MEDICAL

AND

PHILOSOPHICAL

COMMENTARIES.

By a Society in Edinburgh.

Dorum. Sed levius sit patientia
Quidquid corrigere est nefas. Hoc.

VOLUME FOURTH.

PART I.

LONDON:

Printed for J. Murray, No. 32. Fleet-street;
W. Creech, Successor to Mr Kincaid, and
W. Drummond, Edinburgh; and
T. Ewing, Capel-street, Dublin.

M,DCC,LXXVI.
THE COMPILERS
OF THE
MEDICAL COMMENTARIES
HUMBLY INSCRIBE

This VOLUME of a Work, intended for diffusing the
Knowledge of Medical and Philosophical
Discoveries,

TO HIS GRACÉ
HENRY
DUKE OF BUCCLEUGH,

Who, while he is deservedly Eminent for many other
Virtues, has merited and obtained Esteem, as a Lover and Patron of Science.

Non ego te meis
Chartis inornatum flebo,
Totve tuos patiar labores
Impune—carnere lividas
Obliviones, est animus tibi
Rerumque prudens et sevundis
Temporibus, dubiique rectas. HORAT.
At the commencement of our last volume, we mentioned several circumstances which we foresaw would necessarily tend to retard the publication of the subsequent parts of it. We were neither, however, fully aware of the extent to which these circumstances would operate, nor did we then dread other accidents which have since had a share in producing the same effect. The conduct of every part of this work depends so much upon Dr Duncan, that, whatever prevents him from attending to it, must necessarily retard the publication. And, while for two years past, by much the greatest part of his time has been occupied in academical labours, he has also suffered no inconsiderable distress from circumstances
of a more private nature. Those who are themselves parents need not be told what must be the state of mind of an affectionate father on the death of a beloved daughter. We hope, therefore, that no farther apology will be necessary to any of our readers for the late irregularities in the publication of this work. We likewise trust that these circumstances will sufficiently excuse us with several correspondents to whom we are indebted for valuable communications; and who may, perhaps, imagine that these favours have not been acknowledged with that attention which they merited. Although their letters have remained unanswered, yet they have not been overlooked; and most of them will appear in future numbers, in the order in which it shall be thought most proper to introduce them.

From the circumstances which we have now mentioned, it may, perhaps, be imagined that we do not, at present, stand in need of medical observations; and that these, were
they even transmitted to us, could not appear for some time. Although, however, we have been favoured with several communications, in our judgment to be esteemed valuable ones, which we have not now room to insert, yet we think it our duty not to omit the present opportunity of soliciting farther assistance. With this intention, it is only necessary to remind every attentive practitioner, who is duly influenced, either by principles of humanity, or a sense of duty to the public, that the advantages arising from any interesting medical observation, will be much augmented from its being speedily and generally known. And that, when such observations are not soon put into a proper channel for the purpose of publication, they are but too frequently lost. On our part, we may venture to assure those who shall favour us with their assistance, that, if their communications be not hereafter properly and regularly acknowledged, it shall proceed from some cause, affording an excuse sufficiently valid.
After the interruptions which have already taken place with regard to this publication, we will not again promise, what, perhaps, we may be unable to perform. It is our intention, however, and will be our endeavour, to publish at regular intervals, a volume, consisting of four parts, every year. But, should the appearance of future numbers of this work be at any time unavoidably retarded, none of our readers will, we hope, from thence infer that the work is discontinued.

That the three first volumes of this work have been attended with no inconsiderable advantage to the medical world, is, we presume, but a fair conclusion, from an extensive and increasing sale. And we are happy to think, that we have now the prospect of being able to render the ensuing parts of it still more useful than the former ones. Since these Commentaries have been translated into the German language, we have received kind offers of assistance from foreign physicians.
cians of eminence in different parts of Europe. From their aid we expect that this publication will derive many advantages. And the communications which we have already received from Dr Hahn of Leyden, Dr Baldinger of Gottingen, Dr Marcard of Hannover, and Dr Gahn of Copenhagen, deserve a public and particular acknowledgement. As their names are already too well known to the learned world, to acquire any additional fame from this publication, they can be actuated only by the most disinterested and generous motives.

We omit saying any thing of the obligations which we owe to British practitioners of the first eminence. How far, we already stand indebted to some of those, who are best able to render this publication materially useful, will sufficiently appear from the work itself. These gentlemen have an unquestionable title to expect the strongest exertions on our part for rendering it of real value to the public. As far as our abilities will allow, it shall
shall be our constant endeavour to do so. It is by no means, however, an easy matter to accommodate a work of this nature to the taste or judgment of every reader. But, if the utmost impartiality and industry can afford satisfaction, we trust, that there is no one who will not bestow some degree of approbation on our future labours.

Edin. 1st Sept. 7
1776.
HE work which we have now mentioned, is not in our possession. Nor, although it were, are we sufficiently acquainted with the German language, to be able to give our readers any proper account of it, without much more labour.
hour than we could propose to bestow upon it. We imagine, however, that it will be by no means unacceptable to the philosophical part of our readers, to receive an account of it, extracted from a letter from Dr Marcard at Hannover, to Dr Duncan, which is as follows:

S I R,

A work has lately been published in this country, which is so very extraordinary and interesting, and so justly reckoned a phænomenon in the philosophical horizon, that I cannot doubt of your being much pleased at receiving some account of it. The title of this work is, Physiognomische Fragmente, &c. It contains 276 pages in large quarto, neatly printed, with sixty-eight copperplates, and a great many vignettes. It is the production of a clergyman at Zurich.

Perhaps no publication has ever met with more passionate antagonists, and at the same time with more warm defenders and well-wishers, than these fragments did, both in their native country, and throughout all Germany. Without entering into the differences which have been occasioned by this work, or the objections made to its
its author, I shall only endeavour to give you as true an idea of it, as the limits of a letter will allow.

This author does not mean by physiognomy that vain superstitious science which pretends to discover the future fate of men from their faces. To use his own words, physiognomy is to him the science by which we know one’s character and qualities of mind from his outside. Under the outside he comprehends not only the features of the face, and the figure of the whole body, but also the deportment, the voice, the walking, and such like circumstances.

Mr Lavater proposes to lay down, in this work, a number of rules, before unknown, which he has discovered by long observation; by the aid of which, the eye of genius may, with more certainty, judge from the outside respecting the inside of a man, than he ever can from his actions or communications. The great scope of this work is to make men more attentive to the appearance of their fellow creatures; to render the signs of the internal beauties of human nature, impressed on the outside, more perceptible; to draw back, with a discreet hand, the veil with which the inadvertence of men has covered some very
very conspicuous, determinate, and lively expressions of human nature; to analyse the confused feelings of what physiognomists express, which undoubtedly every one, to some degree, possess; and to reduce these to more determined signs.

The author, however, with great modesty, observes, that he does not presume to explain all the thousand lettered alphabet of that by no means arbitrary language of nature, which is imprinted in the face, and whole outside of men. He does not even undertake to point out the whole beauties or perfections of the human face. He aims only at drawing some characters of it, so far intelligible, that a clear-sighted eye may discern them wherever it meets with them.

As the author was to lay the ground-work of an entirely new science, and to tread an uncultivated tract, he found it most suitable to his intentions, to conduct the work on no systematical plan. He has therefore filed his several sections fragments, that the reader may have some idea of what he is to expect. The first volume contains eighteen fragments. These chiefly treat of the nature, the limits, the imperfections of physiognomy, the objections against it, and the testimonies in its favour. Some are dedicated.
to the object of physiognomy, human nature; and one comprehends physiognomical exercises. The engravings are dispersed throughout the work, as the author intends them to illustrate any particular dogma. Some of them are done after the drawings of celebrated painters; others are likenesses of remarkable physiognomies.

I am happy to tell you, that the succeeding volumes, in as far as respects the engravings, will be highly superior to the first; I have already seen many of them which are finished. The work will consist of four or five volumes, one of which is to be published every year. It was intended that a French translation should appear at the same time with the original; and I see, by the list of subscribers, that some of my countrymen, the Germans, have foolishly subscribed for the French translation of this original German work. But, although several able pens have attempted translations, they have been obliged to give it up altogether. It has now been found, that a good French translation of this work, is a thing quite out of reach; not from want of physiognomical expressions, with which the French language abounds, but from the peculiarities of the manly, expressive, elegant, and often truly sublime style of this masterly
fterly writer, which, properly speaking, is crammed with sense. I hear that a Lady has lately undertaken a translation of it; but, whatever her abilities may be, I am almost sure, that, somehow or other, she will miscarry. There cannot be the least doubt that an English translation would succeed better; but where is a person to be found, who, together with sufficient knowledge, possesses both languages to such a degree as to qualify him for the work?

The author's labours would be entirely fruitless, if physiognomy were an imaginary science, founded upon credulity only; and if the different physiognomies of men had no relation with the qualities of their mind, the inside with the outside. He was therefore obliged, in many places, to enter into the discussion of this question; and I think, that, when I read the book, I met with most part of the following thoughts. "Every moment we are acting upon physiognomical principles, without being aware of it; and not men only, but the brutes also, even insects know both their most convenient food and their enemies by the outside. What are we doing when we choose out some fruits as the best, or when we prefer one horse to another, but judging from the outside
fide, of the internal qualities. We then certainly act the physiognomer. That every man is undoubtedly a natural physiognomer, is still more apparent from considering the effects which result from the first sight of persons unknown. We are often much inclined to tell our friends, that we do not like the man before us, although we be in no degree acquainted with him. Whoever is an attentive observer of what passes in his own mind, knows that he no sooner sees any person, than certain attendant ideas succeed the first impression, which involve nothing less than a judgment over his dispositions of mind, so far that we pronounce him to be of a quite different cast from some others of our acquaintance. We cannot, in every case, tell exactly why we judge thus, whether it be from his figure, from his eyes, or from his nose. Nor can we always determine, whether the impression be not from different ideas complicated. This is not to be learned by rule; we judge only from a feeling acquired by experience.

As physiognomical practice is so general, it cannot but founded in nature; and one should think, therefore, that it possibly might be the subj

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ject of science. Does not practice always precede theoretical knowledge?

Although it were allowed, that the physiognomies of men did correspond with their qualities of mind; that there were not one trait in the face which had not some relation to, or was not the effect of a certain disposition of his mind; although it were allowed also, that such a harmony is perceptible by an eye which has some exercise; yet one would ask, whether it be not impossible to bring such faint feelings to such a degree of clearness, as to express them in words; or where the mortal could be found, who, by his piercing look, was able to disclose these mysteries; and, if he should endeavour to explain them, by what means could he assure us of his not erring, and serving up vain subtleties in place of truths?

There is a doctrine in physic, in some respects, much resembling phisiognomy. It is the doctrine of the pulse. We may take it for granted, that there is no particularity in the pulse, however inconsiderable, not even one of the great number of pulses which Solano de Luque has enumerated, which does not depend on a particular condition of the body, and which may not be looked upon as foreboding a certain issue. But we know
know that those who pretended to inform us what each of these particular pulses exactly portends, as soon as they entered into minute distinctions, told us merely things that were useless, that were reprobated by daily experience, and that were not worth reading. This did not proceed from the pulse not being a sign of the present state of the body, and of the events which are to follow, but it arose from these authors not knowing anything of the matter; because it was beyond the reach of their faculties to unfold under what circumstances the pulsus myurus, dicrotos, undosus, formicans, &c. foreboded this or that event.

Many may, no doubt, be inclined to think much in the same manner with regard to physiognomy; and I must own, that I once thought so myself. But, upon reading this work, I was forced to change my opinion. I was obliged to confess either that there is no such thing as physiognomy, or that this author has hit it.

Suppose, Sir, that one was to tell you, a certain person made the same impression upon him, that he did upon you, and suppose, that, by his skilfulness in expressing the faintest feelings in words, he could convince you, that this was really
really the case; if such a man was farther able to point out to you, why the person before him made such an impression upon him, if he was to go through the detail of the peculiarities characterizing the outside of that person, if he told you nothing which contradicted what you felt; and if, upon inquiry, you should find that his judgment was founded on truth, I dare say you would have no hesitation in bestowing upon that man the title of a physiognomer. I will, however, venture to affirm, that this must often have been the case with the readers of the present work.

I could point out many instances of my being entirely satisfied with this author's judgment of physiognomies; and, among them, I remember particularly the likeness of that famous French composer Rameau. But nothing struck me more than what he says of two heads, the one of Judas, the other of Christ, both from Holbein. Although he be not at all satisfied with what these heads express, when he goes through the detail of their physiognomies, yet he, at last, observes, they have still so much characteristic, that, if you were to change names, to write under the head of Judas the name of Christ, and the contrary, every
every person would at once be sensible of the mistake.

I cannot help adding a few passages of this work translated, in which the author apologizes for the science to which he has devoted his labour. But do not believe, Sir, that these apologies are owing to the least diffidence respecting the subject. They are caused by some objections which were made to the several advertisements of this work, the first of which appeared about four years ago.

Nobody will maintain, says he, when in earnest, that a strong man can look like a feeble one, a healthy man like one in a consumption, or one that is phlegmatic, like one that is choleric. He would be thought to rebel against common sense, who would venture to assert, that Newton and Leibnitz could have looked like madmen, unable to observe, or incapable to conceive an abstract idea. The same judgment would be formed of him who could assert, that joy and grief, lust and pain, love and hatred, had the same signs on the outside of man, that is, none at all. And the same judgment ought to be formed of him who declares physiognomy to be an imaginary science.
It is incontestible, that the frequent repetition of certain motions of the muscles, which are inseparable from certain passions and dispositions of the mind, leaves visible tracks, which are sufficiently perceptible to become the object of science.

We know, by experience, that nobody is to be found, be he ever so sensible or ever so stupid, on whom something, at least, of the outside of the people he sees does not, in so far, make impressions, as to determine his opinion of them, and in some measure to regulate his behaviour towards them. Every one acts towards persons whom he does not know, in consequence of his physiognomical sentiments or judgment. It is that judgment, that sentiment, from which arises compassion or delight at the miseries of people unknown to us. It excites love or hatred, distrust or confidence; it makes us reserved or cordial.

It has been alleged as an argument against physiognomy, that it is a most fallacious science, if any at all; and that it may occasion very great mistakes, since those who want to be considered as honest men, may counterfeit that appearance. But those who urge this objection, do not consider,
der, that they are using the strongest argument for the reality of physiognomy. For it evidently supposes, that honesty has a method of appearing on the outside. The whole art of dissimulation is founded upon physiognomical principles. Why does the hypocritical villain counterfeit the appearance of an honest man, but because he thinks, that people about him know and observe the character of honesty? A true physiognomier, however, looks through the veil.

Perhaps, Sir, you may imagine, that I am dwelling too long on an apology for physiognomy; and it may be supposed, that the greater part of the readers of the medical commentaries can have no doubt of the reality of a thing so well founded, especially as I find, that some of the greatest English writers have a high opinion of it; among others, Mr Addison and Lord Shaftesbury. The latter, in his essay on the freedom of wit and humour, has the following passage, when speaking of beauty. "Were the subject to be well criticized, we should find, perhaps, that what we most admired, even in the turn of the outward features, was but a mysterious expression, and a kind of shadow of something inward in the temper."
You will, perhaps, rather expect that I should tell you how far Mr Lavater has succeeded in reducing physiognomy to fixed principles, and what things, properly new, are contained in his work. I thought, however, that, for those readers who had never bestowed much attention upon this subject, these passages might not be entirely superfluous. It is generally acknowledged, that the best thing which has been written upon this subject since the days of Aristotle, is Dr Parfon’s Human Physiognomy explained; which was one of the Cronian lectures on muscular motion, and published in the Philosophical Transactions. But, although that gentleman, in general, lays great stress on the reality of physiognomy, and explodes that trite phrase, *froni nulla fides*, with many arguments; yet I find, that what he calls physiognomy is limited only to the action of the muscles, and to the effects which this action causes on the countenance. Dr Parfon’s physiognomy is merely the physiognomy of the passions. Mr Lavater goes much farther; and the knowledge of Dr Parsons is but a dawning when compared with the light which Mr Lavater spreads over it.

This author by no means overlooks the action of the muscles of the face. But, although it be part
part of his scope to frame a notion of the bent of a man's mind with respect to the reigning passions, as far as they may be guesed at from the tracks caused by the frequent action of the muscles of the face, yet this is rather inconsiderable when compared with what, according to his observations, is expressed by the solid parts; for instance, the skull. The profile of the face, however, is with him the principle article, and the first thing he looks at. It is really surprising how acutely he judges from that, of the turn of mind, the moral character, the abilities, and many other qualities and particulars of men; not only when he has living persons before him, but even when he has merely the contour of the face drawn from the shadow.

I could mention several anecdotes, of the truth of which I have no right to doubt, shewing his judgment over the likeness of persons unknown to him, which would astonish you. On principles entirely new, respecting the harmony of the features, he has founded a sort of divination, by means of which, he is able to discern, in the likeness of men whom he has never seen, whether any of the features be wrong done, or whether the whole harmonizes together so far that the likeness
likeness may be supposed to resemble the original. A very useful art for painters. But all this does not fall properly into my plan, as these particulars do not belong to the volume before me.

We are to be made acquainted, in this work, with many positive signs on the outside of men which indicate particular internal qualities. Most of these signs will be mentioned occasionally in the explaining of physiognomies. In this first volume, however, these signs, from the truly philosophical and analytical plan of our author, are scarcely to be met with. When pronouncing a judgment over a physiognomy he, in this; frequently appeals to the feeling of the reader. But, in the succeeding volume, of which I have already seen some sheets, I find that he is more positive in this point, and frequently has these signs more determined with mathematical exactness. It seems to be his plan, with each volume, to give a stronger foundation to his work, by demonstrating these signs more exactly, and in a more determinate manner, till, in the last volume, he be able, by a set of undeniable truths and consequences, to raise this science to a height which will make it shine even in the following centuries.
As the author is to lay down certain rules, by which to judge of the phisiognomies of men, you may easily guess, that many warnings are given to make readers cautious in their judgment. Much, indeed, according to our author, is required for a good phisiognomer. These requisites he points out in the fifteenth fragment, which is intitled The Phisiognomer, and which contains many excellent reflexions. A would-be phisiognomer, he says, with a shallow head and a bad heart, is one of the most contemptible and noxious creatures upon earth. In concluding that section, he adds, "No one, certainly, is able to discern the look of magnanimity, or the countenance of an exalted soul, but he who is magnanimous himself, who thinks nobly, and who is disposed to act generously."

The author proposes it as a question, whether phisiognomical knowledge will not be rather noxious to society than useful? And after having fully entered into the subject, after having shewn that no science properly, and in general, can be stiled noxious, he concludes thus: "The surest, but most inconsiderable advantage, that may be reaped from phisiognomy, is for painters, whose art, as far as it meddles with human figures, is worth
worth nothing, if it be not founded upon physiognomy; a more noble advantage which it yields, is that of guiding and correcting the human heart."

Another passage, which has some relation to this, I shall here add. "The internal goodness of a man, is determined by the pleasure which the beauty, liberty, and perfections of his fellow creatures, cause to him. If you want to know whether your heart be wicked, ask yourself. Does it give you more pleasure to find fault with others, than to see perfections? To be acquainted with one beauty and perfection, is of infinitely more consequence and use than to know millions of faults. Every sort of perfection is but a single one; deviations from it are innumerable. Nothing is more apt to bestow humanity upon the mind, than the discovery of the beauty and perfection of human nature. It is much better to say little that is useful, than to say a great deal that could hurt. In this world, Good God, who can make known imperfections, without being an author of mischief."

What Mr Lavater advances in these passages, is very remarkable, because he was apparently guided by these maxims when he wrote this work.
work. Being always occupied with researches after good qualities, and their signs, he does not much mind the bad ones; and especially, if, in the faces of real persons, he finds what he does not like, he never meddles with it. He has inferred, it is true, some engravings from Hogarth, to give a view of the physiognomies of some of the most abject mortals in caricature. Caricatures, he somewhat beautifully observes, are to the physiognomner what microscopes are for physical objects; and I find in another engraving, with the caricatures of some notorious rogues, that our author, who is a republican Swift, and who once, when a young man, brought an unjust country magistrate to punishment, has the head of honest John W—s, Esq; among them, although not named. But, having introduced objects of horror, with a figh at the corruption of which human nature is capable, he hastens to leave them for more pleasing objects. I shall only add here a few expressions which he uses in giving an explanation of the plate which I have mentioned above. "Contorsion, perversity, malignity, mischievousness, can in no face appear more lively than here. What renders these faces ghastly? Disharmony, wry features, duplicity!
city! And what causes it? Baseness and falseness.

"Such faces are never formed by nature. Bad education, example, and custom, kindle the tender of a wanton heart. These distort the face of a man into the mask of a satan.

"Such faces as these here, are food for ravens; they are branded by their physiognomy. It is impossible that a man, as long as he is able to lift up his eyes to God, should look like one of them.

"Nothing disfigures men more than vice; nothing adds more to their beauty than virtue." These topics are the theme and the spirit of this work. If these assertions be not acknowledged, our author observes, he had better write not a single line on physiognomical matters.

Having thus stated here, as in many other places, that moral perfections are always producing, in some respect, corporeal beauty, he introduces an objection made to the culture of physiognomy, "that it was to be feared it might render men vain, by exciting a desire to become virtuous, in order to become handsome." All this he answers in the following manner. "Let it be admitted, that, besides the
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the noble desire of improving in honesty, the wish of pleasing the virtuous, bears its part in correcting men, that it serves as a support, if you please, like crutches, for virtue. Let a man be happy by finding, that his countenance acquires some beauty as his moral parts mend. He will soon remember, if he be a thinking man, that virtue, produced by vanity, is not pure; that vanity ever wears the stamp of lowliness; and, that the heavenly beauty of virtue cannot be acquired, but by virtue itself, which destroys vanity."

I shall endeavour to give you, at least, one instance of our author's manner of pointing out the particularities of a physiognomy. I find it, however, exceedingly difficult for me to translate it, as I am not sufficiently master of the English language. I am sorry, therefore, that you will lose much by it; and you will lose still more by not having the engraving before you. Let us take, for example, a head of Homer, which was found a little mutilated at Constantinople. I do not believe that the reflections which the author makes on this physiognomy, are preferable to many others; on the contrary, I think that he proceeds less philosophically than in many others, and that he appeals rather too frequently to the feeling
feeling of the reader. As the object, however, is generally interesting, and as the bust may perhaps be known to you, I have selected it as preferable to any other.

"This is a good fatherly face, full of good-nature and heartiness! This front,—compare it with that searching, disentangling power which vaults the front of Moses* Mendrohn,—is that of a beholder, not of a scrutinizer. The nose is that of a man of natural fine feeling; neither that of a refined sweetly tender, nor of an uncultivated one; there is meekness and prudence in the passing over of the nose into the lip. Suppose I came uninformed before this likeness, I should say, This man does not see, does not hear, never asks, never struggles, is not operative. The centre of the senses in this head is within the upper flatterly vaulted cavity of the front, the seat of memory. Never were these eye-brows pressed down in order to penetrate proportions, and to separate them from their forms. Here all sorts of life dwell cheerfully together.

* Referring to the likeness of a learned Jew at Berlin, who is, without doubt, one of the most penetrating, clear sighted, and perspicuously writing philosophers now alive.
gether. It is Homer! This is the skull in which monstrous gods and heroes had as much room as in the boundless heaven, and the spacious earth. This is Olympus, supported by the freely elevated nape, as by an Atlas, which spreads over the whole countenance firmness and calmness. The blind retracted eye, with a turn to the inward, shews how that internal life is strained which finishes the father of poets. On these cheeks, fatigued by constantly speaking, are the beaten tracks on which gods and heroes descended to mortals. The wilful mouth, which is but the gate of these apparitions, seems to babble like that of a child, and has all the naïveté of primeval innocence."

I could say much more of this work; but, as it would here be impossible to give a full account of a book which is so rich of contents, so curious and original throughout, I shall not swell my letter any more. This is not a work which can be abridged; it ought to be read.

