a mortal motion, that it is *inevitable.* *Shakspeare. Twelfth Night.*

Inflammations of the bowels oft *inevitably* tend to the ruin of the whole. *Harvey on Consumptions.*

Fate *inevitable*
Subdues us. *Milton.*

The day thou eatest thereof, my sole command
Transgrest, *inevitably* thou shalt die. *Id.*

If they look no further than the next line, it will *inevitably* follow, that they can drive to no certain point. *Dryden.*

Since my *inevitable* death you know,
You safely unavailing pity show. *Id. Aurengzebe.*

Inevitable hour! 'gainst fate to strive
Where Desolation plants her famished brood
Is vain; or Ilion, Tyre might yet survive,
And Virtue vanquish all, and Murder cease to thrive. *Byron. Childe Harold.*

INEXCU'SABLE, *adj.* INEXCU'SABLENESS, *n. s.* INEXCU'SABLY, *adv.* Fr. *inexcusable;* Lat. *in excuso.* Not to be excused or palliated by apology: enormity beyond forgiveness or palliation.

It will *inexcusably* condemn some men, who, having received excellent endowments, yet have frustrated the intention. *Browne.*

It is a temerity, and a folly *inexcusable*, to deliver up ourselves needlessly into another's power. *L'Estrange.*

Their *inexcusableness* is stated upon the supposition that they knew God, but did not glorify him. *South.*

Such a favour could only render them more obdurate, and more *inexcusable:* it would enhance their guilt. *Atterbury.*

If learning be not encouraged under your administration, you are the most *inexcusable* person alive. *Swift.*

INEXHA'LABLE, *adj.* In and exhale. That which cannot evaporate.

A new laid egg will not so easily be boiled hard, because it contains a great stock of humid parts, which must be evaporated before the heat can bring the *inexhalable* parts into consistence. *Browne.*

INEXHAUST'ED, *adj.* INEXHAUST'IBLE, *adj.* Lat. *in, exhaustus.* That cannot be emptied, or drawn away.

So wert thou born into a tuneful strain,
An early, rich, and *inexhausted* vein. *Dryden.*

The stock that the mind has in its power, by varying the idea of space, is perfectly *inexhaustible*, and so it can multiply figures in infinitum. *Locke.*

And if, in the ardour of narration, I by chance had drained the sources of reality, and emptied the stores of truth, I betook myself, without hesitation, to ransacking the riches of fiction; and trusted implicitly to the *inexhaustible* fertility of my own invention. *Canning's Microcosm.*

INEXIS'TENT, *adj.* INEXIS'TENCE, *n. s.*, Lat. *in, existo.* Not having being; not to be found in nature; existing in something else: not much used.

To express complexed significations, they took a liberty to compound and piece together creatures of allowable forms into mixtures *inexistent.* *Browne.*

We doubt whether these heterogeneities be so much as *inexistent* in the concrete, whence they are obtained. *Boyle.*

He calls up the heroes of former ages from a state of *inexistence* to adorn and diversify his poem. *Broome on the Odyssey.*

INEXO'RABLE, *adj.* Fr. and Span. *inexorable*; Lat. *inexorabilis*. Not to be intreated; not to be moved by intreaty.

You are more inhuman, more *inexorable*,
Oh ten times more, than tygers of Hyrcania!
Shakspeare.

Inexorable dog! *Id. Merchant of Venice.*

The scourge
Inexorable calls to penance. *Milton.*

The guests invited came,
And with the rest the' *inexorable* dame.
Dryden.

Behold the *inexorable* hour at hand!
Behold the *inexorable* hour forgot:
And to forget it, the chief aim of life,
Though well to ponder it is life's chief end.
Young.

A weakness of the spirit—listless days,
And nights *inexorable* to sweet sleep,
Have come upon me. *Byron.*

INEXPE'DIENT, *n. s.* } Lat. *in expedio.*
INEXPE'DIENCE, *n. s.* } Want of fitness;
INEXPE'DIENCY. } want of propriety; unsuitableness to time or place; inconvenience.