I cannot, however, conclude, without expressing my highest esteem for the author. His regard for truth and virtue, which is clearly to be seen in every line of this work, must render him respectable to every reader. And his earnest

Vol. IV. C endeavours
endeavours to contribute to the good of mankind, springing from a heart overflowing with philanthropy, must make him amiable to the better fort. Even those who may suppose that this author will be disappointed in his main end, cannot, however, deny him the great merit, both of having, in a harmless way, contributed to the amusement of the public, and of being at the same time a moral writer of the first class.

II.


Although that doctrine, which supposes a particular set of vessels in the system to be fitted for the circulation of air, has long been exploded, yet many modern theorists have contended, that there exists in the blood-vessels an elastic fluid; and, on this supposition, they have accounted for lunar and equinoctial diseases from variations in the pressure of the atmospheric air.
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To determine whether such a fluid does, or does not exist, is the subject of the following experiments.

In favour of the existence of such a fluid, the first experiment which our author mentions, seems to afford strong proof. About four ounces of blood, drawn from the arm, were immediately put into the receiver of an air-pump. While the air was gradually exhausted, the blood began to swell, and to rise in bubbles, till it occupied above ten times its original space. But, however plausible this argument might appear, the opinion was fully overturned by the following trials.

Part of the jugular vein of a sheep, full of blood, was included between two tight ligatures, and cut out while the animal was yet alive. It was immediately put into a glass of warm water, and placed in the receiver of an air-pump. It sunk at first to the bottom of the water, and did not rise again, although the air was carefully exhausted. After this, it was wiped dry, and laid on the brass floor of the receiver. The air was again exhausted, but there was not the least visible expansion of the vein or its contents.

C 2   A
A ligature was then put round the gall duct of the faine animal; and the gall bladder, with the bile in it, being taken out and put into water, it funk. In this situation, it was placed in the exhausted receiver of an air-pump. It was afterwards wiped dry, and laid on the brass plate at its bottom, as in the former experiment. But, in neither case, even on the greatest exhaustion, did it shew the least alteration of its bulk.

The urinary bladder, containing about two or three ounces of fluid, was treated in the same manner. Although it at first sunk in warm water, yet, upon exhausting the receiver, many silver-like globules appeared on the surface of it; and it soon shewed manifest signs of expansion rising to the surface of the water. When it was wiped dry, and laid on the floor of the receiver, the result was, that its expansion and contraction were perceptible even to the naked eye.

Some months after these experiments were first made, they were again repeated in the following manner. Part of the vena cava of a swine, full of blood, was immediately after its death included between two ligatures. This part, which was about an inch and a half long, and conjectured to hold about an ounce of blood, was
was immediately immersed in warm water, and put into the receiver of an air-pump. Although the air was by turns exhausted, and again admitted into the receiver several times, yet there was no appearance of any enlargement of the vein, or of any tendency to ascend in the water. The urinary bladder was treated in the same manner, and here also, no change in appearance took place.

The gall-bladder, however, which was tried at this time, although the biliary duct was tied before it was taken out of the body, rose in water, and had air bubbles appearing on its sides, like globules of quick-silver, as our author had formerly found to happen to the urinary bladder.

But, in both these cases, our author ascribed the change of appearance to some adhering cellular membrane, into the cells of which some of the air had insinuated itself at the time of cutting, as it does in tearing off the skins of animals recently killed. Before mentioning our author's conclusions, it may be proper to observe, that, in all these experiments, the water was heated to about an hundred degrees of Fahrenheit's scale, left a greater degree of heat might have raised
an elastic vapour from these fluids, which did not naturally exist in the living animal.

From these facts Dr Darwin deduces several conclusions. He infers, that, as a great change is produced in the blood, in consequence of its receiving in its passage from the arm a mixture of atmospheric air, any experiments afterwards made for ascertaining its sensible or chemical properties must be highly erroneous. On this principle, he accounts for a greater quantity of froth being observed when blood drawn in the common manner is put under an exhausted receiver, than when it is subjected to a vacuum from being drawn off by cupping; although, in this case, the vacuum be in as great a degree as in the former. From the facts that have been mentioned, Dr Darwin farther thinks it probable, that animal bodies can bear, without inconvenience, much greater variations in the pressure of the atmosphere, than any of those to which it is naturally subjected. And he concludes, that those spittings of blood which have occurred in ascending high mountains, were not the effect of the pressure of the atmosphere being diminished, but were either owing to violent exertion, or some other accidental cause. This opinion is, he thinks, confirmed from
from what Dr Halley observed, when, from descending in the diving bell, he was subjected to a pressure equal to that of many atmospheres. He felt no other inconvenience, but a disagreeable sensation like something bursting in his ears. This Dr Darwin ascribes to the air contained in the tympanum, vestibulum, cochlea, and semicircular canals having forced its way into the Eustachian tubes, or external ear. From this conjecture he was led to imagine, that, when the immediate cause of deafness was owing to the excess or defect of external air, the application of a cupping-glass, fitted with a syringe for exhausting it, might be of use. He accordingly tried this experiment with three different persons who were very bad of hearing. On working the syringe, the external ear swelled and became red, and at length, when the patient complained of pain in the internal ear, the air was re-admitted. Of these three patients, one heard considerably better immediately after the operation, and continued to do so afterwards. The others received neither benefit nor disservice.
III.

Account of a Woman enjoying the Use of her right Arm, after the Head of the Os Humeri was cut away. By James Bent Surgeon at Newcastle. Vid. Philosophical Transactions, Vol. LXIV. Part. 2. 4to, London.

The supposition that the head of a bone, with its ligaments, can be regenerated, must unquestionably appear marvelous, and may prevent due attention being paid to those operations which propose the removal of it. Hence every fact which serves to show that such an operation is not only practicable, but advisable, merits a careful consideration. With such a fact we are presented in the history before us.

It is here proper to observe, that the present is not the only instance in which this operation has been said to be performed. Mr White of Manchester, in his surgical cases, published some years ago, affirms that he sawed off the upper head of the os humeri, and that his patient afterwards enjoyed the entire use of the joint. Mr Bent, however, the author of the present observation is, from
from several circumstances, inclined to believe, that, in Mr White's case, a part of the body only of the humerus was removed, which had been separated from its epiphysis by a caries, while, at the same time, the joint, with its capsular ligament, remained in a sound state. But, in the present instance, he thinks there can be no doubt that the head of the bone was actually removed.

The patient on whom this operation was performed, was the daughter of a farmer, who had been afflicted near three years with an abscess in the joint of her right shoulder. Into this abscess there were three apertures, two near the middle and lower edge of the clavicle, and a third near the insertion of the pectoral muscle into the humerus. By introducing two probes, the one at the upper, the other at the lower orifice, they easily met in the joint; and Mr Bent could distinctly perceive the head of the humerus to be carious. In this situation, there was no alternative, but either to amputate the arm, or cut off the head of the bone; and he determined upon the latter of these. He accordingly began an incision from the upper orifice, near the clavicle, and continued it over the joint to the insertion of the pectoral muscle. But as by this, he was not able to get readily
readily at the head of the bone, he separated a part of the deltoid muscle from its insertion into the clavicle, and likewise a little of its insertion into the humerus. He then found the capsular ligament so thickened, as to keep the head of the bone close to its socket, and to prevent it from rising, upon pressing the elbow backwards. He was therefore obliged to separate it quite round. After this, he brought the head of the bone over the pectoral muscle, and cut off all that had been deprived of periostium. During this operation, Mr Bent had no occasion to take up any artery, the pain which his patient endured was not very considerable, no exfoliation succeeded, and she recovered by the common treatment, without any bad symptom. After the cicatrix was compleatly heal, she enjoyed the perfect use of her fore-arm, she could raise her elbow about five or six inches from her side, and perform as well as ever, any work which did not require the elbow to be more raised; the upper end of the humerus playing about an inch below the point of the scapula.
Continuation of an experimental Inquiry concerning the Nature of the mineral elastic Spirit or Air contained in the Poubon Water, and other Acidulae.

It is now several years since Dr Brownrigg published, in the Philosophical Transactions, an inquiry concerning the air contained in Spa water. With his observations on this subject, we may suppose most of our intelligent readers to be acquainted. He then promised to favour the public with farther experiments, intended to explain the mode of union that exists between the air of those waters and the other principles of which they are composed; together with the relation which that elastic fluid bears to common air, and to various other bodies. With his observations on this subject we are now presented in the essay before us.

The great proposition which he undertakes to prove is, that the ferruginous and absorbent earths
earths contained in the Pouhon water are kept dissolved in it by means of the mephitic air, to which these earths are united. From the experiments which he formerly published, it appeared, that mephitic air is not detained in Pouhon water by the pressure of the atmosphere or any external force, but that it is equally mixed with the watery element, and the other ingredients in a state of solution, and is attached to the water by a force sufficient to keep all these ingredients united in one uniform compound. He found, however, that this force could be removed by some external causes, that the air could be expelled by certain degrees of heat, and that, when this happens, the water undergoes a decomposition, letting fall its other ingredients in proportion to the quantity of air expelled. He has farther found, that the opposite extreme of cold will produce the same effect of decompounding the Pouhon water, when its aereal principle is expelled by means of congelation.

Having poured some of this water into tin vessels, placed in a freezing mixture of sea salt and snow, he found, that as soon as the water began to shoot into ice, minute bubbles of air incessantly rose from it, till all the water was congealed. The ice
ice was very white, being every where interper-
fed with minute bubbles of air, by which it was
considerably increased in bulk, and rose on its sur-
face into a convex form. When this ice was
thawed, the water was white and turbid, and let
fall a considerable portion of its metallic and ab-
orbent earths. By a second congelation it was
toally deprived of its air, and upon thawing, it
was deprived of the remaining earths.

In these decompositions of Pouhon water both
by heat and cold, no volatile spirit, either acid or
sulphureous, nor any other subtile matter, has been
found to fly off from it, excepting mephitic air.
Hence Dr Brownrigg thinks it appears, that this
air is the medium by which the metalline and ab-
orbent earths contained in the Pouhon water are
kept dissolved; and, on the other hand, that these
earths are the medium by which this air is more
firmly united to the watery element. And he con-
cludes, that, by its solution in water, and its union
with those earthy substances, from a very volatile
and elastic body, it is reduced to a fixed state.

Our author is of opinion, that the mephitic air
and martial earth contained in the Pouhon waters
strongly attract each other, and, uniting together,
form a concrete soluble in water. This concrete
may
may be esteemed a saline body of the neutral kind, of which the mephitic air constitutes the spiritous solvent, and the martial earth its base. The mephitic air, he observes, is possessed of all those properties by which chemists have distinguished pure saline bodies, and which, in union with other bodies, form more compound salts. This aerial principle, like pure acid spirits, is soluble in water, and imparts to it its peculiar sharp and acidulous favour. In combination with metallic and absorbent earths, it forms concretes soluble in water, and giving to the water a peculiar taste, resulting in part from the spiritous principle, and in part from the earth with which it is combined. This air, therefore, may, he thinks, be justly styled a mineral elastic spirit of a saline nature, sufficiently distinguished by its rarity and by its saline properties. And he concludes, that a class of saline bodies are detected, which are composed of various earthy bases united to a volatile aerial spirit, and differing from each other according to the nature of the base.

The agreement of these saline concretes with neutral salts, farther appears from their decomposition, which is effected by the same means serving to decompound other natural salts. The aerial
aerial spirit of these saline concretes is forced by fire, from its union with the earthy base, in the same manner as the acid spirit of other neutral salts is expelled by fire from the more fixed principles which enter the composition of these salts. The saline concretes formed with this aerial solvent, are decompounded by the addition of stronger acids, in the same manner as other neutral salts. And, lastly, they are decompounded not only by stronger acids, but also by alkalies, whether fixed or volatile. In the decompositions, by means of alkalies, no effervescence or discharge of air bubbles takes place. For here the air is absorbed by the alkali, and not expelled from the water as in the decomposition of these waters by stronger acids.

These observations, our author thinks, show an exact agreement between the neutral salts and those saline concretes, which are formed of mephitic air united to an earthy base in the acidulæ. He observes, however, that the concretes existing in the Pouhon water, although evidently of the neutral kind, have not hitherto been obtained in a solid form. This, he imagines, may in some measure be owing to the great volatility of their spiritous principle; but he ascribes it chiefly to the
their being subjected to decomposition, from the precipitation of their earthy base, by means of common air, during the evaporation of the water in which they are dissolved.

Although the mephitic air of the acidulae be soluble in water, imparting to it a brisk pungent taste, which has generally been stiled subacid; and although it produces many effects similar to those of acid spirits, yet it differs from all acids found in a liquid form, in its rare texture, and in its elastic quality. Besides this, it does not strike a red colour with syrup of violets, or with other blue tinctures of vegetables, which has usually been esteemed a test of the presence of acid. How far, therefore, it may justly merit the title of an acid, our author leaves to the determination of others. He thinks, however, there can be no doubt, that mephitic air has appeared in this light to many philosophers; and he considers it to be the same with the acidum vagum fodinarum of Boerhaave, with the acidum centrale perpetuum inexhaurabile of Becher, with the spiritus sulphureus aereo-aetherio-elasticus of Hoffman, and with the sal embrionatus, and sal esurinus of Helmont.

From
From considering the great subtlety of this principle, its power of dissolving earthy substances, its property of readily uniting with water, and thus pervading the minute vessels of the animal frame, Dr Brownrigg imagines that we may form some judgment of its great efficacy as a deobstruent and solvent in many diseases of the human body, arising from preternatural concretions and obstructions. And, from attending to the great antiseptic powers which it possesses in common with acids, we may, in some measure, account for those extraordinary effects which it is found to produce in the cure of many obstinate diseases.

V.

*Of Torpedos found on the Coast of England, in a Letter from John Walsh, Esq; F. R. S. to Thomas Pennant, Esq; F. R. S. Vid. Philosophical Transactions, Vol. I.*

It has long been the opinion of naturalists, that the Torpedo or Electric Ray, a fish which has of late been the source of much phil-
Iosophical inquiry, is not a native of the British shore, but to be found only in warmer climates. But the ingenious writer of the present letter, who is already well known to the learned world, by his observations on this animal, has here given sufficient evidence, that the opinion is a mistaken one.

In consequence of inquiries which he set on foot, he received in London two torpedos taken in Torbay, the one in the beginning of August, the other in the beginning of November. The first of these Mr Walsh himself had not an opportunity of seeing; but it was examined by Mr John Hunter, and the electrical organs successfully injected. The second he examined particularly before it was dissected. He found it to weigh fifty-three pounds averdupos, and to measure four feet in length, two feet and a half in its extreme breadth, and about four inches and a half in its extreme thickness. Thus this British torpedo was near three times the size of the largest which are caught in the Mediterranean. Its electric organs were proportioned to its size in other respects, each measuring about fifteen inches in extreme length, and eight in extreme breadth.
The electric organs of this last torpedo also were injected by Mr Hunter; but, from the bursting of the artery, he was somewhat disappointed. He determined, however, the number of columns in one organ to amount to 1182, and he fully confirmed the observation he had formerly made, that their numerous horizontal partitions were very vascular.

Mr Walsh observes, that the rest of this torpedo being dressed, was brought to table, and that some of his friends suffered a little from their curiosity in tasting it. He is, however, of opinion, that, although it has been forbid to be sold in the market of Venice by the prefect of health, yet it is not to be deemed unwholesome food. The electrical organs, which make about one half of the animal, are an insipid mucilage; but its muscular part is as palatable as the flesh of the other rays. They are sold, he observes, in the markets of France; but those which are old or overgrown, are in little request.

From the observations of Aristotle, Lorenzini, and Mr Saunier of la Rochelle, our author concludes, that the torpedo brings forth its young twice in the year, and that this principally takes place about the vernal and autumnal equinoxes.

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From
From some circumstances, however, he is led to think, that there may likewise be a production about midsummer; and, from the remarkable instances of superfoetation which he has sometimes observed, he farther infers, that, agreeably to Aristotle’s information concerning the cartilaginous fish in general, the torpedo goes near six months with young.

From some information which our author obtained by means of his learned friend Sir George Baker, respecting a torpedo which was caught at Mounts Bay in Cornwall, it appears, that it does take the hook. He concludes, therefore, that those beautiful poetical descriptions of the capture of the torpedo, which by many have been thought fabulous, are in reality founded. He remarks, however, that, to catch with the greatest success the torpedo, as well as other flat fish, which keep near the ground, the trawl or drag-net must be used.

The torpedo, Mr Walsh observes, is found on the coast of Ireland, as well as of England. Where the fishery, indeed, was wholly carried on by the hook and line, the fishermen were entire strangers to the torpedo; but at Ring, a small fishing village where pole-trawling is practised,
tised, they are acquainted with it. They told him, that they sometimes caught one or two in a year, sometimes none in two or three years. They had taken two that year, and one the preceding year, which were, at a medium, about eighteen inches long and fourteen broad, and were caught a league off the shore.

That the torpedo may become the subject of experiment, it is necessary not only to know where it is to be found, but how it can best be preserved alive. Mr Walsh concludes the present letter with some observations on this subject. He observes, that the electric ray is so far amphibious, as to exist in air for the space of twenty-four hours. When kept in fresh water it survives not much longer. But, as the best method of preserving it, he proposes a well-boat, kept in salt water, and not put into much motion. In such a pen, he has preserved them for several days, and always without food. In confinement, they neglect all kinds of prey; but, from their quiet nature, he thinks it would be easy to force them, if necessary, to swallow food.

Thus, then, it appears, that Great Britain has a claim to the torpedo, or electric ray of the
broad marine fort, whose influence has been said to subdue obstinate headaches, and even the gout itself. For medical purposes, however, this animal will not now be employed, as the Leyden phial contains all its magic powers.

VI.


To this treatise Mr Le Fobure has prefixed as a motto, the following quotation from Celsus: Melius est ancesps eligere remedium quam nullum: And he introduces his subject by presenting us with a few observations on this sentiment. He observes, that, by the word ancesps, he does not mean a remedy, the effects of which are doubtful. He understands it only to mean, that it is better to employ a medicine, the good effects of which have not been confirmed by general experience, than to use none at all.

He
He declines entering into any disquisition concerning the causes of cancer, the seat of it, or the nature of the cancerous virus. He informs us, however, respecting the last of these particulars, that in one instance he found it alkaline, and in another acetic; and he regrets, that, from the want of sufficient supply of matter, he was unable to carry his researches farther. He found, contrary to the assertions of the author of the Dictionnaire Economique, that the cancerous virus, when given to dogs, had no effect in producing the rabies canina; and he promises a more minute detail of his experiments on this subject, in some observations on hydrophobia, which he is at present preparing for the press.

Having premised a few introductory remarks respecting the diffidence and circumspection with which new medicines ought to be proposed or adopted, intended to inspire a confidence with regard to what he is afterwards to advance, he informs us, that arsenic, taken internally, is the remedy which he has discovered to be effectual in the cure of cancer. As this practice will naturally surprise most readers, he justifies himself from the charge of vain empiricism, by enumerating instances where physicians have had re-
course to substances equally dangerous, and even to arsenic itself, with singular advantage.

Mr Le Febure next proceeds to mention the circumstances to be attended to in the administration of arsenic. He orders it to be given according to the following receipt. Take four grains of arsenic, of a clear white shining appearance, and in small crystals; dissolve it in a pint of distilled water; let the patient take a tablespoonful of this solution, with an equal quantity of milk, and half an ounce of syrup of poppies, every morning, fasting, and taking care to taste nothing for an hour after.

This course must be continued for eight days, after which, a dose is to be taken in the same manner twice every day, the first in the morning, the second towards eight at night. At the end of a fortnight, three doses are to be given in a day, the third being taken about mid-day.

In this manner, women of weakly constitutions may continue till a cure be compleated. But, with an adult of a good constitution, the dose may be augmented, by degrees, every eight days, till he take six tablespoonfuls of the solution.
tion every day; two tablespoonfuls being taken for each dose, with as much milk, and half an ounce of the syrup of poppies. For children, tea-spoons must be used, and the dose should, on no account, exceed three of these, with a proportional quantity of the syrup of poppies.

But, besides that the solution of arsenic is thus to be increased to a certain height, in point of quantity, the strength is also to be augmented. Six grains of arsenic may be dissolved in the second bottle of the solution, and eight in the third. But, beyond this, our author thinks it unadvisable to proceed. He has, in general, found six bottles of the solution sufficient for the cure of an open cancer. In one case, however, eight were necessary.

He informs us, that this remedy, taken with the above precautions, never occasions any unlucky accident; and is not disagreeable to the taste. It does not act in any certain manner upon the secretions or excretions. Some, indeed, discharge their urine more freely than usual, with some the belly is more loose, and with others the perspiration is more copious. But these effects are neither general nor constant.
A purgative compounded of manna, rhubarb, and sal thigienne, is to be given every eight or twelve days. Whey, with twelve grains of nitre to the bottle, or a weak decoction of the root of althea, with an equal quantity of nitre, is to be used for common drink. The belly is to be kept open by injections of whey, bran water, or pure water, with the addition, if necessary, of emolient herbs or honey.

With respect to regimen, it is necessary to abstain from wine and fermented liquors. Broth, made with a little beef, veal, or chicken, are proper. Broiled, roasted, or boiled meat, ought to be taken in small quantity. Spinage, lettuce, succory, or forrel, may be given with advantage. Ripe fruit is not to be discharged. Rice, cream, and milk in different forms, is a very proper part of diet.

Mr Le Febure has sometimes been obliged to give the Peruvian bark, and to open an issue, when the humours were either very alkalescent, or in very great quantity. He even considers an issue as useful in every case. When the ulcer is cicatrized, he recommends cold or warm mineral waters, according to the circumstances of the patient, with a view of completing the cure;
cure; or, where these cannot be had, he gives artificial ones.

Besides this treatment by internal medicines, the method of dressing the ulcer becomes also an object of attention in the cure of cancer. If the tumour be not ulcerated, he recommends, that it should be washed with a solution of arsenic, having to the extent of eight grains in the pint of water; and he advises afterwards the application of the following cataplasm. Take of carrot juice one pound, of sugar of lead half an ounce, of arsenic, dissolved in distilled vinegar, half an ounce, of liquid laudanum, a dram and a half; form the whole into a mass of proper consistence with as much powder of hemlock as is necessary. With part of this cataplasm the tumour is to be covered to a tolerable thickness, and the whole kept on with a diachylon plaster.

If the cancer be of the ulcerated kind, he advises, that the ichorous serosity be taken away at each dressing, by means of dry charpee. He then directs the ulcer to be fomented with the arsenical solution, having the chill taken off it, and having about one third of red wine added to it. If the fore be of a very bad kind, he proposes that the arsenic be dissolved in a decoction of
of bark, for fomenting the ulcer. After this, the
cataplasmin mentioned above, and the plaster are
to be applied. This treatment must be renewed
every twelve hours.

If the ulcer be situated in the womb, he re-
commends, that injections be frequently thrown
up of a decoction of carrots and hemlock, having
four grains of opium, and as much arsenic, disso-
vled in every pint of it.

Mr Le Febure, before he concludes this trea-
tise, assures his readers, that, in more than two
hundred instances, he has had proofs of the effi-
cacy of the medicine here proposed. He does
not, however, pretend, that it is infallible in eve-
ry case: He considers the disease to be incurable,
if, in its progress, a considerable haemorrhagy
has happened, from the erosion of large blood
vessels. Nothing also but a miracle could save
those who are hectic, or in the last stage of phthi-
sis. To judge of the efficacy of any remedy, he
observes, that the patient with whom it is tried
should, at least, enjoy an ordinary good constitu-
tion, and be free from a complication of diseases.
And he considers the exhibition of a new remedy
to a patient, in some measure, breathing his last,
as serving no other purpose but to bring it into discredit.

VII.