It concerneth superiors to look well to the expediency or *inexpediency* of what they enjoin in different things. *Sanderson.*

We should be prepared not only with patience to bear, but to receive with thankfulness a repulse, if God should see them to be *inexpedient*. *Smalridge.*

INEXPE'RIENCE, *n. s.* } Fr. *inexperience*;
INEXPE'RIENCED, *adj.* } Lat. *in, expertus.*
INEXPERT', *adj.* } Want of experimental knowledge; unskilful: not experienced: not having tried. Inexpert, not ready or apt at any thing.

The race elect advance
Through the wild desert; not the readiest way,
Lest, entering on the Canaanite alarmed,
War terrify them *inexpert*. *Milton.*

Thy words at random argue thine *inexperience*.
Id.

In letters and in laws
Not *inexpert*. *Prior.*

With all his canvas set, and *inexpert*,
And therefore heedless, can withstand thy power?
Cowper.

(Through *inexperience* as we now perceive),
We missed that happiness we might have found.
Id. Task.

INEX'PIABLE, *adj.* } Fr. *inexpiabile*; Lat. *in, expio.* Not to be atoned or mollified by atonement: to a degree beyond reconciliation.
INEX'PIABLY, *adv.* }

Love seeks to have love;
My love how could'st thou hope, who took'st the way
To raise in me *inexpiable* hate? *Milton's Agonistes.*

Excursions are *inexpiably* bad,
And 'tis much safer to leave out than add.
Roscommon.

INEXPLE'ABLY, *adv.* Lat. *in* and *expleo.* Insatiably. A word not in use.

What were these harpies but flatterers, delators, and the *inexpleably* covetous? *Sandys' Travels.*

INEX'PLICABLE, *adj.* } Fr. *inexplicable*;
INEX'PLICABLY, *adv.* } Lat. *in, explico.* Not to be disentangled, explained, or made intelligible.

What could such apprehensions breed, but, as their nature is, *inexplicable* passions of mind, desires abhorring what they embrace, and embracing what they abhor? *Hooker.*

To me at least this seems *inexplicable*, if light be nothing else than pression or motion propagated through ether. *Newton.*

None eludes sagacious reason more,
Than this obscure *inexplicable* power. *Blackmore.*

There is a calm upon me—
Inexplicable stillness. *Byron.*

INEXPRES'SIBLE, *adj.* } Lat. *in, expressus.*
INEXPRES'SIBLY, *adv.* } Not to be told or uttered: beyond the power of language to state or describe.

God will protect and reward all his faithful servants in a manner and measure *inexpressibly* abundant. *Hammond.*

Thus when in orbs
Of circuit *inexpressible* they stood,
Orb within orb. *Milton's Paradise Lost.*

The true God had no certain name given to him, for Father, and God, and Creator, are but titles arising from his works; and God is not a name, but a notion ingrafted in human nature of an *inexpressible* being. *Stillingfleet.*

He began to play upon it: the sound was exceeding sweet, and wrought into a variety of tunes that were *inexpressibly* melodious. *Addison's Spectator.*

INEXPUG'NABLE, *adj.* Fr. *inexpugnable*; Lat. *inexpugnabilis*. Impregnable; not to be taken by assault; not to be subdued.

Why should there be implanted in each sex such a vehement and *inexpugnable* appetite of copulation? *Ray.*

INEXTIN'GUISHABLE, *adj.* Fr. *inextinguible*; Lat. *in* and *extinguo.* Unquenchable.

Pillars, statues, and other memorials, are a sort of shadow of an endless life, and show an *inextinguishable* desire which all men have of it. *Grew.*

——— in his eye
The *inextinguishable* spark, which fires
The souls of patriots. *Glover's Leonidas.*

INEX'TRICABLE, *adj.* } Fr. *inextricable*;
INEX'TRICABLY, *adv.* } Lat. *in, extricabilis.* Not to be disentangled; not to be cleared; not to be set free from obscurity or perplexity.