It may perhaps be imagined, that an account of a general system, on any particular branch of medicine, is but ill adapted to the nature of such a work as ours. Such systems must consist principally of opinions and doctrines, which, although, perhaps, they may be more distinctly arranged than by former writers, have yet been previously known, and generally received. It may, however, with truth, be affirmed, that, from the publications of several eminent men, more light has been thrown on midwifery within these few years past, than for a century preceding. Hence, an elementary view of this subject, accommodated to these recent discoveries, cannot be unacceptable to practitioners. As such, we propose to present our readers with some account of the accurate and comprehensive syllabus now before
before us. Passing over, however, in a cursory manner those observations of this treatise which are generally known, the remarks now to be offered will principally respect the new matter which it contains.

After introducing his subject by a general description of the foetus, pelvis, and organs of generation, the author proceeds to offer many curious observations on the function of generation. Many have been the theories of philosophers with regard to this wonderful faculty of animal systems. And, although it is not to be doubted, that various particulars respecting it have eluded all inquiry, yet there can be no question, that some circumstances have of late been more certainly ascertained, and that the progress both of the foetus and uterus, through the different stages of pregnancy, have been more distinctly marked than formerly. On this subject our author begins with some remarks on the menstrual flux. After mentioning, from the most accurate observations, the time of appearance, duration, and quantity of this discharge, he offers some reflexions on the different causes to which it has been assigned. Rejecting, without any examination those opinions which suppose menstruation to
to depend on the influence of the moon, the ferment of particular fluids, or such like causes, he considers it as most probable that it proceeds from an universal or from a partial plethora. To the former, however, he brings several objections; and he affirms, that the idea itself is vague; that the existence of general plethora previous to menstruation is by no means proved; and that, even allowing it to be proved, it will not account for all the appearances. He holds it to be the latest and most probable opinion, that the menses depend on a topical congestion. And he adopts this opinion on the ground on which it has lately been taught in the university of Edinburgh by Doctor Cullen.

He sets out with observing, that the growth of the human system, in general, depends on an increase of the quantity of fluids, giving occasion to the distension of vessels, and thus producing a gradual evolution. This evolution he considers as not happening equally in every part of the body at the same time, but successively in different parts, according to the size and density of the several vessels, determined by the original stamina. The upper parts of the body, he observes, first acquire the natural size, and then the lower
lower extremities. By this constitution, the uter-
rus is not considerably evolved till the rest of the
body be nearly arrived at its full bulk. But the
vessels of other parts, in consequence of their di-
stension and growth, increasing in density, not only
give greater resistance, but determine the blood
in greater quantity to parts not yet equally evol-
ved. Upon these principles, there will be a pe-
riod in the growth of the body, when the vessels
of the uterus will be distended till they are in ba-
lance with the rest of the system. This theory
supposes the constitution of these vessels to be
such, that it may proceed so far as to open their
extremities terminating in the cavity of the ute-
rus, so as to pour out blood there, or that a cer-
tain degree of distention may be sufficient to ir-
ritate and increase the action of the vessels, pro-
ducing an haemorrhagic effort, which may force
the extremities of the vessels with the same effect
of pouring out the blood.

In this manner, it is imagined, that the first
appearance of a flow of blood from the uterus
in women may be accounted for. It proceeds
upon the supposition, that the evolution of each
particular part must especially depend upon in-
creased congestion in its proper vessels. But as
this plethoric state of the vessels of the uterus produces an evacuation of blood from them, they are again put into a relaxed state with respect to the rest of the system. This emptied and relaxed state is supposed to give occasion to a new congestion, till these vessels be again brought to the degree of distension which may either force their extremities, or produce a new haemorrhagic effort, with the same effect as before. Thus, the menstreal discharge is begun by causes which must continue to produce it at certain intervals, till particular circumstances occasion a considerable change in the constitution of the uterus. The return of this discharge at nearly the space of a month, depends on a certain balance between the vessels of the uterus and those of other parts of the body. When the first periods are thus determined, a considerable increase or diminution of the quantity of blood in the system will have afterwards but little effect, as increasing or diminishing the quantity distributed to the uterus. And when this evacuation has been repeated for some time, at regular periods, it is supposed, that the power of habit will have a great share in continuing this regularity.
In this manner, according to our author, does Dr Cullen explain the theory of menstruation. And he is inclined to consider this account as the most rational that has yet been advanced. He concludes, however, with observing that to him it seems still liable to objection. What these objections are, however, our author has not said; nor is it our business to enter into any inquiry respecting them. We may here, however, observe, that this opinion is not, perhaps, so generally received at the university of Edinburgh as our author seems to imagine. Dr Monro is still a strenuous advocate for the supposition, that menstruation depends on a general plethora; and Dr Duncan, while he taught the Institutions of Medicine in the university, was so little satisfied with either, that he ventured to propose a new hypothesis on this subject. With a short account of his opinion we shall probably present our readers in some future number. Mean while, it will be sufficient to bespeak their attention, if we observe, that, in a matter of so much doubt, it is hard to say, who may be the fortunate person, first to hit upon the truth.

After these remarks on the menstrual flux, Mr Hamilton next offers some observations on conception.
conception. Here he reduces all the hypotheses that have been offered on the subject to three heads. Some, he observes, have imagined, that the rudiments of the foetus are contained in the mother. Others are of opinion that they exist in the male. And a third set hold, that the foetus results from an union of both. To this last opinion, our author seems to be most inclined. For, after giving a short view of the hypotheses of Aristotle, Leeuwenhoek, and Buffon, and after remarking, that all of them, however apparently specious, are equally exposed to difficulties and objections, he observes, that it is certain there can be no impregnation but by the mutual concurrence of the generative faculties of both sexes. He holds, that, by the orgasmus venereus and the injection of the male seed, all the uterine appendages are put in motion, and that the Fallopian tubes become turgid and erect, so that their fimbriae grasp the ovaria, and separate one of the ova from it. He thinks it certain, that the male semen is conveyed into the uterus in coition; and he reckons it also probable, that, by ascending through the Fallopian tubes, it impregnates the ovum, and that the impregnated ovum is afterwards conducted by the tube into the uterus.

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Having thus stated his opinion of conception, he concludes the physiological part of his elements with a very accurate description of the ovum and its gradations, as well as of the gravid uterus; in all which he has been much indebted to the elegant plates of Dr Hunter.

The second great division of Mr Hamilton's subject is the pathological part of midwifery. Here he delivers an elementary view of the treatment best suited for various topical affections of the parts of generation, with some observations on the irregularities of the menstrual flux, fluor albus, furor uterinus, sterility, spurious gravidity, and false conception. But the principal part of his attention is bestowed on the diseases of pregnancy; and he is particularly minute on the causes and treatment of floodings.

He defines the maenorrhagia gravidarum "an effusion of blood from the uterus, confined to no regular or stated periods, in quantity and duration various, and liable to recur on the slightest occasions." He considers the immediate cause of this to be, in every case, a separation of some portion of the placenta or chorion from the internal surface of the uterus. The remote causes, although various, may, he thinks, be reduced to two
two heads. Such, viz. as affect the system in
general, and such as affect the uterus and pla-
centa in particular. To the first he refers ex-
ternal accidents changing the state of circulation,
changes in the circulation from internal causes,
debility, and plethora; to the last belong direct
affections of the uterus and placenta, and stimuli
communicated to them from an affection of oth-
er parts.

For the cure of floodings, the indications
which he proposes are, to lessen the force and
velocity of the blood in general; and to pro-
mote the constriction of the patulous mouths of
the bleeding vessels, or the formation of coagula
in their orifices. For answering the first indica-
tion, he recommends rest, a recumbent posture,
cool air, tranquility of mind, a light diet, venae-
fection, and sometimes opiates. For the second
he recommends internal astringent medicines, but
chiefly cold styptic applications to the parts affec-
ted, and their neighbourhood. When, how-
ever, the deluge of blood is so profuse as to threat-
ten death, if the woman be near her time, he
considers the emptying the uterus, by delivery,
to be the only safe expedient both for preserving
the life of the mother and the child.

F. 3

The
The third and last part of this treatise respects labours. Under this, our author delivers a short and distinct view of the rules to be observed with regard to the management of labours, whether natural, difficult, or praeter-natural. And after considering the methods of delivery, and the use of instruments in all other cases, he treats, lastly, of the Caesarean operation. Here he considers particularly all the different circumstances which have been alleged to render this operation necessary. These he refers to the six following heads. 1. Narrowness or bad conformation of the bones of the pelvis. 2. Imperforated vagina, or contractions in the vagina, cicatrices, tumours, or callosities in the os uteri. 3. The passage of the child through the uterus, when torn. 4. Ventral conceptions. 5. Herniae of the uterus. 6. The position or bulk of the child. After offering some remarks on each of these, he concludes, that the absolute impossibility of extracting a child through the aperture of the pelvis is, perhaps, the only circumstance which can justify the performance of the Caesarean operation on the living subject. He concludes, that it ought never to be had recourse to in cases of diseases or original mal-conformation of the soft parts of generation,
ration, when there is no suspicion of deformity of the bones.

Although, however, he considers this operation as having been frequently abused, yet he has no doubt that, in some cases, it is necessary, and may be successful. He remarks, indeed, that the fate of this operation in the city of Edinburgh, where it has been performed five times, is rather discouraging, as none of the women have had the good fortune to survive it many days. Of the last of these cases, where the operation was performed by Mr William Chalmers, and of which our author was an eye-witness, he gives a particular history. In this case, where delivery by every other means was utterly impracticable, the woman survived the operation only for the space of twenty-six hours; but the child was saved.

Before leaving this subject, he proposes it as a query, to what cause the frequent want of success in the Caesarean operation is to be imputed? Nervous or uterine irritation from cutting, internal haemorrhage, or the extravasation of fluids into the cavity of the abdomen, may each of them be assigned as the cause of death. He is, however, disposed to think, that it is...
principally to be imputed to the influence which the access of air has on the irritable viscera. This opinion, he observes, is much confirmed by the experiments of Dr Monro on different animals. Dr Monro has repeatedly found, that, although a large opening be made, by an incision into the abdomen, yet, if the wound be quickly closed, the animal will recover, without any bad consequence. But, if the viscera be exposed for a few minutes to the air, dreadful pains come on, and convulsions, terminating in death, quickly ensue. Upon opening the abdomen after death, the whole viscera are found to be in an inflamed state, and universally adhering to each other. On this ground, in performing the Caesarean operation, Mr Hamilton recommends, that the viscera be exposed as little as possible, and that the wound be covered with the utmost expedition.
COMMENTARIES.

SECT. II.

Medical Observations.

I.

Singular effects from the application of Blue Vitriol, by Mr Samuel Froat Simmons, Surgeon at Wingham in Kent.

A Servant to a gentleman in this neighbourhood, who had received a slight wound, not more than half an inch long, from a knife, across the back of his hand, had it slightly touched with blue vitriol, to remove a little fungus which appeared in the wound. The next day he complained that his hand was much swelled, though not very painful. It was at first suspected, that the tendinous fascia on the back of the hand,
hand, or perhaps the tendons themselves, were affected, and had occasioned these symptoms.

The fungus not being removed by the first application of the vitriol, which was exceedingly gentle, and merely round the edges of the wound, it was repeated, and the swelling soon increased. A lymphatic vessel was felt painful, and inflamed a great way up the arm, and the patient complained of pain in the axilla. The symptoms were now ascribed to the vitriol; it was discontinued, and the swelling soon subsided.

I have since observed another case, very much like that which I have now described; and it may perhaps occur, in persons of particular habits, more frequently than seems hitherto to have been noticed. The application of the mercurialis praecipitatus ruber to large ulcers, has been found sometimes to affect the mouth; and the symptoms here related seem to have been occasioned by an absorption of the copper. That mineral, therefore, when united with the vitriolic acid, as in the composition of the blue vitriol, would seem to be rendered capable of producing its specific effects upon the body, even when externally applied, though no such effect arises from it, in its metallic form.
II.

Violent Asthmatic Fits, occasioned by the effluvia of Ipecacuanha; by William Scott, M. D. of Stamfordham, Northumberland.

Mrs S—— of Stamfordham in Northumberland, married a person of the medical faculty in the year 1759, being then about 26 years of age. She had been always remarkably healthy before that period, and quite free from all nervous or other complaints, except a trifling headach that used to affect her temples and forehead, sometimes for a night or so, about the time of her menstruation.

The first year or two after her marriage, she enjoyed her usual good health and spirits in general; but sometimes she was afflicted with a very troublesome shortness of breathing, attended with a remarkable stricture about her throat and breast, and with a particular kind of wheezing noise. These fits came on very suddenly, and without any exciting cause that at first could be assigned. They were often so violent, as to threaten immediate suffocation. They lasted fomc-
sometimes for a shorter, and sometimes for a longer time, but, in general, went off in two or three days, and commonly with a spitting of a tough phlegm, which she said had a disagreeable metallic taste. When these fits were off, she enjoyed her usual good health and spirits. She had children, but suffered as little as any woman could do, either in breeding or lying-in; and it was not observed that she was more subject to these fits when with child, than at other times. She was blooded, and took some common pectoral medicines for them; but without any benefit.

About a year and a half, or two years after her marriage, she told her husband that she had observed these fits had always attacked her when any ipecacuanha was powdered in his shop, and that she was certain the effluvia of that medicine immediately brought them on. This was looked on at first as a fancy, and little regard paid to it for some time. However, frequently after this, when any of that medicine was powdering or putting up, she used immediately to call out, perhaps from a different room, that she found the ipecacuanha, and that they would see her immediately affected by it. This I and several others saw frequently happen, as she had said; so that
we were at last convinced, to a demonstration, that the effluvia of the medicine, some how or other, so affected her nerves, as to bring on a very great and remarkable degree of spasm, all about her throat and breast,

Having thus had several repeated proofs of the effects the medicine had upon her, great precaution was therefore taken for several years, never to pound any of it, but to purchase it powdered; and also care was taken, when weighing or putting any of it up, to send her out of the way, or to some distant part of the house. By these means, she was kept pretty clear of it for seven or eight years together; during which time she enjoyed perfect good health.

Betwixt nine and ten o'clock in the evening June 3d 1775, her husband happening to have got a quantity of the pulv. ipecacuanha home, without considering, opened it out, and put it into a bottle: His wife was not far off at the time, and then in perfect health. Almost before it was got quite put into the bottle, she called out that she felt the ipecacuanha affect her throat, on which she was immediately seized with a stricture upon her breast, and a difficulty of breathing. She was advised to walk out into the air, to try if that
that would put it off, but it had little or no effect; she went to bed some little time afterwards, was exceedingly ill all night, and betwixt two and three o'clock next morning I saw her, when she was gasping for breath at a window, was as pale as death, her pulse scarce to be felt, and, in short, seemed evidently to be in the utmost immediate danger of suffocation. She had seven or eight ounces of blood taken from her arm; her feet put into warm water; an anodyne draught, with seven or eight drops of laudanum, given her; and she took frequently a tablespoonful of oil of almonds. None of these seemed to have any effect, and she continued much in the same way, with few or no intervals of ease, till about nine o'clock that morning; when, being in a manner almost exhausted, she fell into a kind of disturbed sleep, the difficulty of breathing, with a wheezing noise, still continuing but little abated. She slept some little time, and got out of bed again about eleven o'clock that forenoon, her breathing being still very difficult, and her eyes looked red and a little inflamed. After she got up, she became easier towards the afternoon, and it was then supposed it would go off. Dr Brown, an eminent physician of Newcastle upon Tyne, happening
happening to be in the neighbourhood, called upon Mrs S.; and being told what had happened, said, he had known a case pretty much similar from the same cause; and hoped, as she then seemed better, it would soon go off. He recommended to her riding out as soon as she was able, and to be kept open. Towards bed-time the same evening, the difficulty of breathing returned, and she was again exceedingly ill all night; had flannel cloths wrung out of warm water applied to her feet, breast, and throat, with little or no advantage; was blooded again about seven o'clock next morning, and had also a blister applied to the back part of her neck; still continuing now and then a spoonful of the oil of almonds. She again fell upon some sleep about nine in the morning, and continued in bed till betwixt eleven and twelve; she got up, and was again a little easier during the day, but at night was as bad as ever. The same scene was continued for eight days and nights successively; that is, she was generally a little easier from about eleven o'clock in the forenoon, although still far from well, till towards ten or eleven o'clock at night, when the shortness of breathing always returned very violently. However, after eight days, she began
began to get some better rest at night; the asthmatic fits were neither so long nor so violent; and, about fourteen days from the accident, they were almost entirely gone off. Although she is now in very good health, she has not yet quite recovered her usual flesh, strength, and colour. Besides the above mentioned medicines, she took at times, during the first eight days, small quantities of an emulsion of spermacetum, lac. ammoniacum, and succ. liquorit.; had a dose of cooling physic; rode and walked out a little sometimes; had a few anodyne draughts, with seven or eight drops of laudanum; but it could not be observed that she got any benefit from any of them, except that she sometimes thought the oil of almonds gave her a little ease. She had a show of the menses four or five days after the accident, although it was then only about the middle of the usual period; she coughed up at times some small quantities of blood, and had also some mixed with her stools and urine.

The reason why the laudanum, the most effectual and universal antitptic, was used in such small quantities, was, that it was known before, that she could never bear above eight or nine drops of it, as the common dose used to affect her.
her with violent sickness at stomach, giddiness, and pain in her head, to so great a degree, that, for some years past, she neither would take, nor durst her husband administer, a larger dose to her. At the time the above accident happened, she was not with child, nor had she had any for some years before.

The above effects of ipecacuanha I believe very seldom happen, and, no doubt, arise from some peculiarity of constitution. Medical writers, at least as far as I can recollect, seem to have taken little or no notice of its ever producing such an effect.

Mr Leighton, a very reputable surgeon-apothecary in Newcastle, told me, that the effluvia of ipecacuanha had the very same effect upon his wife, as it is above described to have upon Mrs S.; and that he had once, in particular, very near lost her, from having some of it powdered in his shop.

The ipecacuanha that had the above effects upon Mrs S. was the common officinal ash-coloured, or grey kind.
III.

An Account of the effects of Lightning, in discarding:
a Tumour of the Breast. Communicated to Dr.
Duncan, by Dr Alexander Eason, Physician,
Dublin.

TH E following case, which was related to
me both by Dr Hicks, and by the Rev.
Mr Wynne of Abraken in the county of Meath,
whose wife was the subject of it, is so far singular,
that I think it deserves notice, and may perhaps
be of use in practice.

Some years ago, Mrs Wynne, after delivery of
a child, was affected with a hard scirrrous tumour
in her left breast. For the removal of it, she
was put upon a course of medicine and proper
regimen by Dr Hicks. But, as he found it to be
very stubborn, and was afraid that it might prove
cancerous, he desired her to go to Dublin, to
have the advice of some eminent surgeons. She
accordingly went there, and consulted Messrs
Daunt and Lister, who recommended it to her
to return to the country, and to pursue the same
course
course of medicine for some time longer; as they considered cutting off the breast, or extirpating the tumour, to be the last remedy.

Matters continued much in the same state as they had been for several months, when she accidentally received a blow from lightning, as she stood at the window observing a heavy thunderflower. The lightning by which she was struck set fire to the roof of the house, which was of thatch; it forced the chimney-piece from the wall, and raised the carpet from the floor.

Mrs Wynne received the stroke on the left shoulder, from which it passed across the diseased breast and down her back. The colour of her silk gown was discharged in two different places; the flannel on her breast was a little burnt, or rather, it appeared as if an iron, not very hot, had been drawn across it. She fell to the floor, and remained without the use of her limbs till night. But, upon their being rubbed with flower of mustard and spirits, she recovered the use of them.

Two days after this accident, Dr Hicks visited her, and, to his great surprize, he found that the tumour of her breast was much softer, and considerably
considerably diminished. It a short time after, it entirely disappeared, although, for a considerable space before, it had resided the power of every medicine which could be exhibited.

From this case, a question in practice naturally occurs. Since lightning and electricity are of the same nature, should we not be encouraged to try the electric shock against indurated swellings in glands? And may it not serve at least to assist other remedies, when the case is stubborn?

IV.


The practitioners in Britain, who have employed the cabbage-tree-bark for the cure of those afflicted with worms, have differed much in the account they have given of its obvious operation. And, while by many it is held to be a medicine operating very violently, it is not to be imagined that, altho' efficacious, it will ever be soon introduced
ceed into common use. The following letter to Dr Duncan from Mr Anderson, who practised medicine for some years in the West-Indies, may serve not only in some degree to explain these differences, but also to remove objections which may be entertained to the employment of this useful medicine. In this event, we presume it cannot fail to be acceptable to our readers.

"SIR,

"In consequence of your request, I send you what information I can concerning the wild cabbage bark, or worm bark of Jamaica.

"I have seen two different sorts of it, the one of a much paler colour than the other; and although they be nearly of the same taste, and may probably have the same anthelmintic effects, yet I have some reason to think, that they are not equally safe in their exhibition.

"The first kind which I have mentioned, I have tried but seldom. I have generally found it to act more violently than the other. It often occasions loose stools, great nausea, and such like symptoms, attended with no small degree of uneasiness in the belly. In two or three instances, I have suspected it for bringing on fainting fits; which
which took place soon after the medicine was exhibited.

"The second sort which I have mentioned, or the darker coloured bark, resembles much the cassia lignea in colour, though it be of a much coarser texture. This is the kind commonly used in the West Indies. I can give you no botanical description of the trees from which either kind is taken. Nor do I recollect any better mark by which the one kind may be distinguished from the other, than the circumstance of colour which I have now mentioned.

"I am sensible that many have objected to the use of this medicine, from a supposition that it acts too violently. But, from the experience which I have had in having given it to a number of patients, I think I could take upon me to employ it in any case where an anthelmintic is necessary. As it is a medicine but little known in practice in Europe, and, as I believe, it is not very long since it was discovered to any European practitioner, I think it would be unfortunate, were it rejected without a fair trial. The hazardous symptoms which have been ascribed to it may, I imagine, have followed either from the use of the first kind, or from an over dose. Both
the one and the other of these circumstances, however, might easily be guarded against. Thus, for example, in place of giving a table spoonful of the decoction of the latter kind, which is commonly the first dose for a grown person, and which is generally increased in a few days to four or five table spoonfuls, might we not begin with a tea spoonful? This is the method in which I have commonly been in use to give it. And I must observe, that I never saw it act violently when thus managed; while, at the same time, I have often experienced the best effects from it as a powerful anthelmintic.

"I have usually prepared the decoction which I employ in the following manner.

"Take of the bruised bark two ounces and a half; of water two quarts; let it be boiled over a gentle fire to a pint and a half. Strain off the decoction, and let it be kept for use, in a bottle well corked. Of this decoction a table spoonful is usually given the first morning for a dose to a grown person; one and a half the second, continuing to increase it gradually to four or five table spoonfuls, and giving it for eight or nine mornings successively. After this, I commonly give a dose of jallap, with a few grains of calomel.
mel, which seldom fails to bring away the worms, some dead, some alive. If at any time I have found the decoction produce more than one or two loose stools, I have added to each dose a few drops of liquid laudanum. And, in general, I have given with each dose, fifteen or twenty drops of the spirit of lavender on a bit of sugar."

V.

The History of a large Prolapsus Uteri, accompanied with several extraordinary Circumstances, from which it appears, that the Catamenia flow only from the Uterus, and not from the Vagina.

By Mr James Hill, Surgeon at Dumfries.

About the year 1741, a married woman was delivered of her first child when she was in the twentieth year of her age. The midwife, who was none of the most humane of her profession, pulled very hard in bringing away the placenta; upon which, the woman heard a particular noise, and thought she felt something break within her. She complained that she was injured; but the midwife answered, in a surly manner, that she knew her business, and had done no harm. A pain and weakness continued in
in that side; but she was not sensible of all the injury that had been done till she got up and began to walk across the room. The uterus then fell down, as large as the fist of a man of ordinary size, when clinched. It was covered by the vagina reversed, which came down with it, resembling a bag. The os tincae projected about an inch below all, and seemed to her to resemble the nipple of a breast. These, therefore, were the appellations which she afterwards used for distinguishing these parts.