He that should tie *inextricable* knots, only to baffle the industry of those that should attempt to unloose them, would be thought not to have served his generation. *Decay of Piety.*

Men are led into *inextricable* mazes by setting up themselves as judges of the world. *Sherlock.*

In vain they strive; the' intangling snares deny,
Inextricably firm, the power to fly. *Pope's Odyssey.*

INEYE', *v. n.* In and eye. To inoculate; to propagate trees by the insition of a bud into a foreign stock.

Let sage experience teach thee all the arts
Of grafting and *ineyeing*. *Phillips.*

INFALISTATIO, an ancient punishment of felons, by throwing them among the rocks and sands used in sea-port towns. Some think, that infalistatus implied some capital punishment, by exposing the malefactor upon the sands till the next tide carried him away; of which custom it is said there is an old tradition. However, the penalty seems to take its name from the Norman falese, or falesia, which signified not the sands, but the rocks and cliffs impending on the seashore. Commisit feloniam, ob quam fuit suspensus, ut legatus, vel alio modo morti damnatus, &c. vel apud Dover infalistatus, apud Southampton submersus, &c.

INFALLIBIL'ITY, *n. s.* / INFAL'LIBLENESS, *n. s.* / INFAL'LIBLE, *adj.* / INFAL'LIBLY, *adv.* Fr. and Span. *infallible*; Ital. *infallibile*; Lat. *in, fallor*. Exemption from error. privileged from error; incapable of mistake; not to be misled or deceived; certain. Used both of persons and things. Infallibly, with certainty; without danger from deceit; sure in accomplishment.

Every cause admitteth not such *infallible* evidence of proof, as leaveth no possibility of doubt or scruple behind it. *Hooker.*

Believe my words;
For they are certain and *infallible*.
Shakspeare. Henry VI.

Infallibility is the highest perfection of the knowing faculty, and consequently the firmest degree of assent. *Tillotson.*

The success is certain and *infallible*, and none ever yet miscarried in the attempt. *South.*

We cannot be as God, *infallibly* knowing good and evil. *Smalridge's Sermons.*

INFALLIBILITY OF THE POPE. See POPERY.

INFAME', *v. a.* / IN'FAMOUS, *adj.* / IN'FAMOUSLY, *adv.* / IN'FAMOUSNESS, *n. s.* / IN'FAMY, *n. s.* Fr. *infame*; Ital. *infama*; Lat. *in, fama*. To represent to disadvantage; to defame; to censure publicly; to make infamous; to brand. To defame is now used. Infamously, with open reproach; with public notoriety; shamefully; scandalously: infamy, notoriety of bad character.

Those that be near, and those that be far from thee, shall mock thee, which art *infamous*. *Ezek.*

The noble isle doth want her proper limbs,
Her face defaced with scars of *infamy*.
Shakspeare.

Livia is *infamed* for the poisoning of her husband. *Bacon.*

Hitherto obscured, *infamed*,
And thy fair fruit let hang, as to no end
Created. *Milton.*

That poem was infamously bad.
Dryden's Dufresnoy.

At fifty chides his *infamous* delay,
Pushes his prudent purpose to resolve. *Young.*

And to decline it when these motives urge
Is *infamy* beneath a coward's baseness.
Havard's Regulus.

Even in destruction's depth, her foreign foes,
From whom submission wrings an *infamous* repose.
Byron. Childe Harold.

His name is never pronounced by his relations but with disapprobation and disgust; and his memory is consigned to *infamy*. *Canning. Microcosm.*

INFAMY, in law, is a term which extends to forgery, perjury, gross cheats, &c., by which a person is rendered incapable of being a witness or juror, though he is pardoned for his crimes.