After this first prolapsus, she went immediately to bed, and put all up very easily. It continued so till the next time that she attempted to walk, when it again dropt down as formerly. She took no medical advice upon this occasion; but, by the persuasion of some good old woman of her acquaintance, bandages were applied, with a view of keeping it up; but without effect. It always dropt down when she stood erect, and the bandages galled and fretted her so much, that she threw them all away. It continued regularly to hang down all the day, and was put up every night, in which situation it remained till she got up next morning. Her health was in no degree impaired by this affection; she felt no other inconvenience.
inconvenience from it than what arose from the bulk.

She suckled her child for about eighteen months; and, a short time after it was weaned, the catamenia appeared as usual. She then observed, that the menstrual blood was discharged entirely through the nipple, as she called it, and that not a drop came from the bag. Sometimes the blood came away by single drops; and very slowly, at other times it flowed so fast that she was obliged to keep within doors; and, in general, her menstrual evacuation was in great quantity.

After some time, she again fell with child. This was attended with much inconvenience during the whole time of gestation; the uterus still hanging down all the day and being put up at night. At length, however, it grew so big, that it could not get down. Then it lay as a heavy load on the os pubis and neighbouring bones, till some time in the seventh month, when she was delivered. She nursed this child also, and it lived till it was four years old. During the time that she gave suck, and after the child was weaned, the circumstances with respect to the
the prolapsus were, in every particular, the same
as formerly; with this difference only, that the
nipple now hung somewhat lower.

In the course of a few years, she conceived
three times after this; but she carried none of
her children beyond three months. This she
herself attributed to her being of a very passionate
temper. And an abortion in all the cases ensued
on her being much provoked. After every mis-
carriage, the nipple hung still farther down than
formerly.

These frequent miscarriages were succeeded
by a fluor albus, which continued for six or seven
years. During all this time she uniformly ob-
served, that, when she menstruated, the discharge
was from the nipple; while, on the other hand,
the whites came entirely from the bag; which
last was so wet, that she was obliged to have it
constantly covered with cloths.

While in this situation, she was affected with
a very severe colic, and such a swelling of the
uterus from cold, that she could not put it up.
This obliged her to acquaint me with the whole
affair. The colic and swelling were soon re-
moved; but I did not propose to do any thing for
the
the other complaints, which continued in the situation described above till the year 1761, when she was attacked with a severe intermittent. She was then between forty and fifty years of age; and, after the ague was removed, her menses did not return. The prolapsus, however, continued as formerly, with this remarkable difference, that the os tinae or nipple coalesced and was skinned over. The fluor albus also went off, and she has now no trouble from the pendulous uterus, but the bulk, to which she has been accustomed for thirty-three years; and, for these last ten or twelve years, she has not taken the trouble to put it up.

It swells sometimes to a great bulk, from cold or hard labour. At other times, it shrinks up like a corrugated scrotum, to which it bears a very great resemblance; as, from being long exposed to the open air, it is now dry, and of the same colour with the rest of the skin.

I imagined, that, after having been so long down, and after having assumed this appearance, it could not be put up again. But in this I was mistaken. She was still able to reduce it with the utmost ease; but it came down again as soon
as the pressure was removed. The bulk of this tumour never obstructed the urethra, as it was entirely below that passage. She still continues in good health, and goes about so briskly that few people know she has any disorder.
The following account of the celebrated Morgagni is extracted from the *Eloge* on that great man, which have been published, since his death, in the Memoirs of the French Academy.

**John-Baptist Morgagni, Doctor of Medicine**, first Professor of Anatomy in the University of Padua, and member of several of the most eminent Societies of learned men in Europe, was born in the year 1682, at Forli, a town in the district La Romagna, in Italy. His parents, who were in easy circumstances, allowed him to follow that course in life which his genius dictated. He began his studies at the place of his nativity, but soon after removed to Bologna, where,
where, such was the rapidity of his progress, that he obtained the degree of Doctor of Medicine, when he had but just reached the sixteenth year of his age. An intimacy which he there contracted with the celebrated Domenico Guglielmini, had probably some share in inspiring him with a relish for mathematical learning. But his peculiar taste for anatomy soon found an able and indulgent preceptor in Valsalva, a man whose name needs no encomium. Less penetration than that of Valsalva, would have been able to discover the superior abilities of young Morgagni, among other pupils. On him Valsalva bestowed the utmost attention; and, such was the progress he made under this able master, that, at the age of twenty, he himself taught anatomy with high reputation.

Soon, however, the fame of his prelections, and the number of his pupils, excited the jealousy of the public professors, and gave rise to invicious perfections. But his abilities and prudence gained him a compleat triumph over his enemies. And all opposition to him was finally terminated from his being appointed by the senate of Bologna to fill a medical chair, which soon became vacant.

But
But the duties of this office, although important, neither occupied the whole of his time, nor satisfied his anxious desire to afford instruction. He still continued to labour in secret on his favourite subject, and soon after communicated the fruits of these labours to the public in his Adversaria Anatomica, the first of which was published in the year 1706, the second and third in 1717, and the three others in 1719. Of this work, it is sufficient to say, that it may justly be considered as one of the most beautiful anatomical productions of the present age. There he describes many parts of the human body before unknown; and he revives many important discoveries, of which his cotemporaries were ignorant. He corrects the faults of other anatomical works, and supplies their deficiencies. Throughout the whole, he appears to be an able and impartial critic, an useful and perspicuous commentator, and a subtle and ingenious discoverer.

The publication of these Adversaria spread the fame of Morgagni far beyond the limits of the state of Bologna. Such was his reputation, that the wise republic of Venice had no hesitation in making him an offer of the second chair of the theory of medicine in the university of Padua.
dua, then vacant by the death of Mr Molinetti; and, to ensure his acceptance, they doubled the emoluments of that appointment. While he was in this department, he published his treatise, intitled, *Nova Institutionum medicarum Idea*, which first appeared at Padua in the year 1712. From this work his former reputation suffered no diminution. And soon after he rose, by different steps, to be first professor of anatomy at that celebrated university.

Although Morgagni was thus finally settled at Padua, yet he gave evident proofs of his gratitude and attachment to Bologna, which he considered as his native country with respect to the sciences. He exerted his utmost efforts in establishing the academy of Bologna, of which he was one of the first associates; and he enriched their publications with several valuable and curious papers. Soon after this, the Royal Societies of London and Paris received him among their number. These distinguishing marks of honour were particularly acceptable to him, and he ever continued to acknowledge them with becoming respect.

Not long after the publication of his *Adversaria Anatomica*, he began, much upon the same plan,
plan, his *Epistolae Anatomicae*, the first of which is dated at Padua in the beginning of April 1726. They consist of twenty in number, published at different times. Throughout the whole, he equally displays the abilities of the critic and the author; and, while he corrects material errors, he at the same time publishes important discoveries.

The works of Morgagni which have already been mentioned, are to be considered, in a great measure, as strictly anatomical; but he was not more eminent as an anatomist, than as a learned and successful physician. In the year 1760, when he was not far distant from the eightieth year of his age, he published his large and valuable work *De causis et sedibus morborum per anatomen indagatis*. This last and most important of all his productions, will afford convincing evidence of his industry and abilities to latest posterity. Besides these works, he published, at different periods of his life, several miscellaneous pieces, which were afterwards collected into one volume, and printed under his own eye at Padua, in the year 1765.

It does not appear that he had in view any future publications; but he intended to have fa-
voured the world with a compleat edition of all his works, which would probably have been augmented with many new observations. In this he was engaged when, on the 5th of December 1771; after he had nearly arrived at the 90th year of his age, death put a period to his long and glorious career in the learned world. He descended to the grave equally loaded with years and with honours: For, besides marks of distinction from almost every country in Europe; the nobility of Forli, the place of his nativity, as an unequivocal proof of esteem, granted letters of noblesse to him and to his posterity; and they ordered a bust of Morgagni to be placed in their public hall. So great an honour was it reckoned by that city, to have given birth to such a man:

* * * * * *

On Wednesday, June 12th, the Magistrates and Town-council of Edinburgh declared the Professorship of the Institutions of Medicine in the University to be vacant; as Dr Drummond, who was elected to that office about three years before, had not accepted of it; and, on Wednesday the 19th of the same month, they nominated Dr James Gregory, son to the late Professor Gregory, and who had obtained the degree of Doctor of Medicine about
about two years before, to succeed Dr Drummond. The only other person who publicly appeared as a candidate for this office, was Dr Andrew Duncan, who, by appointment of the Town-council, on the recommendation of the Medical Professors, had taught this branch of medicine in the university for the two preceding sessions. All that Dr Duncan wished for was, that the magistrates should, as formerly, send to the professors a list of the candidates that might offer, requesting their opinion which of them they believed to be best qualified for discharging the duties of that important office in all its branches; or, if they had any particular reason for not thus consulting the professors, that they should take the opinion of the colleges of physicians and surgeons at large on the same question. But, in place of this, the Lord Provost put a verbal question to the Medical Professors, asking whether they had any objection to Dr James Gregory? To which the Professors returned an answer in writing, informing him that they had no objection to Dr Gregory.

Although, however, Dr Duncan's engagements in the college are now terminated, he does not mean to give up teaching. He took an opportunity of announcing his future intentions when
when he concluded his summer-course of clinical lectures at the Royal Infirmary. As his address to the students, on that occasion, will give the best account of this undertaking, we shall make no apology for presenting it to our readers.

Conclusion of the Clinical Lectures at Edinburgh, 26th July 1776.

"I have thus, Gentlemen, concluded the present course; and am now to put a final period to my academical labours in this university. I need not, on this occasion, call to your remembrance, either the footing on which I was appointed to teach, or the circumstances by which that appointment is now terminated.

"For two years past, I have been engaged in discharging the duties of an office, which required the utmost exertion of the highest medical abilities; and, of all its branches, the Clinical lectures, while it was the most difficult, was also the most interesting. Resolved, however, to conjoin to what experience I before had, and to very limited reading, the utmost efforts of unremitting industry, I yet entertained some hopes that my labours might not be unacceptable. That industry, I may now venture to assert, has not been without effect; and, in an at-
tempt to extend this useful institution beyond its former limits, by teaching a clinical course during the summer as well as the winter session, my endeavours have been crowned with greater success than I had reason to expect. I can farther reflect, with satisfaction, that this success has been no less beneficial to the hospital, than advantageous to myself. To you, also, I hope it has not been without its use; for, unless I were to offer an insult to your understandings, I must consider the attendance I have had during this fourth clinical course, as an incontestible proof of your approbation.

"By this, however, I am far from meaning to insinuate that the present course has been without faults. These cannot have escaped your observation. Yet I may venture to assert, that no one among you is more sensible of them than I have been myself. In any hands, errors and omissions were unavoidable; and I trust, that those which I have here committed, will be judged of with that candour and indulgence to which the best intentions are intitled. While, at the same time, the records of the hospital will bear witness, that, in proportion to the number of difficult and dangerous cases which have been under our care, the success of our practice has been
been by no means inconsiderable. Of sixty patients, we have lost but three; and these too, even at the time of admission, might have been pronounced in an irrecoverable state. I have now, therefore, the satisfaction of being able to retire from this arduous task, with ease in my own mind, and, I hope, not without some additional credit in your estimation.

"My academical labours have not, indeed, in other respects, been attended with equal advantage. I was not without hopes, that, by my exertions here, I should still have been able to hold the office of a teacher in the university; and I had no hesitation in offering myself a candidate for the chair lately vacant. In that competition, indeed, I had no powerful connexion, no political interest, to aid my cause; but I thought that my chance for success stood on no infirm basis, when it was rested on what I had done to deserve it.

"Although, however, I can no longer act in an equally conspicuous capacity, yet I hope I may hereafter be employed as a teacher in one not less useful. I am neither arrived at that age which requires ease, nor am I placed in those circumstances which will allow of it. It is therefore my present intention still to dedicate my labours..."
hours to the service of the students of medicine at this place. And, when I reflect on the manner in which they have hitherto heard me, I am not without hopes that these labours may not be unsuccessful. In that event, what I now rank among the list of misfortunes, may not hereafter, perhaps, deserve the appellation. Young as I am, I have already lived long enough to have experienced even advantages from disappointments on other occasions; and time alone can determine whether the present disappointment may not yet afford me the strongest instance of the particular favour of Heaven.

"The task, indeed, which I now propose to myself, while it is no less difficult than extensive, is, in some respects, also, not without hazard. Those who are ignorant of the matter, may ascribe my conduct to motives by which I was never actuated; or may apprehend consequences from this undertaking which cannot possibly follow. Thus, perhaps, it may be the origin of a malicious and groundless opposition to my advancement in other respects. But, conscious of the integrity of my intentions, persuaded of the liberality of sentiment which will actuate the conduct of the present professors, and trusting to the continuance of that discernment and
and favour which I have so often experienced at the hands of the students, I am inclined to view the danger as more apparent than real; and it is not now the season for me to shrink from labour, or to be startled with difficulties.

"I am now, therefore, to employ my endeavours in attempting to exhibit, in one connected view, the whole fundamental principles of the healing art. Those who are acquainted with the subject, will at once conclude, that what I have propose to comprehend within the short space of six months, would afford ample field for consideration during as many years. It is not, however, my aim to enter into minute discussions, but to afford merely such a comprehensive view of general principles as may be a proper basis for future inquiries; and, avoiding matters of mere curiosity, I propose solely to confine my attention to topics of real utility. By thus treating subjects on a limited scale, I hope, that, within the period I have mentioned, I shall be able to deliver the most essential principles, both of the theory and practice of physic. By offering what may serve as an introduction to more extended discussion, by stating, in a new point of view, interesting medical questions which still
still remain involved in great obscurity, and by dwelling principally on chronical affections which are sometimes, even in courses strictly confined to practice, from the great attention bestowed on febrile diseases, either passed over in a cursory manner, or entirely omitted, I hope I may be able to render no inconsiderable service to the study of medicine, even at a place where it is taught in an university by eminent professors.

"But, gentlemen, while I take this opportunity of mentioning my future intentions, I must not forget that it is now my duty to return you thanks for favours I have already received. Be assured that I shall ever retain a due sense of the respect and attention with which you have honoured me; and, while I am happy that my present labours are thus brought to a termination, yet that happiness is still accompanied with the disagreeable reflection, that I shall soon be separated from some of my best friends. I trust, however, that, while you shall be more usefully employed, in reaping the fruits of those industrious exertions which I have here witnessed, the union which has thus been formed between us will still subsist. I hope you will long remember, with satisfaction, the mutual ties by which we have
have here been connected; and you may rest assured, that from my mind they shall never be obliterated. While I am anxious to hold a place in your esteem, and to be a sharer in your affections, I ask no more than I am willing to bestow. Wherever you may be situated, my best wishes shall always attend you, and in whatever I can promote your interest, my utmost efforts shall be cheerfully exerted.

“Farewell, gentlemen: May every one whom you follow as a teacher be equally anxious and assiduous to instruct you; may every one whom you rank among the number of your friends be equally sincere when he offers you his services; and, may your honest and industrious exertions be ever properly and fully rewarded. Continue through life the same care and attention which you have here displayed, and rest satisfied, that, though the reward of virtue and industry may sometimes be slow, yet in the end it is always sure.”

* * * *

Dr Henry Marcard, Physician at Hannover, in a letter to Dr Duncan, relates the following instance of the congelation of quicksilver.
On the 11th of January 1774, a young student of physic at Goettingen, about half an hour after five o'clock in the afternoon, put three drams of quicksilver into a small open glass. Upon this, he laid some loose snow and sal ammoniac, mixed in equal parts. This he put out at a window, from the third floor of a house, by which it was exposed to the open air from the north-west. And he, at the same time, mixed with the snow upon which the glass stood, about two drams of sal ammoniac.

The snow and salt were soon congealed; but on the mercury no alteration was perceived, till about one o'clock in the morning; Mr. Blumenbach then found that the quicksilver was become solid. He observed, that it was divided into six pieces, two were large ones, of more than a dram each. One of them had a hemispherical shape, the other cylindrical. The four others of a smaller size, were nearly about half a scruple each. They were all with a flat side, frozen fast to the glass, but not in contact with the snow and sal ammoniac, with which it was covered. Their colour was different from that of mercury in its liquid state; it was pale, without any gloss, and
and tended a little to a blue colour, somewhat resembling zinc.

Mr Blumenbach would have broken the glass to try how they did under the hammer; but he wished rather to have witnesses of this curious phaenomenon. At this time, Fahrenheit's thermometer stood ten degrees under 0. In the morning, about seven o'clock, he observed, that the hemispherical piece began to melt, perhaps from its being more exposed to the open air, and from its being farther removed from the mixture with sal ammoniac under the glass than the rest. It had then the appearance of an amalgama, tending a little to that side to which Mr Blumenbach inclined the glass. The other five pieces still remained solid; and he now called for several of his fellow students, whose names he mentions, and who observed, along with him, this extraordinary occurrence. About eight o'clock, the cylindrical piece began to melt; and soon after the four smaller pieces shared the same fate. They dissolved into small bright globules, and soon disappeared in the interstices of the congealed snow and sal ammoniac.

Mr Blumenbach gave an account of this experiment to the Royal and Electoral Society at Goettingen,
Goettingen, and it was lately published in the literary gazette of that university, from which the above account is extracted.

This phænomenon has not been observed since the year 1769, when it was often seen at Petersburg. On examining the Petersburg commentaries, I find the principal difference between the two observations to have been, that the quicksilver at Goettingen had no gloss at all, and at Petersburg it was bright like polished silver. But, as Mr Braun took no quicksilver for his experiments but what was inclosed in the bulbs of thermometers, the polished surface of the mercury may have been the effect of the glass which surrounded it.

* * * *

The following articles of Medical and Philosophical news were communicated to Dr Duncan, by that ingenious and industrious physician Dr Percival, to whom this work has frequently been indebted on former occasions.

Extract of a letter from Mr Vaughan to Dr Percival.

Dr Priestly has lately sent a very remarkable paper to the Royal Society, pointing out the uses of
of the blood in the animal frame. Mr Cavendish has also laid before the Society certain experiments, which exhibit an electrical shock from an apparatus in water; and which are thought very decisive with regard to the Torpedo. At Wanstead, in Essex, at half past ten o'clock in the evening, my brother and I observed the thermometer for near a quarter of an hour, on the 31st of January, so low as 6\(\frac{1}{4}\) deg. it being hung on a sweet briar twig, about six feet distant from the north side of our house.

 Extract of a letter from Dr Baker to Dr Percival.

I have lately seen a dropfy cured by diluents. You have heard that the French King has purchased Madame Nouffer's medicine for the tenia. It is remarkable, that Dioscorides recommends the fern root, four drams for a dose, against worms, and he adds, that the virtues of it are improved by Scammony.

 Extract of a letter from Mr Forrester to Dr Percival.
I send you some Winter’s bark lately collected at Terra del Fuego. This Winter’s bark is very different from what is sold as such in the shops, and which is the Canella alba coming from Jamaica and China. This latter belongs to the class of Dodecandria of Linnaeus; but our Magellanic Winter’s bark belongs to the class of Polyanandra in the same system. We found in New Zealand, another plant of the same genus, but of a different species, which had likewise a very acrid, fiery, pungent taste. The Magellanic bark has likewise such a taste, but besides that, a fine aromatic smell, which even served us for a kind of incense: For its effluvia when burned, or rather smoking, are very agreeable.

* * *

We mentioned some time ago, that a building had been begun at Edinburgh, for the use of the Medical Society there. This building is now so far advanced, that the hall intended for the weekly meetings of the Society, was completely fitted up for their reception, and opened by an address to the members from Mr Robert Freer, their senior annual president, on the 26th of April. At this meeting, besides the ordinary members of the Society,
there was a numerous and respectable company, consisting of most of those gentlemen, residing in Edinburgh, who have contributed to the expense of the building.

Mr Freer, in his address to the members, after a very modest and suitable introduction, pointed out the many advantages which must necessarily result from literary institutions, when conducted with propriety. He then recalled to the attention of the members, the numerous advantages which the medical students at Edinburgh have, for the space of forty years past, derived from this society. Of this, repeated acknowledgements from almost all its members, and among these are to be ranked some of the most eminent physicians who at present practice medicine in the British dominions, afford incontestible evidence. But he observed, that however great these advantages might be, still farther benefits would necessarily result from the present undertaking. And he demonstrated, in a striking and perspicuous manner, that many conveniences, tending in a particular manner to facilitate the study of medicine, which are not enjoyed by any other seminary of medical education, would result
result from this building, when either the funds of the society, or the farther generosity of the public should enable those to whom the conduct of it is entrusted, to carry all their schemes into execution. Among these the advantages which will flow from a commodious appartment for chemical and philosophical experiments, were represented as by no means the least considerable. Here genius and industry may be exercised, not more to the improvement of the individual, than to the interest of the public.

Having thus stated the beneficial consequences which will necessarily follow from this undertaking; he next described, in lively colours, that gratitude which was due by every future member of the society, and by every sincere lover of science, to those who had given contributions towards the erection of this building, to those who had become the guardians of it, and to those whose earnest desire for the future prosperity of the society first gave rise to the scheme, whose ardour for the improvement of the medical art has prompted them to conduct the execution of every part of it on the most useful and extensive plan. He observed, that a due
sense of these obligations could not fail to be productive of the best effects. And he put a period to his address, by pointing out to the members the expectations which would naturally be entertained by those who had generously contributed to the undertaking, the fair opportunities which were now afforded for the exertion of genius, and the censure to which indolence would necessarily be subjected. By these, and many other convincing arguments, he attempted to infligate the members to the strongest and most unwearied endeavours in the prosecution of medical inquiries.

A list of the contributors to this building, elegantly written, is suspended in their hall. It contains the names of almost all the medical practitioners at Edinburgh, of many members of the society, who have long been engaged in the practice of medicine at a distance from Edinburgh, and of several other gentlemen, who could be prompted to contribute to this undertaking from no other motive, but an anxious desire for the improvement of medical education. Yet every one who reads this list, will be surprised at the absence of some names which he would natur
urally have expected. Many parts of the work still remain to be finished, and farther aid from the public is still requisite. Contributions are received by Doctors Cullen, Hope, and Duncan, physicians in Edinburgh, and by Mr John Murray bookseller in London.

* * *

Dr Robert James, physician in London, died on the 23d of March. He will long be esteemed by physicians as an industrious and learned author; and his memory has a claim to the gratitude of mankind, as being the inventor of a celebrated fever powder. It cannot, however, be mentioned without regret, that he should have thought it necessary to conceal his method of preparing it.

* * *

David Hume, Esq; died at Edinburgh on the 25th of August. He bore a long and painful illness with peculiar serenity of mind. And he met the slow, but manifest approaches of death, with becoming fortitude. As a philosopher of the first rank, and as a man, the uniform tenure of whose life demonstrated the constant influence of every social and benevolent affection, he will live in the esteem of future ages.

Dr
Dr Hope, Professor of Botany at Edinburgh, put into the hands of his students, during his course this summer, a new classification of the vegetable kingdom. With a particular account of his system we are in hopes that we shall be able to favour our readers in a future number.
Sect. III.

List of New Books.

AN account of the weather and diseases of South Carolina. By Lionel Chalmers, M. D. of Charlestown, South Carolina. Two volumes 8vo, London.


A short account of the present epidemic cough, in a letter to Dr De la Cour at Bath. By William Grant, M. D. 8vo, London.


An
An essay on the blood, in which the objections to Mr Hunter’s opinion concerning the life of the blood are examined and removed. By G. Levison, M. D. 8vo, London.


Tracts on medical subjects. By Charles Efte, 8vo, London.

Medical advice for the use of the army and navy in the present American expedition. By William Rowley, M. D. 8vo, London.

Philosophical transactions, giving some account of the present undertakings, studies, and labours of the ingenious in many considerable parts of the world, vol. 65. 4to, London.


Essays physical and chemical, in two parts, by Mr Lavoisier, member of the royal academy at Paris, translated from the French. By Thomas Henry, F. R. S. 8vo, London.
Medical observations and inquiries by a society of physicians in London, vol. 5. 8vo, London.

Eight anatomical tables of the human body, containing the principal parts of the skeletons and muscles represented in the large tables of Albinus; to which are added concise explanations. By John Innes, 4to, Edinburgh.