IN'FANCY, *n. s.* / IN'FANT, *n. s.* & *adj.* / INFAN'TA, *n. s.* / INFAN'TICIDE, *n. s.* / IN'FANTILE, *adj.* / IN'FANTRY, *n. s.* Fr. *enfant, infanterie*, Lat. *infans, infanticidium*. The first part of life usually extended to seven years; civil infancy or minority is extended to twenty-one years; first age; beginning or commencement of any thing. Infant, not mature; early; imperfect. Infanta, a princess descended from the royal blood of Spain. Infanticide, the slaughter of infants. Infantile, pertaining to an infant. Infantry, the foot soldiers of an army.

There shall be no more thence an *infant* of days, nor an old man that hath not filled his days. *Isaiah* lxv. 20.

At length a shepheard, which thereby did keepe
His fleecie flocke upon the playnes around,
Led with the *infants* cry, that loude did weepe,
Came to the place, where when he wrapped found
The abandoned spoyle, he softly it unbound.
Spenser. Faerie Queene.

Dare we affirm it was ever his meaning, that unto their salvation, who even from their tender *infancy* never knew any other faith or religion than only Christian, no kind of teaching can be available, saving that which was so needful for the first universal conversion of Gentiles, hating Christianity? *Hooker.*

It being a part of their virtuous education, serveth greatly both to nourish in them the fear of God, and to put us in continual remembrance of that powerful grace, which openeth the mouths of *infants* to sound his praise. *Hooker*

Within the *infant* rind of this small flower
Poison hath residence, and medicine power.
Shakspeare.

The principal strength of an army consisteth in the *infantry* or foot; and to make good *infantry* it requireth men bred in some free and plentiful manner. *Bacon's Henry VII.*

But if you deign my ruder pipe to hear,
(Rude pipe, unused, untuned, unworthy hearing)
These *infantile* beginnings gently bear,
Whose best desert and hope must be your bearing.
Fletcher. Purple Island.

That small *infantry*
Warred on by cranes. *Milton.*

Pirithous came t' attend
This worthy Theseus, his familiar friend:
Their love in early *infancy* began,
And rose as childhood ripened into man.
Dryden.

In their tender nonage, while they spread
Their springing leaves and lift their *infant* head,
Indulge their childhood. *Id. Virgil.*

In Spain our springs, like old men's children, be
Decayed and withered from their *infancy*. *Dryden.*

Young mothers wildly stare, with fear possest,
And strain their helpless *infants* to their breast.
Id. Æneid.

The insensible impressions in our tender *infancies* have very important and lasting consequences. *Locke.*

The fly lies all the winter in these balls in its *infantile* state, and comes not to its maturity till the following spring. *Derham.*

The difference between the riches of Roman citizens in the *infancy* and in the grandeur of Rome, will appear by comparing the first variation of estates with the estates afterwards possessed. *Arbuthnot.*

Let such as deem it glory to destroy,
Rush into blood, the sack of cities seek,
Unpierced, exulting in the widow's wail,
The virgin's shriek, the *infant's* trembling cry.
Thomson.

Here first, at Fancy's fairy circled shrine
Of daisies pyed this *infant* offering made.
Warton. A Monody.

And yet poor Edwin was no vulgar boy,
Deep thought oft seemed to fix his *infant* eye;
Dainties he heeded not, nor gaude, nor toy,
Save one short pipe of rudest minstrelsy.
Beattie's Minstrel.

Both baby featured, and of *infant* size,
Viewed from a distance, and with heedless eyes.
Cowper. Progress of Error.

Or must such minds be nourished in the wild
Deep, in the unpruned forest, 'midst the roar
Of cataracts, where nursing Nature smiled
On *infant* Washington? Has Earth no more
Such seeds within her breast, or Europe no such store?
Byron. Childe Harold.