Traité de l’apoplexie et de ses différentes espèces, avec une nouvelle méthode curative dont l’utilité est prouvée par l’expérience. On y traite également de la paralysée et de ses différentes espèces particulières, &c. par M. G. B. Fonlart, M. D. médecin consultant de S. A. S. la Prince évêque de Liége, 12mo, Liége.

Traductions d’anciens ouvrages Latins relatifs à l’agriculture, et à la médecine vétérinaire, avec des notes; par M. Saboureuex de la Bonnetrice, ecuyer, avocat en parlement, Docteur et professeur de la faculté des droits en l’université de Paris, tom. 5. and 6. 8vo, Paris.

Traité complet d’anatomie, ou description de toutes les parties du corps humain; par M. Sabatier, membre du college de Chirurgie de Paris, censeur et professeur royal de l’académie royale
royale des sciences et celle de chirurgie, chirurgien major et consultant de l'hôtel royal des invalids, &c. 2 vol. 8vo, Paris.

Avis tres-important au public sur différentes espèces de corps et de ceintures d'une nouvelle invention, par le Sieur d'Offemont, maître et marchand tailleur à Paris, 8vo, Paris.


Medizinische commentarien von einer Gesellschaft der Ärzte zu Edinburg. Erster und zweiter theil, aus dem Englischen, &c. i. e. Medical commentaries by a society of Physicians in Edinburg. First and second volumes, translated from the English, 8vo, Altenburgh.


Josephi Jacobi Plenck, Chirur. Doctoris, nec non chirurgiae, anatomes, atque artis obstetriciae profefforis
profectulis Caesareo-regii publici ac ordinarii in Caesareo-regia universitate Tyrnavienfi, Pharamcia Chirurgica, sua doctrina de medicamentis praeparatis ac compositis quae ad curandos morbos externos adhiberi solent. 8vo, Vienneae.

Josephi Jacobi Plenck, Chirurgiae Doct. &c. Prima Lineae Anatomicae in usum praelectionum. 8vo, Vienneae.

Josephi Jacobi Plenck, Chirurgiae Doct. &c. Selectus Materiae Chirurgicae, cui additur clenchus instrumentorum et fasciarum chirurgicorum. 8vo, Vienneae.


Dissertationes Medicae inaugurales, quas et auctoritate reverendi admodum viri, Gulielmi Robertson, SS. T. P. Academiae Edinburgenae Praefecti; nec non amplissimi senatus academici consenuit, et nobilissimae facultatis medicae decreto; pro gradu doctoratus, summisque in medicina honoribus et privilegiis rite et legitime consequendis;
sequendis; eruditorum examini subjecerunt. Prid. Id. Jun. 1776,

Thomas Bowdler, Britannus, De febrium intermittentium natura et indole.

Dionysius Dorsey, Americanus, De chlorosi.

Ezekiel-John Dorsey, Americanus, De nutritione.

Thomas Neufville, ex Insula Jamaica, De Pneumoniae et sedis ejus historia.

Ludovicus Brotherston, ex Insula Sancti Christopheri, De utero et inflammatione ejusdem.

Samuel-Martinus Stephenfs, Hibernus, De typho.

Johannes Johnston, Hibernus, De Phlegmasiis vel inflammatione.

Johannes Carfon, A. B. Philadelphiensis, De cantharidum historia, operatione, et usu.
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By a Society in Edinburgh.

Quod si deficient vires, audacia certe
Laus eis; in magnis et voluiisse fat efi. PROPERT.

VOLUME FOURTH.

PART II.

LONDON:

Printed for J. Murray, No. 32. Fleet-street;
W. Creech, Successor to Mr Kincaid, and
Drummond, Edinburgh; and T.
Ewing, Capel-street, Dublin.

M,DCC,LXXVII.
M E D I C A L
C O M M E N T A R I E S.

S E C T. I.

An Account of Books.

I.

_Dissertatio Physica Experimentalis de effectibus
Electricitatis in quaedam corpora organica, Auctore
Carolo Herico Koestlin. 4to, Tubingae._

In the first part of the essay before us, we are
informed that, from different circumstances,
but particularly from the perusal of Doctor
Priestley's history of electricity, the author was
induced to attempt several experiments, with a
view to determine the effects of electricity, upon

I 2 different
different organized bodies. We are told like-wise, that his inquiries are confined to the three following subjects, viz. The influence of electricity in the incubation of pullets eggs; its influence, in the same respect, on the eggs of different butterflies; and, lastly, its effects on the vegetation of different plants.

The electrical apparatus employed, as it differed little from those in common use, does not require a particular description; only it may be observed, that no electrometer was had recourse to, the author imagining, that no instrument, hitherto invented for that purpose, can be much depended on. But he takes notice that, when the weather, and other circumstances, were favourable for electrical experiments, so much matter was generally collected, by three turns of the wheel, as to give a pretty smart shock, and, by fifty turns, spirits of wine could be set on fire. Besides the usual electrical apparatus, however, he found it necessary to have a small table made of wood, suspended to the ceiling of the room by means of four silk cords, for the purpose of more conveniently applying electricity to the different plants made use of in the experiments; and, when any of the eggs were to be electrified, they were placed
Commentaries

placed in glass bells made for the purpose. Some of the eggs were hatched under hens, and others by means of heat artificially applied, in a furnace of a construction similar to that described by Mr Begvelin in the history of the academy of sciences and belles letters of Berlin for the year 1749.

In the several experiments that took place, every precaution was taken upon, to prevent any mistake or fallacy, with respect to the effects of the electrical matter applied to the different substances. All the eggs made use of, as well those electrified as those that were not, were recent, and taken from such hens as had daily communication with cocks. The vessels in which the plants were placed, were always as nearly the same in point of size as possible, as was likewise the quantity and quality of the earths made use of. The plants and seeds were all placed at the same depths, and had always the same exposure, both with respect to heat, air, and light.

Before proceeding to enumerate the several experiments, our author thinks it necessary to mention the different modes in which electricity was applied; and these were,

I 3
I. Po.
I. Positively.

1. Without sparks.

   a. The substance to be electrified, being insulated, and having, at the same time, a communication with the conductor, by means of an electric. This our author terms simple electricity, or the electrical fomentation.

   b. The body to be electrified, not being insulated, but connected immediately with the surrounding elements.

II. Negatively, by conjoining the body to be electrified with the cushion of the globe.

III. Positively and negatively together, or in what are termed electrical shocks:

   1. The substances to be electrified, being insulated, and connected with that side of the charged phial positively-electrified, and a connecting chain then applied to the negatively-electrified side of the phial.

   2. The body to be electrified, not being insulated, being connected with the negatively-electrified side of the phial, and afterwards, on the phial being charged with the positively electrified side.

The
The first experiment was upon pullets eggs. Six eggs which had been exposed to the electrical fomentation, three times a-day, for five days, and for a quarter of an hour each time, were, on the 24th of June, placed below a hen, together with other six eggs that had not been electrified. The electrified eggs received three other applications, similar to the former, on the 25th, and one on the morning of the 26th. Although the eggs had been placed below the hen on the 24th, yet, as she did not begin to sit constantly upon them till the evening of the 26th, that period, therefore, must be considered as the commencement of the incubation.

On the 14th of July, viz. the 18th day of incubation, two fine chicks were produced from two of the electrified eggs; and, on the fifteenth, the other four electrified eggs also afforded fine birds. The author, after waiting till the 20th of the month for the fruits of the non-electrified eggs, and nothing then appearing, opened them, and found them all entirely rotten, without the least rudiments of chicks being observable.

The birds from the electrified eggs were, at first, and all along, remarkably large and healthy,
and continued to thrive even without the assistance of the mother.

On the 4th of July was commenced an experiment similar to the above, and the consequence was, that, on the 19th day from the time of incubation, four out of six electrified eggs produced fine birds; and as, after three days, there were no appearance of chicks from any of the rest, they were all broke, when two out of five eggs, which had not been electrified, were found to contain living birds. The rest were all rotten.

Two other experiments on eggs are enumerated, in which considerable variations took place, both with respect to the quantity of electricity used, and the manner in which it was applied. The result was, that eggs to which simple electricity had been applied, and that whether before or after the commencement of incubation, not only yielded chicks of a larger and stronger make than usual, but these too at a more earlier period than they commonly appear. On the contrary, however, when sparks were taken from eggs electrified in that manner, no evident difference could be observed between the produce of these and of such as had never been electrified: And again, eggs to which the electrical shock
shock had been frequently applied, seemed to be rendered entirely unfit for the purpose of incubation; none of them producing chicks on being exposed to the due degree of heat, and, in one egg that had been violently electrified, the yolk and white were found mixed together.

The effects of electricity on the ova of different kinds of butterflies, were nearly the same as those produced upon pullets eggs; the electrical atmosphere, when frequently applied, always quickening their hatching.

In our author's experiments on vegetation, several remarkable circumstances occurred, which prove, with certainty, the influence of electricity on the growth of plants. His first trials in this way, were upon seeds newly sown; and the conclusions that may be drawn from this part of the work, are,

1. That the germination of plants is greatly accelerated, by the application of simple electricity, and that in proportion to the quantity of electric matter made use of, in whatever kind of earth the seeds have been planted.

2. That, in this respect, electricity seems to have even more considerable effects than dung mixed
mixed with earth, in which seeds are to be fown.

3. That, in such experiments, the nature of the vessels that contain the earth, seems to have some influence: Thus, electricity applied to seeds and earth, contained in metallic vessels, proved more powerful in its effects, than when glass vases were made use of, and in these again, it seemed more active than when earthen pots were had recourse to.

4. That the effects of electricity in promoting vegetation, appeared equally remarkable in the open air, as in the confined air of an apartment.

5. That, although watering earth in which seeds have been fown, does not appear requisite for rendering the effects of electricity on vegetation remarkable, yet that sprinkling the earth with water, to which the electrical fomentation has been previously communicated, seems to have a considerable influence.

6. That the vegetation of plants may be retarded by their seeds being negatively electrified.

7. That although the growth of seeds can be considerably


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considerably hastened by their being exposed to the influence of the electrical fomentation; yet that no plants were produced from such seeds as the electric shock had been communicated to. And,

8. That electricity, from several experiments, both upon annual and perennial plants, had evidently a considerable influence in forwarding vegetation. With these last, however, electrical shocks do not seem to have been made trial of, the plants having been merely exposed to the electric atmosphere.

After giving a minute detail of the several experiments, our author next endeavours to account, as nearly as possible, for the several effects produced by electricity. The electric matter which he, with others, supposes, in certain quantities, to be diffused over all bodies is, he says, a fluid, singularly elastic, igneous, or at least very analogous to fire, and of a remarkably irritating nature; and, from these different properties, many of the phænomena which occur in electricity may, he thinks, be accounted for.

II.
II.


The intermittent fever here described by Mr. Raymond, prevails very universally, not only in the islands of Zealand, but likewise in similar situations on the neighbouring coast of Flanders. It is less frequent in the district of Holland; but is often met with both in East and West Friesland.

The first symptoms of this disorder are, a belching from the stomach, with other appearances of indigestion; to these succeed a cold and hot fit, which lasts so violent, and so lasting, as to cause the disease to be mistaken for an acute fever of the continued kind. The intermission of febrile symptoms is, in the beginning of the disease, so inconsiderable, as often not to be observed;
served; if proper attention, however, be given, a flight remission may generally be discovered. The new paroxysm is always ushered in with a gentle coldness, and, by returning at stated periods, the disorder is, by that circumstance, sufficiently distinguished from a real continued fever. There is likewise another remarkable distinction which occurs between the two diseasés; for if, in the fever now under consideration, are prescribed, blood-lettings, purgatives, and such other strong evacuating medicines as in continued fevers are frequently of service, different chronic disorders are thereby often produced; and, on the contrary, if very warm stimulating remedies are made use of, dangerous continued fevers are often the consequence.

Next to the violent heat, which is in this fever always a very troublesome symptom, the bilious colluvies shews itself most remarkably; the belly swells, the patient is troubled with a constant vomiting, and weight in the hypochondria; the whole mouth is from the beginning, covered with a yellow bitter mucus; and so universally is the bile diffused over the system, that a bilious humour is frequently oberved to fill, and transpire from the several glands about the neck. In the course
course of the disease, violent headaches with delirium occur; the sleep is disturbed, and not refreshing; the patient is seized with startings, and other convulsive motions in the muscles. Angina is a common symptom, together with aphthae, and pains in the abdomen.—Sometimes a costiveness takes place, and at other times profuse diarrhoeas; purple coloured eruptions break out, that neither appear to be critical, nor even to alleviate any of the symptoms; nay, they rather, on the contrary, seem to increase the violence of the heat; and profuse sweatings often occur, without any other effect, however, than that of weakening the patient. Amidst the violence of these several symptoms, a certain and pathognomonic characteristic of the disorder may, by an attentive observer, be always discovered. At stated intervals, of a longer or shorter duration, an entire remission of all the symptoms takes place, in so much, that, excepting a general debility, the patient has frequently at these times no other complaint. This more particularly is the case, when the disease has been of three or four days continuance, the distinct paroxysms being then more easily observed than in the first days of the fever; at least, it
it always is so, if the disorder has not from the beginning been improperly treated.

This fever in general at first shews itself in the form of a tertian intermittent; it afterwards, often indeed, assumes the appearance of a quotidi-an, and by this means the paroxysms are always considerably lengthened. Sometimes, again, a quartan is the type under which it appears: From the long continuance of that species of intermittent, and the several affections of the viscera it is often attended with, this always renders the complaint not only more tedious, but in reality more dangerous.

Although the symptoms of this disorder are of a very alarming nature, yet a great proportion of such as are attacked with it recover; and it is always observed, if ever the violence of the fever abates, the patient then certainly, though slowly, recovers the use of all his functions. It is likewise remarkable, that such patients always recover most quickly, as from the beginning have had the bilious humours properly evacuated; and, vice versa, such as are carried off by the disease, die seemingly in a state of apoplexy, which is commonly preceded by such a degree of coma or torpor, as the patient can scarce be roused from. The face
face becomes red and turgid; the tongue remarkably parched, the patient at the same time making no complaint of thirst; the different excrements are passed involuntarily; the pulse intermits, and the breathing becomes slow and difficult. It is always observed, that plethoric robust people recover with greater difficulty from this species of fever, than those of an opposite temperament; and hence stout young men are always more violently attacked than old people, and such as are of lax phlegmatic habits. All ages are equally liable to the distemper; infants are as frequently seized with it as adults, and rich people as well as poor. It is observed, however, that the disorder is always most severe on such as have been much exposed to the heats of summer, and on those also that have been obliged to live upon fat rancid animal food.

The origin of this disorder is, by our author, attributed chiefly to a putrefaction of the humours in general, but particularly of the bile, which may be excited by various causes; but, about Middleburg, and all over the island of Walcher, the principal cause, we are told, is the want of fresh water; for, as that island is almost wholly below the level of the sea, there are nei-
ther springs nor fresh water rivers; so that the inhabitants have to trust entirely to what they can collect by spouts, in the rainy seasons, from the sides of houses. Such water, from the variety of putrefactive matters, with which it is frequently unavoidably mixed, and from the manner of keeping it in cisterns, soon becomes putrid, and very unfit for use; it is no wonder, therefore, that the juices of such people as are obliged daily to have recourse to it, soon acquire a putrefactive tendency. This, together with a stoppage of perspiration, occasioned by cold wet weather succeeding to warm summers, our author considers as the proximate cause of this species of fever. From a variety of facts, it is well known, that this disorder, though frequently epidemic, yet is not in the least contagious. Physicians who attend the sick, and other people who live in the same house with them, are never seized with such complaints, unless they have previously received the seeds of infection. Nay, children even have been known to suck their infected nurses with impunity.

In the treatment of this disorder, blood-letting is never advisable, excepting in young plethoric patients, where, to a certain degree, it may sometimes be necessary, either with a view to moderate
rate any inflammatory symptoms that may occur,
or to prevent any risk from the violent opera-
tion of such emetics as are found requisite.

Both the nausea, and the natural vomiting
which so frequently occur in this complaint, evi-
dently point out the propriety of having recourse
to emetics; and of these the most gentle are much
preferable to those of a more stimulating nature;
so that ipecacuanha is always to be preferred
to tartar emetic. In general, however, and espe-
cially in the beginning of the disorder, neither
of those articles are necessary, as warm wa-
ter, merely, answers every purpose fully better
than either. It not only acts as an evacuant,
but such of it as is not thrown up, by mixing with
the putrescent particles of the fluids, tends
thereby not only to correct their acrimony, but
may likewise assist in carrying them off by the
skin and other emunctories. For this reason, it
should be given in large draughts, and these fre-
quently repeated, especially soon before the return
of a paroxysm is expected.

When the first paroxysm is over, gentle laxa-
tives are generally had recourse to, and almost al-
ways with evident good effects. Manna, tama-
rinds, and cassia are the articles commonly pre-
scribed.
scribed. During the continuance of the fit, it is found of service to throw in different absorbent powders, as is also the use of some of the neutral salts, and particularly nitre and cream of tartar; to which a few grains of rhubarb are sometimes conjoined with advantage. For ordinary drink, barley-water, acidulated with spirits of vitriol or nitre, answers very well; tea is likewise frequently used, as also water in which bread has been boiled, with a small proportion of wine, a moderate use of which not only is of service by supporting the patient, but tends in reality to suppress that violent heat which always prevails here.

In the first days of the disease, no kind of nourishment is ever given, excepting such drinks as have been mentioned; afterwards weak flesh broths, acidulated with citron juice, may be allowed. Butter milk is sometimes given too, both by itself, and made into porridge with flower. Ripe fruits, such as apples, prunes, and cherries, roasted or boiled in their own juices, may here likewise be safely permitted. Whatever nourishment is necessary, however, should be taken a considerable time before a paroxysm is expected, as meat of any kind, taken immediately before a fit, always occasions a great deal of uneasiness to the patient.

K 2 By
By proper attention, and the continuance of such a course as has been prescribed, a great proportion of those attacked with this disorder recover from it; it sometimes, however, proves very obstinate, especially in such as have previously laboured under any complaints in the abdominal viscera.

Of all the symptoms that occur in this disease, jaundice is most to be dreaded; for, although the feverish symptoms be got the better of, yet a dropy, or some other dangerous disorder of a chronic nature, always supervenes. In such cases, sloap with rhubarb, and other resolvent medicines, must be had recourse to inwardly, along with the external use of proper ointments, and fomentations to the abdomen, with a view to the resolution of such obstructions as may have taken place. The Peruvian bark, in this disease, when prudently administered, is always of the greatest advantage; there are some periods of the complaint, however, in which it cannot be used but with the greatest risk, particularly when any obstruction in the liver, or other abdominal viscera, takes place; as likewise when the patient is troubled with a cough, or any other pectoral complaint. In that case, the use of Peruvian bark almost certainly lays the foundation
foundation of a real phthisis. But, whenever the disorder, by its long continuance, seems to be assuming the form of a continued fever, when no obstructions in the viscerata take place, when the pulse is feeble and the patient much debilitated, and especially when the different evacuations have been carried a proper length, the bark is then the only remedy to be depended on, and should be carefully exhibited, in proper quantities, between the different paroxysms. Even in the most dangerous state of the disorder, the bark is frequently had recourse to with advantage, as in the words of our author: 'Omnium maxime cortex procedit, quando sopor comatosus, ex quo difficulter excitatur aeger, cum facie Hippocratica, et intercurrentes Leipothymiae, profundaque et obliviosa infensibibilitas, cum pulsus intermittente et respiratione stertorosa, prænunciant lethargum vel apoplexiam inflare. Tum faciliter cortex optimus cum multis acidis, præfertim vitriolicis, etiam cum rhabarbaro, si opus, et, cum salibus medius maritatus, cito et copiose est dandus. Ab ejus enim usu homo iterum evigilat, quasi redeunt sensus, redit pulsuum et respirationis integritas, homoque, ex orci quasi faucibus creptus, dein vitam protrahit, ut reliqua morbi queant superari.'

When
When the disorder assumes the form of a quartan intermittent, as it sometimes does, its cure can never be soon expected, scarcely ever before the return of one or more summers; and what in such a form always renders it more dangerous, is, that, in these regions, a scurvy frequently supervenes in the course of the winter. In the beginning of this state of the disease, little or nothing can be done; for evacuations, especially when the autumn is much advanced, have always the effect of inducing a double quartan, and febrifuge remedies cannot then be had recourse to, but with considerable risk. Refolvents, however, and bitters, with other stomachic medicines, may, in the mean time, be used with advantage; and, as soon as spring commences, antiscorbutics may be had recourse to, and afterwards the bark conjoined with these. In such cases, where the putrid scurvy has come any considerable length, as may be known by the erosion of the gums, and other symptoms that evidently shew themselves, the stronger acids, and especially the ol. vitrioli, should be had recourse to, the vegetable acid being then not found strong enough to correct the putrefcence that takes place in the blood.

After these general observations on the conjunction of
COMMENTARIES

of putrid scurvy, with the disorder now under consideration, our author then proceeds to the conclusion of the dissertation, with a few remarks on what he terms the muriatic scurvy; and, the more clearly to convey his meaning, we here present our readers with his own words: 'Quod si autem scorbutus sic dictus muriaticus accedat, qui apud nos propter aëris marini exhalationes falsas, et propter copiosiorem nautarum vivendi modum, quem etiam plures alii imitari coguntur, scilicet, propter halecum et pilium falitorum, carnisque fumo et sale conditæ quotidiam ufu-ram, etiam ob vegetabilia recentium in mag-no hominum numero penuriam et raram dispensationem, frequens est, et qui ex rigiditate ac dolore rheumatico, musculorum, ex pruritu cutis, ex eda-citate et fistula ostitate perpetua, ex urina male coccta et acer, ex spasticis nervorum contractionibus, epidermidis fascitae et desquamatione, ulceribus late serpantibus, et ex rebellis pertinacia febris quartanæ contra salutarem corticis Peruviani ufuem cognoscitur, tum praeter anti scorbutica ordinaria imprimis aqua calcis vivæ, ex conchiliis marinis exsultæ, et cum æquali lactis copia mesta, bibenda commendatur. Sæpe aqua Selt-terana et Spadana, cum regimine his aquis debito,
An exact knowledge of the situation of the abdominal viscera, in all ages, is of the greatest consequence to every practitioner. And as Mr Portal has had the best opportunities for information on the subject, his observations deserve particular attention.

The abdomen is, by Mr Portal, divided into three regions, the superior, middle, and inferior; in the first are comprehended those parts that are bounded by the diaphragm and ribs; the second
extends from the ribs to the pelvis, and the pelvis itself constitutes the last.

These three regions form one large cavity, in which are contained all the visceræ of the lower belly; the extent, however, of these different divisions varies in different ages, in different subjects, and is altered likewise by disease. In new-born infants, the distance between the sternum and pelvis is near to a third of their whole length; in adults, the length of the abdomen does not extend to a fifth of the whole. In children of three feet in height, the abdomen measures nearly one foot, and it is not found to exceed that in adults five feet high.

This difference with respect to the abdomen in infants and in adults, is confined entirely to the middle region, which, in children, is not only much longer, but, in proportion, much more extensive in every respect, than in people come to their full size. In the former, it is wider from before backwards, in children the spine being almost entirely straight, whereas, in adults, it becomes considerably crooked. In children too, it is much wider from one side to the other than in adults, as in them the ribs bend more outwards than they do in the latter.

Although
Although this middle abdominal region, however, is in children so extensive, yet both the superior and inferior divisions are not proportionally so; nay, they are even small, in comparison to those of adults. The pelvis is incomparably smaller in the foetus than in adults; in the former, the under extremity of the os sacrum bends considerably over towards the pubis. The horizontal branch of the pubis is both short and flat, and the tuberosities of the ischia are turned backwards. Every circumstance, therefore, concurs to shorten the cavities of both the inferior and superior abdominal regions; in so much that, in young children, all the viscera of the lower belly are contained in what we have termed the middle division, and remain there, till, by degrees, they insinuate themselves into the other two regions, as these, in course of time, come to be enlarged. Before treating, however, of the changes the viscera undergo in point of situation from the infantile state to that of adults, it will not be improper first to give a more particular description of their several situations in the former.