INFANCY. Anatomy discovers to us, that during infancy there is much imperfection in the human frame; e. g. its parts are disproportioned, and its organs incapable of those functions which in future life they are designed to perform. The head is larger in proportion to the bulk of the body than that of an adult. The liver and pancreas are much larger in proportion than in advanced life; their secretions are more in quantity also. The bile is very inert; the heart is stronger and larger than in future life; the quantity of blood sent through the heart of an infant, in a given time, is also more in proportion than in adults. Though these circumstances have their important usefulness, yet the imperfection attending them subjects this age to many injuries and dangers from which a more perfect state is exempted. Dr. Percival observes, that of all the children who are born alive, two-thirds do not live to be two years old.

INFA'NGTHEF, or HINGFANGTHEFT, or INANGTHEOF, is compounded of three Saxon words: the preposition in, fang, or fong, to take or catch, and thef. It signifies a privilege or liberty granted unto lords of certain manors to judge any thief taken within their fee.

INFANT. See INFANCY. Infants, amongst the Jews, Greeks, and Romans, were swaddled as soon as they were born, in a manner similar to that practised by the moderns. The Jews circumcised and named their infant children on the eighth day from their birth. Upon the birth of a son, the Grecians crowned their doors with olive; of a daughter, with wool. The infant was washed in warm water, and anointed with oil—by the Spartans with wine; it was then dressed, and laid in a basket, or on a shield if the father was a warrior. At five days old they ran with it round the fire, and the mother's relations sent presents. The Greeks named their children on the tenth day, the Romans on the ninth. The naming was attended with sacrifices and other demonstrations of joy. The maternal office of suckling their children was never declined, when circumstances would permit. The names of children were registered both among the Greeks and Romans.

INFANT, in law, is a person under twenty-one years of age; whose capacities and incapacities, and privileges are various.

The ages of male and female are different for different purposes. A male at twelve years old may take the oath of allegiance; at fourteen is at the years of discretion, and therefore may consent or disagree to marriage, may choose his guardian, and, if his discretion be actually proved, may make his testament of his personal estate; at seventeen may be an executor; and at twenty-one is at his own disposal, and may alien his lands, goods, and chattels. A female also at seven years of age may be betrothed; at nine is entitled to dower; at twelve is at years of maturity, and therefore may consent or disagree to marriage, and, if proved to have sufficient discretion, may bequeath her personal estate; at fourteen is at years of legal discretion, and may choose a guardian; at seventeen may be an executrix; and at twenty-one may dispose of herself and her lands. So that full age in male or female is at twenty-one years, which age is completed on the day preceding the anniversary of a person's birth; who till that time is an infant, and so styled in law. Among the ancient Greeks and Romans, women were never of age, but subject to perpetual guardianship, unless when married nisi convenissent in manum viri: and, when that perpetual tutelage wore away in process of time, we find that, in females as well as males, full age was not till twenty-five years. Thus, by the constitution of different kingdoms, this period, which is merely arbitrary, and juris positivi, is fixed at different times. Scotland agrees with England in this point; both probably copying from the old Saxon constitutions on the continent, which extended the age of minority ad annum vigesimum primum, et eo usque juvenes sub tutelam reponunt; but in Naples persons are of full age at eighteen, and in Holland at twenty-five. The very disabilities of infants are privileges; in order to secure them from injuring themselves by their own improvident acts. An infant cannot be sued but under the protection, and joining the name of his guardian; for he is to defend him against all attacks as well by law as otherwise; but he may sue either by his guardian or prochein amy, his next friend who is not his guardian. This prochein amy may be any person who will undertake the infant's cause; and it frequently happens that an infant, by his prochein amy, institutes a suit in equity against a fraudulent guardian. With regard to estates and civil property an infant has many privileges. In general, an infant shall lose nothing by nonclaim, or neglect of demanding his right; nor shall any other laches or negligence be imputed to an infant, except in some very particular cases. It is generally true that an infant can neither alien his lands, nor do any legal act, nor make a deed, nor any manner of contract, that will bind him. But, although infants cannot alien their estates, yet infant-trustees, or mortgages, are enabled to convey, under the direction of the court of chancery or exchequer, or other courts of equity, the estates they hold in trust or mortgage, to such person as the court shall appoint. Also it is generally true that an infant can do no legal act: yet an infant, who has an advowson, may present to the benefice when it becomes void. For the law in this case dispenses with one rule, in order to maintain others of far greater consequence; it permits an infant to present a clerk (who, if unfit, may be rejected by the bishop), rather than either suffer the church to be unserved till he comes of age, or permit the infant to be debarred of his right by lapse to the bishop. An infant may also purchase lands, but his purchase is incomplete; for, when he comes to age, he may either agree or disagree to it, as he thinks prudent or proper,