The stomach in infants, in place of being situated transversely, as is the case in adults, hangs almost perpendicularly. It extends from what is commonly
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commonly termed the epigastric region, to the umbilical, inclining a very little to the left above, and to the right side below; having its convex side or great curve turned to the left, and the small curvature towards the right. In consequence of this situation of the stomach, the omentum, which is always attached to its great curvature, lies more towards the left than the right side; and, from want of knowledge of this circumstance, practitioners have often treated, as diseases of the colon, such complaints in children, as, on opening the bodies after death, have been found seated in the omentum only. The liver is very large in the foetus, in proportion to its size in adults, and is situated almost entirely in the middle region of the abdomen; it appears to the touch externally, indeed, much nearer the linea alba than it is ever found to be in a more advanced age. At this period the duodenum is placed almost entirely behind the stomach. The spleen in infants is always easily discovered by the touch, immediately below the false ribs; this, in adults, never can be done, but in a diseased state of that viscus. In the former, a considerable part of it is situated in the middle region of the abdomen; whereas,
whereas, in the latter, its seat is always in the left hypochondrium.

In very young subjects the urinary bladder is situated entirely without the pelvis, is remarkably large in proportion to the other parts, and extends to within a very small distance of the navel; when full of urine, it makes a very evident prominence near about the middle and inferior part of the abdomen. This position of the bladder, above the os pubis, ought to be particularly attended to; for when, in infancy, it is necessary to have recourse to lithotomy, the high operation should always be preferred to those where the opening is made in the perinaeum. This operation, however, has never been favourably looked upon. But, as the shortest and easiest passage to the bladder is, in lithotomy, a principal object, it ought certainly, in children, to be preferred to every other, the bladder in them lying so near to the external teguments above the pubes.

In young girls, the womb, with its two ovaria, are considerably raised above the os pubis, and, when swelled, a circumstance, however, which, at this age, seldom occurs, it can be easily distinguished by the touch externally.

Such
Such are the situations of the visceræ in childhood. In a more advanced age, however, they are entirely changed; the ribs become less crooked, the diaphragm more vaulted, and the liver gets a higher situation; insomuch that, about the fifteenth year, it is almost entirely covered under the ribs, when the person is in an horizontal posture. This change of situation in the liver occasions a manifest alteration likewise in the position of the stomach. By degrees it deviates from the perpendicular to a horizontal line; and according as it changes its situation, the omentum recedes entirely from the left side, and proceeds to occupy the middle part of the lower belly. Although the horizontal lobe of the liver can be distinguished by the touch in adults, yet never by any means so evidently as in children; it is situated almost upon the under extremity of the oesophagus, so that, when it becomes preternaturally enlarged, it compresses that canal so entirely as to prevent the entrance of the aliments into the stomach. Two such cases our author mentions his having met with; and, in both, the patients suffered greatly from very violent vomitings with which they were attacked some time before death.
In the mean time, the pelvis becomes every way larger; the pubis turns considerably longer, and acquires a greater height; the os sacrum stretches farther back, and the tuberosities of the ischium push outwards, and to a greater distance from the os coccygis.

Such a considerable augmentation in the cavity of the inferior part of the abdomen, gives rise to such changes in the position of the different viscera, as deserves, from practitioners, very particular attention. Those which, from their make and nature, have been accustomed to float in the middle region of the abdomen, now fall down into the pelvis; this is particularly the case with the bladder, which, in falling down, has its superior part carried forward, and the urachus, which had been attached to the fundus, is tore away, and never again connected with it. This fact was first taken notice of by Mr Lieutaud, and is not as yet believed by many anatomists. The study of anatomy, in different periods of life, offers a new field for discoveries; and there is little doubt of its being prosecuted farther, but that the various opinions of different anatomists on the same subject may be reconciled, they having generally considered as certain and constant such appearances as they had observed at any particular age.

The
The same cause which produces the change of position in the bladder, occasions also that of the uterus. The womb, which, in childhood, had been placed above the pubis, by degrees falls into the pelvis, insomuch that, in adult women, who are not pregnant, it is always, in a found flate at least, entirely sunk in it. Both the bladder and uterus acquire an oblique situation in the pelvis, owing to the descent of the intestines; this obliquity, that becomes in a manner natural to both these viscera, was observed by Gunzius and Camper. On examining such cases of herniae of the bladder as have yet occurred, it is found to have happened much more frequently in the right than the left side; and it is certain that the left ovarium is generally higher situated than the right. And, indeed, the bottom of the uterus cannot be inclined towards the right side of the pelvis, without having the ovarium attached to it carried down at the same time. There is likewise another peculiarity which sometimes occurs in the position of the left ovarium, it being frequently found almost contiguous to the lower lumbar vertebra. A case of diseased ovarium is here related by the author: He was consulted, a-
long with other two physicians, by a lady attacked with a schirrous tumor, about four fingers breadth below, and a little to the left side of the umbilicus. His opinion was, that the swelling adhered to the bottom of the uterus, and that it was not produced by either of the ovaria, which he imagined lay more to each side. On opening the body, however, after death, the womb was found in the pelvis, with the right ovarium below; while the left, which was of a prodigious size and hardness, was placed near to the lowest vertebra of the loins, and above the left side of the uterus.

IV.


The first attempt to discover the number of marriages, baptisms, and deaths, that annually occur in the city of Paris, was commen-
ced in the month of January 1670, and continued monthly for two years and upwards. Mr Morand, in the first part of his paper, has inserted a copy of this list for the first two years of the undertaking, together with that of the three first months of the year 1681, which is all that, after the most diligent search, he has been able to procure. In the year 1709, a similar plan was begun, and has been regularly continued ever since; of this the following table is an exact copy; and we are told, that it is to be regularly carried on, and its contents communicated in the subsequent volumes of the memoirs of the academy, every tenth year. The very great increase, that of late years appears by the table to have occurred in the number of infants, admitted to the Foundling Hospital at Paris, is owing, we are informed, to the greater difficulty, now experienced by the lower set of people, in rearing and maintaining their children, than was the case some years ago.
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V.


M. Bertin’s observations on the disease alluded to in the title, are preceded by several pertinent remarks on the helpless state of new-born children, and on the absolute necessity of attending to all their wants.

One of the most material cares due by a nurse to a child, is to see that all the passages intended by nature, whether for the entrance or exit of the air and aliments, are free, and without any obstruction; for, as many cases occur, in which some of these are not altogether complete, if they are not soon either rendered so, or the deficiencies, in some measure, at least, supplied, such children cannot be supposed long to survive their birth.

Of all the different passages, none are found so liable to such obstructions as the anus, in which
it is now well known they are far from being un-
common. This disorder, our author alledges,
may, and has happened, in four different man-
ers, all of which require a different method of
treatment.

1. The anus may be entirely obstructed, either
by a thin membrane, or a more fleshy substance,
merely stopping up the external passage.

2. The rectum is sometimes wanting alto-
gether; is sometimes not perforated through its
whole extent; and sometimes terminates in one
or two bags or culs-de-sacs, before reaching the
external teguments,

3. The rectum in girls sometimes terminates
in the vagina; and, on other occasions, by a double
opening, one in the vagina, and another at the
usual part, viz. the anus. It may end doubly too
in another manner, viz. with one opening into the
bladder, and another in the vagina.

4. In male children the rectum sometimes
terminates in the bladder, without having any o-
ther opening; and in them likewise may end
doubly, viz. both in the bladder, and at the or-
dinary situation of the anus. In the first of these
circumstances, the disorder in general is very easily
got the better of; for, when the passage is only
covered
covered by a thin membrane, the proper situation of the anus is at once evident, both to the eye and the feel, by the pressure and blue colour occasioned at the part by the meconium within. Mr Levret, in such cases, advises a circular incision of the membrane; but our author thinks, with Hildanus and Lamotte, that a simple incision is all that is requisite; the wound being immediately washed with spirit of wine, and covered with dry charpee, without even having recourse to tents. When, however, the obstrueling substance is of a more thick fleshy nature, in place of one simple incision, two, three, or more may sometimes be necessary; as it is much better to effectuate the opening safely, in a slow gradual manner, than run any risk of wounding the bladder and other contiguous parts, by plunging the scalpel to the bottom of the obstruction at once. In order farther to avoid the bladder too, we are advised to direct the course of the incisions backwards, near to the direction of the os sacrum. In such cases, where it is necessary to carry the opening to any considerable depth, either a tent, as described by Heister, must be introduced after the operation, or a cathula, as directed by Hildanus; as the sides of
the wound would, without such a precaution, be apt to coalesce.

It sometimes happens that, although their be an opening at the ordinary part, yet the passage is too strait to allow a free exit to the meconium, and other excrements. This state of the disorder may be relieved in three different methods, either by diluting the feces with frequent injections, so as to render their evacuation more easy; by dilating the opening with a tent or canula of a proper size; and, lastly, if neither of these answer, by enlarging the opening with a scalpel. A case is here related from Roonhuyzen, wherein this last method was had recourse to with success.

The second species of this disorder enumerated by our author, is, as will be readily imagined, of a much more dangerous nature than the preceding. Several instances of it are here related by Mr Bertin, taken from the memoirs of the academy of sciences, and those of the academy of surgery, as well as some other authentic publications.

It has been proposed by Van Sweiten and others, in such desperate cases, wherein the rectum is altogether wanting, and when, at the same time, any attempts that have been made for the formation of an artificial anus have failed, that the abdomen...
men of the child should be opened, so that, in this manner, such a passage for the feces might be obtained, as has frequently been known to answer in very bad cases of herniae. Our author, however, is of opinion, that such a dangerous and doubtful operation, should in no case be had recourse to, except it should in some particular instances so happen, that nature should point out the part proper for the opening, by the formation of a circumscribed tumor occasioned by the collection of meconium in the intestines; in which event, as the surgeon would then have a sure guide for the direction of his incisions, some operation of the kind proposed might, he thinks, be attempted.

But, in general, all that is advisable to be done, is, with a scalpel to make an opening of a proper size, at the usual part where the anus terminates; and the incision being carried as deep as conveniently it can, a pharyngotom is then to be directed on the finger, and pushed as far up as the operator judges can be done with safety; and its point being carried backwards towards the course of the os sacrum, the bladder may in that way be avoided.

It sometimes happens that, although there is an opening at the usual part where the anus termin-
nates, yet the passage is entirely obstructed by the interference of some membrane or other substance, at the distance of two or more fingerbreadths from the external opening. Such a case is here related, wherein, after the child's death, the inferior extremity of the colon was found about half an inch distant from the upper end of the rectum; so that those two extremities of the two different intestines formed, as it were, two distinct culs-de-sacs. Our author is of opinion, that children, in this situation, might frequently be saved by a trocar or pharyngotom being pushed along the finger in a proper direction, so as to reach that part of the intestine containing the meconium; and in fact, we find an instance related in the memoirs of the academy of surgery, tom. 1. page 385. of a child, who laboured under this species of the disorder, being recovered by the means proposed. The third species of the disorder now under consideration, arises, as was observed, from the rectum terminating in the vagina. It sometimes ends by one single opening in the vagina; and at other times doubly, with one opening in the vagina, and another at the ordinary situation of the anus. In this last case, if the two openings are large enough for the passage of the feces, little or nothing is necessary to be done;
for any operation that could be had recourse to, might produce fully greater inconveniences than can occur, even from a continuance of the disorder. But, on the contrary, when the two passages are found insufficient for the exit of the feces, the opening at the anus should be enlarged, either by means of tents or canulas of different sizes; or, if these are found ineffectual, by the scalpel, as advised in the first species of the disorder. When it so happens, that the rectum opens altogether into the vagina, and at the same time there is reason from appearances to imagine, that the gut could be easily got at by an incision upon the usual situation of the anus, the operation, in such a case, should certainly be had recourse to, as it may be a means, if not of curing the inconvenience altogether, at least of rendering it more tolerable.

The fourth and last species of the complaint proceeds, as was observed, from the rectum terminating in the bladder. It cannot easily occur in girls, as in them the vagina interferes between the rectum and bladder; but several instances of it in boys are here related by our author. The intestine may terminate either altogether in the bladder, or by two different openings, one in the bladder, and one externally, at the usual situation of the anus. Both
Both species of the disorder must be considered as exceedingly dangerous, it being impossible for the faeces to find a passage by the narrow canal of the urethra; and their being long retained in the bladder, must inevitably destroy the patient at last. It should therefore be the first object with practitioners, in all such cases, if possible, to make a free opening for the passage of the faeces from the bladder. Although the opening from the intestine into the bladder, may not perhaps be within reach either of the eye or finger, yet this species of the disorder is just as evidently characterized as any of the others, being always known to exist when the meconium and other excrements are passed by the urethra.

When an external opening takes place, together with the communication between the intestine and bladder, all that is necessary to be done, is to enlarge the former, through its whole extent, from the teguments to the gut itself, so as to make the passage for the faeces as free in that way as possible. And if that does not answer the purpose sufficiently, the incision should be carried into the posterior part of the bladder, so as to allow a free exit, both for what has been collected in it, and for such portions of the excrement as may
may in future be emptied into it. The same steps become equally necessary when no opening occurs externally. An incision, to a proper depth, being previously made at the ordinary situation of the anus into this artificial opening, the finger is to be introduced, and a cutting instrument conveyed by it to the bladder. Whether a passage, so formed, between the bladder and rectum, will ever heal up or not, is uncertain; but, in such a state of the disorder as no other resource can afford any chance for the patient's recovery, it ought surely always to be put in practice. When the original passage between the bladder and rectum can be discovered by the finger, an enlargement of it may perhaps be preferable to any other; but when that cannot be done, an opening may either be made on the posterior part of the bladder, by a bistoury conducted on the finger, as already directed; or a staff being introduced at the urethra, a passage may be formed for the feces in the neck of the bladder, by an incision of nearly the same parts as are now usually cut in the operation of lithotomy.

A case of this species of the disorder that occurred to our author, is here circumstantially related; and he regrets much his not having had recourse to what, he is now convinced, might probably
probably have saved the child, viz. such an opening into the bladder as above directed. There was no external opening; but, as the usual situation of the anus was marked out by a remarkable violet colour, it was not doubted that the meconium was near at hand. On carrying the incision very deep, however, no appearance of the intestine could be observed; and, as the propriety of making an opening into the bladder did not at the time occur to the practitioners concerned, the child perished evidently by the excrements being too long retained in the bladder.

VI.

Cases of retroverted Uterus, by Dr Garthshore, Mr Hooper, and Mr Bird, with Remarks on that Disease, by Dr Hunter. Vid. Medical Observations and Inquiries by a Society of Physicians in London. 8vo. London.

In the volume of the London Medical Observations and Inquiries, lately published, are inserted no less than five cases of retroverted uterus, which, in the course of three or four years, had occurred to three practitioners in midwifery; one to Mr Bird surgeon at Chelmsford, two to Mr Joseph Hooper, and two to Doctor
tor Maxwell Garshore. In the treatment of these several cases, the directions laid down by Dr Hunter in the fourth volume of these observations, were, with very little alteration, pursued in all of them; and, by the assistance of the above named gentlemen, all the women did well. The reduction of the uterus being, in each, accomplished with more or less difficulty, according as the disorder had been of longer or shorter duration. Whether or not any particular period of pregnancy is more liable than others to this disorder, is perhaps as yet uncertain; it may however be remarked, that all the five women, in whom the cases alluded to occurred, were either in the third, or between the third and fourth months.

These cases have perhaps, in some measure, led to the following remarks on the disease in question, by Dr William Hunter.

The growing bulk of the uterus in the first months of pregnancy, before it rises above the brim of the pelvis, has a natural tendency to produce micturition, dysuria, and suppression of urine. The particular form and state of the pelvis, in many instances, may contribute much to such complaints, and even to the retroversion itself in various degrees. The Doctor says various degrees, as
as he is convinced, by the cases he has seen, as well as by the nature of the parts concerned, that, in different cases of that kind, the axis of the uterus is thrown into different directions.

That pelvis which is most capacious below, and narrowest above, will be the most disposed to such disorders; and our author imagines, that very corpulent women will seldom or never have the complaint. When the lower part of the pelvis is very capacious, and especially when there is little adeps to fill it up, the enlarged uterus, in the second and third months, will occupy the lower part principally of the pelvis; it will press more upon the meatus urinæ than upon the upper part of the bladder, and thereby dispose the patient more to dysury and suppression. In consequence of the last, she will have more frequent calls and urgent bearings downwards.

In this state, the complaint will take a very different turn in different cases, as the influence of various causes, singly or in co-operation, may happen to direct. If the causes of the complaint exist in a less degree, which is most commonly the case, especially when accompanied with favourable postures and motions of the body; and if the patient takes pains to keep the bladder tolerably
rably empty, nature will recover herself, and go on in her usual course.

But, when the contrary happens, the uterus, increasing daily, will at length be so jammed in the pelvis, as to bring the patient into a very painful and hazardous situation. Being kept down by the distended bladder which rises over it, and urged frequently and powerfully downwards by the efforts of the patient, it is pressed against the parietes, and especially the lower parts of the pelvis. Where those parietes are bony, it is restrained to the cavity of the pelvis; but, where fleshly and yielding, it swells outwards, and forms projections, which fix it almost immovably in that situation. In this distressing state, the uterus may be, 1. Fully retroverted; or, 2. Half retroverted; or, 3. So far in its natural state, that the orifice of the uterus shall be downwards.

1. One of the most usual causes of the full retroversion, we may suppose, is the distension of the bladder, which, as it rises upwards into the abdomen, where it has room to expand, naturally tends to drag along with itself the cervix uteri, and the adjacent part of the vagina, to which it is fixed; thus the full retroversion will be produced.

2. But,
2. But, when there is a coincidence of such causes as, in some degree, obstruct the revolution of the uterus, it will be only partially or half retroverted. This was actually the fact, in one of the cases, communicated to the society by Dr Garthshore. There the fundus uteri was turned back so far only as to bring the orifice of the uterus close to the inside of the lower part of the symphys of the osa pubis.

3. And when the causes above mentioned operate powerfully in keeping the uterus steady, it will be so little retroverted, that the orifice of the uterus will be pushing out of the body as in a common procedentia. This was actually the case, we are told, in a woman whom the Doctor attended not long ago, along with Mr Combe. The water was at first very difficult to draw off; but the patient recovered, and did very well.

With respect to the treatment of this disease, experience, as far as can yet be judged, has only confirmed what was at first proposed by Doctor Hunter, in a former volume of these observations. By some, indeed, it has been said, that the retroverted uterus would, of itself, recover its natural situation, if, by the constant and proper use of
the catheter, the bladder were but kept moderately empty. In many, perhaps it might be so; it is our author's opinion, however, that, when it can be done with ease, (and, in most instances, it may), it would be better to put an end at once to pain and danger, by replacing the uterus. Practitioners know both how painful and how dangerous the situation of a patient is, whose urine cannot pass but through the catheter. Besides this, it is sometimes so very difficult to infinuate the catheter, that even expert operators fail. And, in most of those cases, the patient is liable to be without help at the proper times, and to be thereby exposed to mischief, perhaps, irreparable. If, in a short space of time, two women were known to have lost their lives by this disorder in London hospitals, where help is always at hand, must we not presume that every woman is in danger who has a retroverted uterus? And, when we can easily at once remove her pain, and put her into a state of security, can it be advisable to be passing the catheter for days and weeks together, till the uterus recovers itself, even if we could be sure that this would happen?
VII.

The Case of a Hydrophobia, by Dr Fothergill, F. R. S. Vide London Medical Observations and Inquiries, vol. 5th, 8vo, London.

The Ormskirk medicine, which has been so long famous for the cure of persons bit by mad dogs, has so generally, in this country, at least, acquired such a character, that to many, the strongest and most convincing proofs of its inefficacy must be held forth, before they will be prevented from placing more dependence on it than there is now too much reason to suspect it deserves. The following case, however, seems to put the fallibility of the medicine beyond all manner of doubt.

Doctor Fothergill not having seen the patient, in whom the case alluded to occurred, till some days after the disorder had begun to make its appearance, his account of the case during his attendance, is preceded by a state of what had previously happened, while the patient was under the care of Mr French, his apothecary.
Mr Charles Bellamy of Holborn, aged forty years, on the 14th of February 1774, was bit by a cat, which was killed the same morning. The day after, viz. February 15th, he took the celebrated Ormskirk medicine, sold by Hill and Berry, in Hill-street Berkely-square, and conformed to the directions given by the vender, in every respect. A servant maid, who was bit in the leg by the same cat, immediately before her master was bitten, likewise took the same remedy.

About the middle of April he complained of a pain in his right knee, which he supposed was affected with rheumatism; he had felt the like pain, at times, during the last two years, and had procured himself ease by pumping cold water on the part. On the 7th of June, his complaint increasing, he desired Mr French to attempt something for his relief; and accordingly pills were sent him, composed of calomel, ipecacuanha, and pill. saponac. Of these he was to take dozes, of a proper strength, daily, together with Huxham's tincture of bark, and buckbean tea.

After having taken these medicines about six days, he discovered an unusual titulation in the urethra, a contraction of the scrotum and penis,
to a degree of pain, and an emission of semen, after making water, to which he had frequent calls. Alarmed at these symptoms, which he attributed to his medicines, he was desired to discontinue them, and to live as temperately, in every respect, as possible.

On Thursday the 16th of June, he sent for Mr French in the morning, when he complained much of having had a restless night, and said, that, though he had eat some bread and butter, as usual, for breakfast, yet he found he could not swallow tea without difficulty. He attempted it then, by throwing a little into his mouth with the utmost agitation. Recollecting the accident of the bite, and apprehending the most serious consequences, Mr French, without discovering his apprehensions to the patient, proposed that a physician might be sent for. Doctor Fothergill was immediately called; and, as the patient's danger then appeared evident, a consultation was desired, and the Doctor accordingly met with Doctor Watson, the person pitched upon, on the evening of the same day. In the mean time, six ounces of blood were ordered to be taken from the arm, a bolus of native cinnabar, and half a scruple of musk, to be taken every
ry four hours, and as much fruit and other nourishment prescribed, as the patient could easily get down, he, by that time, having found a good deal of difficulty in swallowing any thing liquid.

In the evening his countenance was pale, and he seemed much agitated and distressed, complained of extreme thirst, and of the impossibility of swallowing any liquid. His tongue was white, but did not appear dry. He was perpetually endeavouring, with great efforts, to bring up and discharge a viscid tenacious phlegm which lined the fauces. The heat of his body was moderate; but his pulse was quick, hard, and irregular; and he had strong palpitations of his heart. He was perfectly sensible; and, when his endeavours to discharge the viscid phlegm would allow him to speak, gave very pertinent answers. He had made but little urine since morning; the dragging, as he called it, of the scrotum, still continued, and the uneasy sensation and emission. The blood which was taken in the morning, had some slight appearance of inflammation; the crassamentum was firm, with slight traces of size, but the serum remarkably yellow. There had been no evacuation by stool since morning; and, upon the whole, it was evident, that, in that time, the dis-
order had increased. On maturely considering the patient's hazardous situation, the following process was agreed upon: A clyster was ordered, with a view to procure a stool or two; and the patient afterwards to use the warm bath, for such a time, and of such a degree of heat, as was most agreeable to himself. At his return from the bath, frequent clysters were given, of a pint of milk and water each; and in the last of these was to be exhibited a dram of Dover's powder. He was ordered to rub two drams of strong mercurial unction into his legs and thighs, as soon as he came home from the bath, and he was desired to get down all the sustenance he could.

On the morning of the 17th, it was found, that the laxative clyster had operated properly. The warm bath relieved him greatly while he was in it; so that, for a time, as he expressed it, his sufferings were suspended. They had returned, however, with more violence in the night; the clysters had been repeated several times, and the unction applied. He had passed a most restless night, totally without sleep, and in much agitation, not being able to lie still a moment. His countenance bespoke much distress, though accompanied with endeavours to conceal it; sometimes
times he was calm, then agitated, talked much, but sensibly. He had now a copious flow of saliva; his tongue white and moist, but foul. His pulse very quick, small, hard, and irregular; his hands rather cold than hot. He had made water in the night with less difficulty, and without its usual consequences. The dragging pain, or spasmofic affection of the cremaster, was gone off. In general, his strength and faculties seemed less impaired than might have been expected, where so little sustenance had been taken in, with constant restlessness, and no sleep.

On observing, therefore, that there was a more copious flow of saliva, the tongue more moist, the thirst less, the spasm of the cremaster gone, yet that his difficulty in swallowing was not less, still no sleep, but his head still clear; that his pulse continued hard and quick; that there were some appearances of an inflammatory density the preceding day; that he had found relief from the bath, it seemed proper to continue the former plan. It was now ordered that the patient should be bled and standing, according as his strength could bear it: That he should remain in the warm bath, for as long a space as he found agreeable: That a clyster of milk and water should be thrown up at his return.
turn from the bath, with a dram of Dover's powders, and half an ounce of mercurial unctation rubbed in as soon thereafter as convenient. One scruple of extract. thebaic. was ordered to be made into twenty pills, three of these to be given when he came out of the bath, and two every hour till he seemed disposed to sleep. At five next morning his physicians visited him again, when he received them with the utmost transport and joy; describing, in very strong terms, the pleasure and benefit he received from the warm bath, and the hopes he now conceived of a speedy recovery. A vast quantity of viscid phlegm was continually flowing into his mouth, which he was as constantly employed in discharging; for it seemed to have the same effects on the organs of deglutition, as if he attempted to swallow any other liquor, and gave him extreme uneasiness. To get rid of this defluxion, the moment he felt it in the fauces, he exerted a sudden and vehement expiration, as if it were with a design to blow away the moisture so offensive to him, with the utmost force and expedition. This occasioned a sound, which did not seem very remote from the hollow barking of a dog. When he was not employed in these efforts, he was
was talking constantly, but coherently. His eyes had a particular keenness, and all his motions were quick and vehement; his pulse was also quick, hard, sometimes trembling and irregular. His hands were rather cold and clammy; but the general heat of his body not intemperate. On inquiry, it was found, that all the nourishment he had taken, consisted of a few bits of bread, moistened with wine, a little pudding, and two or three pieces of China orange, which pleased him much. He had taken none of the pills.

On his desiring to be shaved, every fresh application of the lather to his face, as likewise of the razor, made him fall back with surprize; and, in short, every new movement about him gave him some fresh alarm, some degree of agitation and anxiety. Whilst the patient was in the bath, the person attending, without any particular intention, took up some of the water in his hand, and poured it on the patient’s head and face; this confused him much; and he afterwards described the distress it gave him very emphatically; and added, with much apparent satisfaction, that he had so far conquered his aversion to it, that he had poured water on himself, with his own hand, in the same manner. In speaking of this affair
fair he mentioned the term *Hydrophobia*; observing, that his complaints resembled it; yet without giving any reason to apprehend he had the least idea of his actually labouring under this distemper. He had not slept a moment from the time he was seized with the dread of liquids. He repeatedly expressed the satisfaction he received from the bath, and wished to go into it again. His physicians consented, and desired that he might be carried thither again, and that he might stay in it as long as he chose.

Every new operation now became an extreme difficulty to him; such as dressing and undressing at the bath, and going into the water, which he now did with much entreaty, putting one foot in, and hastily withdrawing it. He was at length prevailed to go into it. A recollection of the ease he had enjoyed in it before, aided by a manly resolution that never forsook him, subdued his fears, and he remained in it near half an hour. He was brought home about nine o'clock. He refused to take the pills, and every other prescription. He grew fretful and restless; soon became delirious, but offered no violence. After remaining in this condition about two hours, the powers of nature funk;
funk; he reigned his head gently on the pillow, and expired.

Endeavours were used to observe the condition of the part that was bit, when he was dressing after bathing, as far as could be done without alarming him; but without effect. After death, it was examined minutely, but without perceiving the least morbid appearance. In the course of attendance, it was found out, that the sore occasioned by the bite of the cat soon healed, and the patient never afterwards thought more of it. Perhaps fortunately for the girl, who was bit at the same time, her leg did not heal; it grew worse, and baffled the skill of a young surgeon to whom she applied. It is since known, that her leg continued long sore, as likewise that she was perfectly well on the 29th of August, being more than two months after the death of her master.

After this detail of the patient’s case, Doctor Fothergill concludes this paper with several observations on the treatment of persons bit by mad dogs; and, in an after-part of the same volume, is inserted another paper by Doctor Fothergill, containing a variety of remarks on the same subject. His observations are, that the practice of immersion
in salt water, as a preservative from the hydrophobia, was begun on false principles, has been continued through custom, and has now, from many instances, been found insufficient: That the Ormskirk medicine has likewise failed: That mercurials are also, as preservatives, ineffectual: That neither the pulvis antilystus of our very eminent countryman, nor the Tonquin medicine, are altogether to be relied on as certain prophylactics. It seems therefore necessary, the Doctor observes, to withdraw the public confidence as much as possible from such uncertainties, and to urge the trial of one, which if used speedily and effectually, promises much security, and is strongly recommended by long and extensive experience. The practice here alluded to, and recommended by our author, is that of keeping the wounds occasioned by the bite of mad animals open as long as possible. The case above related of the girl escaping who was bit by the same animal, and at the same time with another person who died, tends greatly to the support of what is here advised; the only material difference in the treatment of these two cases, having been the sores in the girl’s legs having been kept open for a considerable time, while those on her master’s healed very
very soon. Divers other cases, we are told, have been related to the Doctor, of persons escaping the fatal consequences of this bite, by the continued running of the sore; it ought therefore, he observes, to be the first business of those who have the care of such persons, to pursue the directions of Celsus, who advises practitioners to burn the part, when it can be done with safety, and to promote a discharge from the wound as long and as copiously as possible. In timid subjects, who will not admit of the use of either the actual cautery or knife, for enlarging such wounds, Doctor Fothergill proposes to fill the wounds made by the bite with gun-powder, which being set on fire, the explosion thereby occasioned, may not only be of service by enlarging and keeping open the sores, but may likewise be a means of actually destroying the infectious matter communicated by the different bites. This, we are told, is a practice in some of the warmer countries of Europe, where venomous animals are more frequent than with us, and where the method here recommended is more easily and conveniently had recourse to, than any other, by huntsmen, who are much exposed to the bites of such creatures. In very tender subjects,
subjects, the Doctor observes, the application of a blister to the part might probably be of use; and this might be kept open, for such a length of time as the security of the patient might seem to require.

VIII.

A remarkable Case of the softness of the Bones, by Mr Henry Thompson, Surgeon to the London Hospital. Vide Medical Observations and Inquiries, by a Society of Physicians in London. Vol. 5th, 8vo, London.

SEVERAL instances are now upon record, of the bones, even in the living body, having acquired a great degree of softness; and of these, the following is, perhaps, none of the least remarkable.

The patient, who was the subject of the case here related by Mr Thompson, was a shoemaker in Wapping, aged thirty-three years, five feet seven inches high. He enjoyed good health till the year 1766, when he was seized with violent pains in his
his knees and feet, and was tormented with a
head-ach, which came on at irregular periods.
For these pains, which were considered as rheu-
matic, a variety of remedies were had recourse
to without any effect.

In November 1768, by a fall in his shop, the
patient fancied he had sprained his knee; this in-
jury confined him to bed about a week, and he
was afterwards unable to walk without the sup-
port, both of a person’s arm and a crutch-flick.
On the 21st of December following, on endeav-
ouring to go up stairs to bed, he struck the toe
of his right foot upon the edge of a step, and in-
stantly cried out that his thigh was broke. The
following day Mr Thompson, on examination,
found a fracture of the thigh-bone, near its up-
per extremity. The reduction was effected with
very little extension; but the pain, which before
was considerable, was not thereby so much dimi-
nished as might have been expected. About the
end of five weeks from the time the bone had
been replaced, the apparatus made use of for its
retention was all taken off, with a view to ob-
serve how far the union had taken place. In the
course of this examination, Mr Thompson was
surprised to find the thigh-bone yield and fall in,
about
about a hand-breadth above the knee, similar to what occurs in a fracture, excepting, that in this case, there was no sensation of grating, as is usual, when the broken bone is of a solid texture. No violence whatever had been used, the leg having been merely lifted by one hand put below the ham, while another embraced it a little above the ankle. The operator, however, was still more astonished, on turning to the assistant who held the leg, when he observed a similar separation of the tibia and fibula had taken place, about a hand-breadth below the tuberosity in the os femoris. Both these separations were unaccompanied with any remarkable signs of additional pain to the patient.

Upon examining the patient, with a view to the discovery of the cause of such a miserable state as he was now in, he acknowledged his having laboured under the venereal disease for upwards of eight years; that he had scurvy blots upon him for some years, and that he even then had a gleet. Mr Thompson, from the appearance of the eruptions, being convinced of their being venereal, put the patient immediately under a mercurial course, ordering a dram of strongunction to be rubbed in every night.
On examining the fissure occasioned in the leg, a regular transverse cleft was perceived in the tibia, without any appearance, however, either of ecchymosis or tumefaction. And as, on tracing the surface of the tibia below the fissure, a remarkable softness and yielding of the bone was discovered, similar to a fluid being contained in it, Mr Thompson, in order to discover the cause of so uncommon a feel, made two incisions parallel to one another, and about five inches in length, through the skin, along the spine of the tibia, and then removed the intermediate portion of the teguments, clear from the periosteum, which was very thin. Finding that the external part of the bone was very pliant and yielding, the scalpel was passed through it, and the denuded part all removed with the greatest ease, its texture being only about the solidity and thickness of the rind of cheese. This being done, a dusky red, or liver-coloured flesh, was found occupying the whole internal part of the bone, devoid of sensibility, and from which the osseous covering had been removed without the least haemorrhage; in short, it appeared an unorganized mafs, similar to the flesh-like substance or coagulum which may be formed
formed upon a stick or feather, by stirring fresh drawn blood in a basen.

By the mercury being continued a proper time, the pains in his limbs were alleviated; the wound in the leg healed kindly; the eruption on the skin gradually disappeared; and, upon the whole, his health seemed much amended. The mollities ossium, however, still continued to gain ground, the left tibia becoming soft in the same manner the right had formerly done; that leg and thigh, of course, lost its straightness, and became deformed, as the other had done before. In proportion as this contraction and deformity took place, the patient gradually lost all sense of muscular action; but, when it became necessary to smooth the sheet under him, he was very sensible of pain, upon lifting up and laying down the limbs. His appetite remained good the whole time of his confinement, till within three weeks of his death. As he was sometimes costive, laxatives were necessary. His urine, for the first two years, generally deposited a whitish sediment, which, upon evaporation, became like mortar; and he voided three or four small jagged stones, some time after a complaint in his loins. He was at last carried off by a lassitude on the 18th of February.
1775, after a confinement to bed of above six years.

Doctor Hunter assisted at opening the body; the ribs and sternum were found to have lost all their solidity, being easily cut through with a common scalpel. The cartilages of the ribs were unaltered; the contents of the thorax and abdomen appeared in a healthy state, and were no otherwise affected than by situation, owing to the deformity of what originally formed the bony supports of the thorax, the spine, and pelvis. The gall-bladder, however, was destitute of bile, greatly contracted, and contained a considerable number of very small black jagged stones, resembling coal dust. The state of every bone in the body was afterwards looked into; and the result was, that the knife could easily be passed through those of the cranium, sternum, ribs, vertebrae, pelvis, and all the cylindrical bones which formed the extremities; and the phalanges of the fingers were even so much altered, that they were capable of being slit through longitudinally. All these originally bony parts consisted of a mere cortical or outside osseous covering, of the thickness of rind of cheese, and of an inside flesh-coloured mass. The cartilaginous coverings of the epiphyses
epiphyses of the bones of the extremities appeared to have lost much of their original thickness. In many parts of the epiphyses, it appeared as if this cartilaginous covering was in a manner annihilated, whilst, in other parts, it appeared prominent and full of bumps. The epiphyses were equally compressible and springy to the touch as the diaphyses of the same bones; and, although there was an apparent diminution of cartilaginous covering, yet it by no means appeared to be abraded, since what remained preserved its pearly colour and smooth polish; and it is remarkable, that though the joints of the lower extremities in particular, had been destitute of motion above fix years, the synovia was perfectly good, and in great quantity. It may farther be added, that the muscular parts, in general, but more particularly of the lower extremities, were exceedingly pale, having lost the appearance of flesh; and, it would scarcely have been possible to have traced them by deflection, from their contortion and adhesion to each other.
IX.


In the month of July 1771, a gentleman, newly recovered from a fever, was suddenly seized with a hiccough after drinking a glass of claret. This troublesome symptom, after eight or ten days continuance, at last gave way to some antispasmodic medicines; and no complaint now remained, farther than a slight hoarseness, together with some little defluxion on the trachea. To remove these, as they were supposed to proceed from a want of tone, gentle exercise, with a free diet, was prescribed, but to no purpose; the hoarseness still continued, and at times was complicated with a little difficulty in breathing. A blister, applied round his neck, relieved him greatly; and, a day or two thereafter, a gentle puke carried off the difficulty of breathing entirely. This interval, however, was but of short duration. The night but one after taking the vomit,
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vomit, he waked suddenly out of his sleep about eleven o'clock with a violent asthma. To relieve this, he got a grain or two of tartar emetic, with forty drops of laudanum, which puked him twice, and afterwards eased him so much, that he slept the remaining part of the night tolerably well. The following night, at eleven o'clock, he had another attack similar to the former, and was again relieved by the same medicines. After this, he never enjoyed a complete intermission of this disorder. He had a constant orthopnoea, and breathed so loud as to be heard at a considerable distance. His abdomen was drawn more inwards than is natural, at each inspiration; but the muscles that move the scapula were never observed in action. He frequently threw his head back to get breath, and then always made a deep inspiration. His lungs seemed free from any complaint: He felt no pain in his breast; and, when a little relieved from the difficulty of breathing, could lie with equal ease on either side. His belly was natural; his urine in small quantity; and his pulse quick, though regular, till within four days or so of his death, at which time it intermitted after every fourth or fifth stroke. His eyes were dull and watery; and he frequently complained.
complained of a dizziness, but never of the least pain in his head, or of any defect in vision. He coughed much towards the close of the disorder, and discharged a large quantity of viscid purulent matter, without any relief however to his complaints.

He frequently put his hand to his throat, and sometimes felt a pricking pain below the cricoid cartilage, on the left side of the trachea; and as, on inquiring, he acknowledged his having at times felt a slight difficulty in swallowing, these symptoms, we are told, determined Doctor Rush as to the cause and seat of the disorder: For, having lately perused *Morgagni de causis et sedibus morborum*, he found, in letter xv. articles 13th and 15th, two cases which resembled this in so many particulars, that he was under no hesitation in declaring the disease to arise from some kind of tumour compressing the windpipe. Difcutient applications were ordered to the throat; and the case being now considered as alarming, other two physicians were called in, who both agreed as to what had been suspected for the seat of the disease. There was no swelling or appearance outwardly, to direct either to the seat, depth, or nature of the tumor which compressed the windpipe; but
but some blood was ordered to be drawn by means of a cupping-glass, as near as possible to the part where he had felt the pricking pain. A blister was applied round the throat, and another soon after below the left ear. He got some doses of calomel. Baths and cordials were freely administered, together with digestive gargles; but all to no purpose. The patient died on the thirteenth day from the attack of the asthma. On opening the thorax after death, the lungs were found inflated with air, but in no respect either diseased, or adhering to the pleura; and there was no water in the cavity of the thorax, and not above an ounce and half in the pericardium.

On dissecting the windpipe from the neighbouring parts, a tumour, about the size of an English walnut, was observed on the left side, near an inch below the cricoid cartilage, seated partly on the trachea, and partly on the oesophagus. On cutting into this tumour, which was of a substance between flesh and cartilage, about a tea spoonful of dark-coloured matter burst out, which had a most foetid smell. The matter laid upon the trachea itself, and was lodged in a sinus which extended near two inches above the seat of the tumour.
tumour. It was evident that the tumour had been the cause of the patient's death; but it was likewise obvious, that no operation could have been put in practice for his relief: For, to say nothing of the uncertainty of the situation of the swelling, there would have been a risk of wounding the carotid artery, which lay contiguous to it. Even bronchootomy itself, if performed above the tumour, would have afforded no relief; and, if below it, would only have prolonged the patient's misery.

Dr Rush concludes this paper by observing, that the symptoms, which occurred in this patient's disorder, should lead us to inquire into the state of the trachea more frequently in a hoarseness. And although, in the present case, the tumour lay beyond the reach of medicine and the knife, yet such swellings may occur in practice as will yield to one, or to both of them; and, if they should not, the physician may at least save his credit, by pronouncing the disorder to be incurable.

sect.
S E C T. II.

Medical Observations.

I.

The History of a case of the Morbus Niger, with some Remarks on the effects of Camphor. By Dr Henry Marcard, Physician at Hannover.

A Woman of a very deformed crooked shape, about 48 years of age, had complained, many years ago, of very severe pains about her stomach, attacking by intervals, and commonly accompanied with belching, and a rejection of the food, or, if she had taken none, of an insipid lymph. The disorder was allowed to be of the hysterical kind, and treated as such, there being no apparent reason to impute it to any other cause.
On the 16th of February 1773, when I was called for, I was told that she was then attacked with those pains, to a degree never before experienced; that she had vomited up some black stuff like coagulated blood. I found no fever; she had great nausea; her tongue was not at all furred; she had most excruciating pains in the hypogastric region, and was much affected with anxiety.

I should have given her a vomit; but durst not venture upon it, from the apprehension that the rejection of the black matter might be a sort of vomitus cruentus, as it afterwards proved not to be; and besides, as it would have been against the common rule, Gibbosis nulla sunt exhibenda vomitoria; which, by the bye, is a principle, I think, far too generally pronounced; and there is no doubt this very woman might have taken a vomit with great safety, as she brought forth, notwithstanding her irregular shape, and even the apparent deformity of her pelvis, six healthy children, then all alive.

Thinking, however, some evacuation proper, I ordered something to open the body, and the emplastrum de hyosciamo to be laid over her belly.
The following day she was remarkably better, and continued so all the 18th.

On the 19th, at once, arose a severe fever; the pains in the region of the stomach became intolerable; she was constantly vomiting, without bringing up anything particular, and had no stools.

I ordered ten ounces of blood to be taken away; frequent clysters, composed of emollient and salt, to be given; a bladder with warm water to be laid upon her stomach, and a mixture of lemon juice and sal absynthii to be taken several times during the effervescence. Towards night I found the heat abated; she vomited only by intervals of an hour, and the clysters brought away, now and then, somewhat more of the coagulated blood, as the friends of the patient filed it, which they had omitted to keep for my examination.

On the 21st, in the afternoon, I was told that the patient was in a dying condition, the pains being augmented to such a degree, as to produce convulsions and a cold sweat.

I own I was now quite at a loss what to do, being entirely ignorant from what cause these heavy symptoms could rise. And though I suspected the black stuff might be the origin, yet I knew so little about its nature, that even that could
could give me no directions at all. I resolved at last to prescribe three grains of camphor every four hours, in an emulsion, with some nitre, and a good deal of syrup of white popies, and to order a large blister upon the part affected. On the same night, about eight o'clock, I was called again, and was told that the patient, not long after having taken the emulsion, began to vomit in a most shocking manner; and that the people about her really believed she puked most part of her guts away, such strange matters as they thought were to be observed in what she threw up. Before my arrival, the vomiting had ceased; but a large quantity, at least sixteen ounces, of the black stuff was collected for my examination. Upon inquiry, I found it to be a matter somewhat like poultice, but less adherent; it was quite black, neither inclining to the red nor to the yellow, being neither blood nor gall. I put a little of it upon white paper; and, after it was rubbed upon the paper, it went clear off from the sheet without colouring it, or leaving any mark behind besides moisture. The patient said, that it had no particular taste. I have never seen any matter more resembling this, than the contents of a tumor cysticus, an atheroma, which I found once in
the dead body of an old man, just under the spleen.

The patient was much relieved by this evacuation, though she became extremely weak; she recovered very slowly, but did never vomit again. As often as she complained of nausea and pains, I ordered her purgatives and clysters, and heard that they frequently brought off somewhat more of the black matter, with apparent relief. She fell afterwards into a slight fever, and some other little complaints, of which it is unnecessary to give any particular account; but, after two months from the beginning of her illness, she was entirely recovered, and had never again an attack of her old complaint, the pains.

I do not pretend to determine whether this stuff came from the spleen, by means of the vasa brevia, or whether, perhaps, a tumor cysticus near the stomach furnished the matter. This case may probably fall under that species morbi nigri Hippocrates, whereof he says: Aeger vigium vomit recti fœcum; but is not to be determined, as he gives no further description of that species.

I shall forbear mentioning any authors who have seen similar cases that proved, I find, commonly fatal. One observation, however, I cannot help adding, concerning the effect of camphor in
in the present case. All the vires vitae seemed to have undergone a very hard struggle by the time that I resolved to try the effect of camphor, and, soon after it was taken, all was brought about.

Not long ago, I have seen an effect of camphor pretty much resembling this one. A woman was taken ill of a pleurisy of the bilious kind. After about seven days, the pleuritic symptoms disappeared, and the remaining disorder was, as far as I could guess, merely bilious. Besides acids, I ordered frequent purgatives, and gave them as strong as I durst venture upon. They had always the desired effect, causing some stools every day; but there was no change to the better; she rather became weaker and weaker. I, however, continued for some days in the same way. On the 15th day of her illness, I found the patient very low; she could not well sit in her bed; her pulse was hardly to be felt; though she was not light headed, she could neither think nor speak without great difficulty.

I thought it now necessary to try another way, and gave her four grains of camphor, to be taken in four pills, every third hour; and besides, ordered
ordered some wine. Upon my calling again at night, the husband of the patient told me that these few pills had proved very efficacious; and, upon inquiry, I was not a little surprised to find, that, after the first dose, the patient had six stools of green viscous stinking excrements; and that, after the second dose, there followed three more; after which she found herself a little better. From that time she began to mend; she recovered afterwards, but extremely slowly.

As camphor has neither faculties to effect vomiting nor purging, it is somewhat difficult to discover what cause the effects could be derived from, which it exerted in these two cases. Nor shall I presume to determine whether it acted thus, by adding to the stimulus of the morbid matter, or by adding to the irritability of the parts, or rather by supporting the vires totius corporis: Be that as it may, this conclusion seems very obvious, that camphor might prove many times an excellent remedy when the patient grows weak, whilst nature intends a salutary evacuation; though certainly the effects can never be so evident when the evacuation is to come from other excretory organs than the primae viae; when the
morbid matter is to be eliminated by insensible perspiration, by urine, sweat, or eruptions.

II.

Case of the Puncture of a Nerve in Phlebotomy, communicated to Dr Andrew Duncan, Physician in Edinburgh. By Mr John Sherwen, Surgeon, Enfield, Middlesex.

However easy and trifling the operation of bleeding appears, yet it is well known to be often succeeded by the most serious and alarming consequences; and some of these, in all probability, as often happen under the hands of the most skilful as of the most ignorant and illiterate operator. Hitherto, when no particular bad habit could account for it, the inflamed and painful symptoms which follow bleeding, have been pretty generally ascribed to the puncture of a tendon or subcutaneous nerve; but, lately, Mr John Hunter, whose skill in his profession is justly celebrated, has advanced a contrary doctrine. He rejects the commonly received opinions, and supposes, that an inflammation attacks the cavity of
the vein in consequence of its having been exposed to the external air, which is well known to all experienced practitioners, to be injurious to other cavities when exposed to its influence; and which, no doubt, as Mr Hunter observes, may sometimes be the consequence of bleeding. But I am very far from thinking, with him, that, most commonly, the inflamed or painful symptoms proceed from this cause, or that the nerves which are liable to be wounded in venefaction, are small and unimportant: Small indeed they may be, but as to their being unimportant, that does not so readily follow; for every person who has paid proper attention to the phaenomena which belong to the nervous system must know, that the smallest fibre of a nerve when injured, under certain circumstances, will communicate irritation from one branch to another, in a most extraordinary manner.