without alleging any reason; and so may his heirs after him, if he dies without having completed his agreement. It is, farther, generally true, that an infants under twenty-one can make no deed but what is afterwards voidable: yet in some cases he may bind himself apprentice by deed indented, or indentures for seven years; and he may by deed or will appoint a guardian to his children, if he has any. Lastly, it is generally true, that an infant can make no other contract that will bind him: yet he may bind himself to pay for his necessary meat, drink, apparel, physic, and such other necessaries; and likewise for his good teaching and instruction, whereby he may profit himself afterwards.

The law of England does in some cases privilege an infant under the age of twenty-one, as to common misdemeanors; so as to escape fine, imprisonment, and the like: and particularly in cases of omission, as not repairing a bridge, or a high-way, and other similar offences; for, not having the command of his fortune till the age of twenty-one, he wants the capacity to do those things which the law requires. But where there is any notorious breach of the peace, a riot, battery, or the like (which infants when full grown are at least as liable as others to commit); for those an infant above the age of fourteen is equally liable to suffer, as a person of the full age of twenty-one. With regard to capital crimes, the law is still more minute and circumspect; distinguishing with greater nicety the several degrees of age and discretion. By the ancient Saxon law, the age of twelve years was established for the age of possible discretion, when first the understanding might open; and thence till the offender was fourteen, it was ætas pubertati proxima, in which he might, or might not, be guilty of a crime according to his natural capacity or incapacity. This was the dubious stage of discretion; but, under twelve, it was held, that he could not be guilty in will, neither after fourteen could be supposed innocent of any capital crime which he in fact committed. But by the law as it now stands, and has stood at least ever since the time of Edward III., the capacity of doing ill, or contracting guilt, is not so much measured by years and days, as by the strength of the delinquent's understanding and judgment. For one lad of eleven years old may have as much cunning as another of fourteen; and in these cases the maxim is, that malitia supplet ætatem. Under seven years of age, indeed, an infant cannot be guilty of felony; for then a felonious discretion is almost an impossibility in nature: but at eight years old, he may be guilty of felony. Also, under fourteen, though an infant shall be prima facie adjudged to be doli incapax, yet if it appear to the court and jury that he was doli capax, and could discern between good and evil, he may be convicted and suffer death. Thus a girl of thirteen has been executed for killing her mistress: and one boy of ten, and another of nine years old, who had killed their companions, have been sentenced to death, and he of ten years actually hanged; because it appeared, upon their trials, that the one hid himself and the other hid the body he had killed; which hiding manifested a consciousness of guilt, and a discretion to discern between good and evil. And there was an instance in the last century, where a boy of eight years old was tried at Abingdon for firing two barns, and it appearing that he had malice, revenge, and cunning, he was found guilty, condemned, and hanged accordingly. Thus also, in very modern times, a boy of ten years old was convicted on his own confession of murdering his bedfellow; there appearing in his whole behaviour plain tokens of a mischievous disposition; and as the sparing this boy merely on account of his tender years might be of dangerous consequence to the public, by propagating a notion that children might commit such atrocious crimes with impunity, it was unanimously agreed by all the judges, that he was a proper subject of capital punishment. But, in all such cases, the evidence of that malice, which is to supply age, ought to be strong and clear beyond all doubt and contradiction.

Infanta, and Infante, are titles given to all the sons and daughters of the kings of Spain and Portugal, except the eldest; the princes being called infantes, and the princesses infantas.

END OF VOL. XI.

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