I believe the painful symptoms much oftener arise from the partial division of a nerve than from any other cause; and I think it a circumstance of consequence in practice, to be convinced of this matter; which will appear from the following case which lately fell under my care, and which demonstrates that sometimes, at least, if not much
oftener than Mr Hunter supposes, the puncture of a nerve in phlebotomy may be attended with the most dangerous and alarming symptoms.

Sufan — a maid-servant, in the family of W. Bridgen, Esq; a young woman of a plethoric habit of body, was blooded, to the amount of twelve ounces, on the 14th of last April, for a little heaving in her head; she was, in other respects, in good health. The vein bled freely, without any particular circumstance being noticed, except a smarting of the orifice.

April 15. This day the patient took a dose of physic, for the same cause for which she had been blooded. The orifice had bled again, to the amount of six or eight ounces, and continued to smart a good deal; in consequence of which, a small piece of the emplastrum commune was applied to it.

16. The orifice still continued to be uneasy, and a pledgit of soft cerate was made use of, instead of the dyachilon.

17. Still the smarting and uneasiness continued, and she now, I think, for the first time, mentioned her feeling a tingling pain shooting from the orifice to her hand. As there was difficulty in procuring
procur ing a better application, I made use of a cataplasm of bread and butter; and desired my patient to give her arm as much rest as possible.

18. On this day the orifice was very sore and tender; the tingling from the orifice to the hand was more painful, and extended upwards, towards the shoulder. I now ordered a fomentation and lintseed cataplasm, and the arm to be kept very quiet.

19. The pain and soreness of the orifice was much increased, and also the tingling pain from the orifice to the hand and shoulder: She had also a circumscribed pain on the lower part of the right pectoral muscle, with some redness and inflammation of the part, which was sore to the touch. The fomentation and cataplasm had both been neglected, and only the poultice of bread and butter made use of; and the girl was still under a necessity of doing the work of the house.

20. The fomentation and cataplasm had still been neglected, the patient having been informed that it would occasion a humour in her arm. This day, however, she submitted to be fomented, and a poultice of lintseed was ordered to be applied twice a day; she was enjoined a strict antiphlogistic regimen, and the arm was put into a sling.
fling; but she was often obliged to take it out of
the fling, as she was still under the necessity of do-
ing the work of the house, which she performed
with exquisite pain. The arm was much worse
on the evening of this day than it was before;
and there was now an appearance of erysipelas
or efflorescence on different parts of it above
the orifice. The pain now extended not only to
the hand and shoulder, but up the neck, and was
violent in the inflamed place on the pectoral
muscle. The patient felt a numbness all over her
arm. The orifice, though exquisitely tender, did
not appear to be elevated or much inflamed.

Besides the applications already mentioned, the
hand, arm, and shoulder, and the pectoral muscle
were anointed with this liniment,

\[
\begin{align*}
\text{\textit{\textbf{R. Camph. 3i.}}} \\
\text{Spt. v. r. q. f.} \\
\text{Ungt. ex. alth. 3fis.} \\
\text{Ol. e mucilagin. 3fis.} \\
\text{Balsam. anodyen. 3fis. m. f. lin.}
\end{align*}
\]

21. The symptoms to day were much the same,
or a little increased, and were attended with some
involuntary convulsive catchings in the arm. The
same applications, and the same regimen were
continued.

22. The
22. The appearances much the same.

23. The symptoms were this day much increased; she had now a pain and stiffness in her temples, and uneasiness when she opened her mouth wide, her jaws, to use her own expression, feeling as if tied with strings; when she breathed deep, the pain on the pectoral muscle was acute. The fermentation and poultice were still continued, although they seemed to give little or no relief. A trifling discharge from the orifice had last night given some little ease, but it was not permanent; and, upon examining the orifice with a probe, there was no appearance of matter or any ichor that could be discharged. The patient said she felt as though strings were pulling and drawing her in different parts of her arm, and from the arm to the inflamed part on the pectoral muscle.

As the symptoms had now plainly indicated a nerve to be injured, the most likely means of giving relief was undoubtedly by enlarging the orifice; but this, for many reasons, could not be practised. I was therefore willing to try how far the sedative virtue of opium would be efficacious, in allaying the painful and troublesome symptoms. I gave twenty drops of tinctura the-
baica, and ordered half that quantity to be repeated every two hours, till it procured ease, or induced an inclination to sleep.

24. The tintura thebaica had yesterday evidently exasperated all the symptoms, nor had it procured even a temporary mitigation of the pain, though it was taken in larger and more frequent doses than I had recommended; it occasioned some degree of flupor, but gave no ease; the internal use of it was therefore declined; but a large deposit of lint was made wet with tintura thebaica and applied to the orifice, and it was repeated two or three times when it became dry. The whole arm was bathed with oil and tintura thebaica, previous to the application of the lintseed cataplasm.

25. The pain was this day much increased, and she had frequent convulsive catchings in her arm. The orifice was, if possible, more tender than it had yet been; but there was no great tension about it, nor was there the smallest appearance of suppuration; but there was a good deal of rigidity both above and below the orifice. The fomentation was still continued twice a day, sometimes for three hours at once. The lintseed cataplasm was now applied over the whole arm,
from the hand to the shoulder, and the limb was kept constantly at rest.

26. Notwithstanding the great care and diligence with which the fomentation and cataplasm had been applied, the symptoms kept still increasing. Bark was now recommended by a gentleman of long and extensive practice, from a supposition that it might be productive of suppuration in some part of the arm. One scruple of the powder was given every two hours.

27. The symptoms were this day much the same as yesterday; but, if there was any change, it was for the worse. The fomentation and poultice were still continued. In private practice it is often difficult to act agreeably to one’s own judgment, as it is often necessary to pay attention to the prejudices of people who are unacquainted with the nature of the attending circumstances. The present case afforded an instance of this; for, as it was presumable that the injury proceeded from the wound made by the lancet, it was not an easy matter to convey an idea, that the enlargement of a wound which had already done so much mischief, could be proper. The enlargement, however, was agreed to, from the hopes of its procuring a discharge of matter. I lengthened
lengthened the orifice each way, and made a crucial incision upon it. Some slight relief was obtained for a few minutes, whilst the blood trickled from the wound into the warm fomentation. The bark was this day continued more freely than yesterday.

28. This morning I found every symptom very much exasperated; the bark was therefore laid aside, and two large leeches were applied to the edge of the orifice. These drew away much blood, and seemed to give some trifling relief, which was, however, soon followed by increased pain, and drawing of strings, to use the patient's own words. Her appetite for food had now been gone for some days; her tongue was loaded, and her pulse feverish: She was now ordered to take one scruple of nitre every two hours, in a cup of barley water, with manna dissolved in it.

After using the warm fomentation this morning, the erysipelas appearance on the arm increased rapidly, and there was much tension, though not the smallest mark of suppuration. A person who had seen a cataplasm of oatmeal, vinegar, and oil, applied with extraordinary benefit to an inflamed arm, which put on a similar appearance to this, though from a different cause,
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yiz. a puncture of a bramble, recommended the same application, which was accordingly used; but in the evening the erysipelas was greatly exasperated by it, and all the other symptoms were increased. This evening I took seven or eight ounces of blood from the back of the same hand, which unloaded the vessels, and gave more relief than any thing that had yet been tried; this relief however was transient. The patient now declaring that the fomentation and poultice had constantly done harm, they were left off, and the arm was wrapped up with slips of cloth spread with the unguent. flor. fambuc. except the orifice, to which a small lintseed cataplasm was still applied.

29. This day the erysipelatous appearance was a little abated; but the catchings, and other symptoms which threatened convulsion, were increased. I opened a vein again in the back of the hand; but was not able to procure a plentiful discharge of blood. Two or three large leeches were again applied near the orifice, with some trifling advantage. The slips of cloth, spread with ointment of elder, were continued, also the small cataplasm to the orifice. In the evening the erysipelas was much diminished; but the violent pain,
pain, catchings and convulsive jerks of the arm, were increased. I could this day observe, that though the erysipelas was abated in every other part of the arm, yet it remained round the orifice of the exact form and dimensions of the small cataplasm which had been applied to that part; therefore the orifice was dressed with ointment of elder, and the poultice was no longer applied.

30. I had yesterday bathed the arm with o. e. mucilaginisibus previous to applying the ointment of elder, and the patient thought it did some good; it was therefore now used freely twice a day. The erysipelas was this day still more diminished; but the convulsive jerking of the arm, and the stiffness of the temporal muscles, which threatened a locked jaw, were increased; and indeed these symptoms seemed to be almost entirely independent of the inflammation on the surface of the arm, which I had reason to think was in a great measure occasioned by the cataplasm, and frequent tedious repetition of the fomentation.

May 1. Yesterday, at noon, the patient dozed a little, and was delirious; but was free from delirium in the evening, though all her other symptoms seemed to be more alarming. This morn-
ing every bad symptom was exasperated, notwithstanding that the arm externally appeared to be less inflamed. As there was very great reason still to suppose that a nerve was partially divided, and in a state of distress, and that the enlargement which I had made of the orifice on the 27th of April, had been done with too sparing a hand, I determined to increase it; but this was to be done with great caution, because the pulsation of the artery could be felt very near the corresponding vein in the other arm. The patient had great resolution, and seemed to have formed some idea in her own mind, that she should get relieved from the tugging, as she called it, from the part being cut. As it was probable that the nerve immediately in the punctured part must now be much diseased, I thought it better to make the incision above it, in such a manner as to be most likely to cut across any nervous fibre that could run towards the orifice. The arm being properly secured, I began an incision about half an inch above the original wound, and a little to one side, which I brought down in an oblique direction, across the superior part of the orifice, and a little to the other side of it. This incision was gradually made deeper, by four or five careful strokes, till
I was convinced I had gone further than the point of the lancet could have penetrated in the original bleeding. There was only a small discharge of blood from the wound, and not the smallest appearance of matter. I could immediately observe the patient bend her arm with more ease than she had done before. The wound was dressed with cooling cerate.

May 2. This morning I found my patient in good spirits, singing most cheerfully, with joy and satisfaction painted on her countenance. She said she felt herself easier in less than ten minutes after the part was cut yesterday, and she had enjoyed several hours of refreshing sleep, which was the first she had experienced for many nights. She could now move her arm, without much pain, in every direction; she still, however, complained of some numbness in her arm; but from this time the orifice and the incision both healed as common wounds.

From the termination of this case, I think I may venture to say, that the injury proceeded from the puncture of a nerve, which I believe often happens in bleeding, though it may seldom be attended with consequences so truly alarming as those above. What but the puncture of a nerve can
can account for that frequent pain and uneasiness which often affects the muscles of the arm several weeks after the orifice has been healed, and when all inflammation must have long subsided?

A lady, who was blooded about seven weeks ago by a person of reputation in London, complains of much pain in the supinator radii longus, though the orifice is perfectly healed, and the cicatrix scarcely perceptible. The pain frequently extends to the shoulder; and, what is remarkable, she feels the pain shoot down to her hand, when the fleshly part of the supinator radii is rubbed with the palm of the hand.

I have, at this time, a young woman under my care, who was blooded by a surgeon of reputation upwards of two years ago, and she has never been free from uneasiness in her arm since: Sometimes she feels most exquisite pain in performing the motions of pronation and supination. This patient says she felt such exquisite pain when blooded, that she could not refrain from screaming aloud. She was confined upwards of six weeks after the accident, and great part of that time to her bed. In this case an abscess formed near the orifice; but, as her arm has never been free from pain since she was blooded, I think
think the abscess was the consequence of inflammation from the puncture of a nerve. If a wound of the tendon of the biceps muscle could account for the pain she feels, one might suppose it to arise from that accident; because the tendon lies immediately under the cicatrix, without any cellular membrane to defend it.

Another case fell under my care, about twelve months ago, which seems to be a confirmation of Mr Hunter's opinion, that the mischief may proceed from inflammation attacking the internal surface of the vein.

A worthy gentlewoman, far advanced in life, of a scorbutic bad habit of body, was blooded in the arm in the median vein; but for what cause I do not know. A few days after being blooded, she came from London to this neighbourhood. As she complained of much pain and inflammation in the orifice, I was called to her relief. The pain gradually increased, and at last terminated in an abscess a few inches below the orifice, between the flexor carpi radialis and the supinator radii muscles. There was another formation of matter in the orifice which kept open a long time, and at last the mischief terminated in an abscess above the clavicle, which at that time I ascribed to
to the absorption of purulent matter from the parts below, but which might probably be owing to inflammation communicated through the vein. This last abscess was attended with great pain, and was cured at last, after a long and tedious discharge. In this case, though there was violent pain and inflammation, yet it was not attended with those peculiar symptoms which lead one to ascribe the injury to the puncture of a nerve.

From the whole, I would conclude, that, though much merit is due to Mr Hunter for his ingenious observations on this subject, yet his idea is not to be generally admitted. I think the patient, whose case I have so particularly related, would, in all human probability, have soon been seized with a locked jaw, had the incision which cured her been neglected; and, from an idea that the symptoms were occasioned by inflammation of the internal surface of the vein, such an incision could not have been indicated. From this circumstance, it is not a matter of mere curiosity to be able to distinguish whether the injury proceeds from one cause or the other, but a circumstance essentially interesting to the practical surgeon; as, in one case, the most alarming symptoms may be speedily removed by a small incision.
incision, which, in the other, could be productive of no manner of advantage.

It is remarkable, in the case I have described, that little or no advantage was experienced from the use of emollient applications; nay, some of them, particularly the fomentation and cataplasm, were rather prejudicial; and yet I believe such-like applications would be used in a similar accident by almost every surgeon. Heister and Wiseman both recommend a very different treatment. The former, speaking of the same accident, which happened to Charles IX. King of France, when he was bled by Parry, says: 'Primo loco oleum terebinthinae cum spiritu vini rectificato, calidum immissum vulnere fuit;' and presently after he adds, 'Cacterum haud aliena quoque haec videtur curandi ratio, si nimirum pro terebinthinae oleo vinique spiritu, balsamum Peruvianum, vel et aqua regina Hungaria aliquoties per dies singulos calida instillantur atque simul superimponuntur, dum scilicet dolores imminuantur.' Wiseman recommends an application to be dropped scalding-hot upon the orifice.

I believe few surgeons would now use such remedies; and yet, if I was again called to a similar accident
accident to the one I have related, my first application should certainly be the oil of turpentine made warm, from having had so recent an opportunity of observing the uniform insignificancy of those applications which are commonly called cooling and emollient. I think the oil of turpentine bids fair to do good, from its great use when applied to a puncture from a pin or needle: It is pretty generally applied in such cases by country-people, and they find it to be efficacious in preventing the part from what they call festering.

The volatile alkali, dropped on the sciatic nerve of a frog, renders the leg and thigh of that animal paralytic. Query, Whether such an application, which seems to possess a power of destroying the nervous influence, might not be equivalent to dividing the punctured branch of a nerve?
III.

An Account of the Extermination of a polypous Excrecence from the Os Uteri. By Mr. Fielding Belf Fynney, Surgeon at Leek in Staffordshire.

About the middle of April, 1774, I was called to Jenny Locker of this town, aged 21 years, low in stature, but of a sanguineous habit of body; who, upon examination, I found was afflicted with a prolapsus uteri, together with a polypous excrecence growing just within, and hanging pendulous from the os uteri. It was rugged, highly red, and in some places of a dark purple colour; it frequently bled upon the most gentle touch; and, upon the whole, it had the most unfavourable aspect of any polypus I ever saw.

She, amongst the answers to the interrogatories which I then put to her, informed me, that, when she was about ten years of age, one of her companions, with whom she was playing, pushed her down upon a stool with three feet, which was turned toplly-turvy, and one of the feet, which were
were small ones, passed into the vagina, and occasioned much pain, with a large effusion of blood; but in a few days she was apparently well, and continued so until the beginning of the year 1773, when she complained to her mother of something protruding from the labia pudendi, but would not let anybody examine the part, until the latter end of the same year, or the beginning of the year 1774, she shewed herself to a midwife, and since then, to several gentlemen of eminence amongst the faculty in this, and the adjacent towns.

I recapitulated the method I intended to pursue to her and her friends; and, after administering a few doses of purging physic, I passed a ligature, upon the 5th day of May, as near the basis of the tumour as I possibly could; but it not answering according to my expectation, I extirpated it with the knife, above the ligature, on the 7th, rather taking part of the os uteri, than leaving any of the polypus; which weighed nine drams troy weight. A most obstinate haemorrhage ensued, to stanch which, I applied a doil of lint well charged with powdered blue vitriol, and retained upon the part, with gentle compression, by the hand of her nurse, until it ceased; after which I applied an emolient poultice.
tice. I daily touched the part with lunar caustic, to destroy any remains of the polypus that might have escaped me, and dressed with mild digestives, over which, for a few days, I continued the poultice. The part was quite healed, and radically cured on the 21st day of May, when I replaced the uterus in its natural situation, and applied a proper pessary to keep it so.

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I presume that the faculty in general will join me in opinion, that this polypus originated from the injury done to the mouth of the womb by the stool-feces, as those of the nose are frequently occasioned by some violence done to the glands, and minute circulating vessels of the pituitary membrane, as picking, or blowing forcibly down the nose, taking snuff, &c.

I shall never hesitate to repeat the method of extirpation by excision, when the case is either circumstances as above, or when the polypus is seated low in the vagina: But, when there is no prolapsus uteri, and the tumour high up, then the method of extirpation by ligature, assisted by the instrument, represented in the mémoires de l'Académie.
demie royale de chirurgie, tom. trois, pl. 13. fig. 3. p. 598. is undeniably preferable to all others.

I durst not make use of the needle and ligature to stop the haemorrhage, on account of the irritability of the part. The tenaculum would not answer my purpose in this case, as the vessel lay too high within the mouth of the womb. And the sponge I did not choose to apply, as the granulations of flesh always shoot up into its pores, and are productive of pain at the time of separation, especially in irritable habits, or in parts so nervous as this is.

There are various forms of pessaries, and made of as many sorts of materials; but that which I would recommend, should have no screws about it, as they soon swell and burst by being kept humid; therefore it should be turned out of one solid piece of ivory, the head to be made rather concave on the upper side, with three or four holes in it, to let pass the fluids secreted by the part to which it is adapted; and convex on the lower side, with a stem or pillar of proportionable length, coming from its middle; and, at the bottom of the stem, should be a hole or two to pass a fillet through to fasten it to its proper bandage.

P 4

S E C T.
On Sunday the 12th of January 1777, died at Edinburgh, Mr John Innes, dissector to Dr Monro, Professor of Medicine in the University of that city.

Mr Innes was born at Callart, a small town in the Highlands of Scotland, within a few miles of Fort William. From this situation, it may be presumed, that the earlier part of his education was but ill calculated for literary pursuits, or for his improvement in the liberal arts. But the want of proper opportunities at his first outlet in life, were amply compensated by the united efforts of industry and genius. And such was the proficiency he had soon made in anatomical knowledge; such was the
the address he had acquired in displaying the structure of the most minute parts of the human frame, that, when he had not even reached the 18th year of his age, Dr Monro had no hesitation in appointing him dissector for the anatomical class. This important and troublesome office, he filled with high and deserved reputation, for the space of near twenty years. During all that period, his labours gave equal satisfaction both to the Professor and to the students; and the presumption is, that, in the way of his profession, he had very few, if any, superiors.

But, however considerable his abilities in this respect might be, it would be the highest injustice to his talents, to represent them as confined merely to the mechanical part of anatomy. When he had occasion to speak of the structure of any organ, he possessed a facility in description, which could not fail to convey the clearest ideas. This the students soon perceived, and were willing to avail themselves of the advantages which it might afford. At their solicitation, therefore, after he had enjoyed his office about ten years, he opened an evening course of lectures for anatomical demonstrations. The judgment and perspicuity which he displayed in these demonstrations,
tions, afforded no less pleasure than instruction to every hearer. The number of gentlemen who became his pupils every year, afforded the most unequivocal proof of the advantages which were to be derived from his prælections. At his last course, he had the honour of being attended by near two hundred students. And there is some probability, that, had he been less zealous in discharging the duties of his office, he might longer have enjoyed the emoluments of it. For some time he had been threatened with an affection of his lungs; but, while he was following such measures as were directed for his recovery, he did not relinquish the duties of his office, till he was confined to a sick-bed chamber. There the approaches of death were no less evident to himself than to others. And he prepared to meet the event with a frame of mind which gave equal evidence of the honest man, the affectionate son, the faithful husband, and the dutiful parent. He settled with all his creditors on his death-bed. He put a wife and children in circumstances above indigence. And, with filial affection, he provided against the future wants of aged and helpless parents. His death will be regretted, and his memory will be esteemed by all who had the pleasure
COMMENTSARIES.

fure of his acquaintance. For his temper was social and obliging, his heart was open and generous, his friendship was steady, and his integrity was unimpeached.

While, from these qualities, he yet continues to live in the affections of his friends, those who, with care and industry, apply to the study of anatomy, will stand indebted to him for obligations of a different nature. The monuments which he has given to the world of his anatomical knowledge, will afford ample testimony of his abilities to future ages.

About the beginning of the year 1776, he published a short Description of the Human Muscles, chiefly as they appear in dissection; together with their several uses, and the synonyma of the best authors. A Treatise, which will recommend itself to the perusal of every student; by the concise and simple, yet plain and accurate descriptions, which it contains. Towards the close of the same year, he published eight anatomical tables of the human body, containing the principal parts of the skeletons and muscles represented in the large tables of Albinus; to which are added, concise explanations. If, in this work, those who have a taste for elegant engraving, shall think
think that there is any ground for finding fault with the execution of the artist, yet every intelligent anatomist will allow, that the fidelity of the explanation must render it of no inconsiderable utility to the young student.

Had Mr. Innes lived to a more advanced age, there is no reason to doubt, that the improvement of his art would still have continued to be the object of his ambition. While his untimely death will be most severely felt by his friends and family, it may also be considered as a loss to the medical world, and will long be regretted by the students of anatomy at Edinburgh.

* * * *

Extracts of a letter from Dr. George Brown, Apothecary to his Majesty's hospitals in America, to Dr. John Hope, Professor of Botany in the University of Edinburgh, dated September 14, 1776:

"Last summer the dysentery was very frequent, and a good many died. Besides the common medicines, the rad. columb. and cort. eicether. were given in a number of cases; but I could not perceive, from their effects, that they deserve the character"
character which has been given of them. The vitr. antimon. cerat. was likewise employed, and frequently with success. However, I think I may venture to assert, from experience, that the tartar emetic produces all the good effects of the other preparations, with the advantage of being much more certain and steady in its operations.

"In the fall, the scurvy began to make its appearance among the regiments that had been longest in America, and, as the cold weather advanced, it attacked the rest of the troops. A variety of medicines were used, most of which mitigated some of the symptoms; but no cure was effected till a quantity of four kraut arrived from England, which was given to the scorbutics ad libitum, to eat as a salad with vinegar. At other times it was boiled with their meat; and it was really surprising to see the effects which it had, even in a short time. They devoured it greedily, and recovered apace.

"A great quantity of this useful article arriving, it was issued to the army twice a week, with their salt provisions. And it was as effectual in preventing, as it had been in curing that disease, which perhaps is, of all others, the most to be dreaded,
dreaded, in a garrison living on salt provisions, in a cold climate, and subjected to hard duty.

* During the time that they used the sour kraut, by the advice of some officers of rank who had served last war in Canada, they were ordered to drink a pint of the infusion of hemlock spruce, as it is called, every morning; but this was so nauseous that few of them took it regularly. However, that omission was supplied, by allowing them plenty of spruce beer, in my opinion the best medicine of the two.

* One man had been ill of the scurvy for three months, and had several haemorrhages from the gums, the fauces, and nose. By the above treatment, he got the better of the scurvy, but he was afterwards seized with an anaemia and ascites. For this he was topped, and three gallons of water drawn off; and, by the use of the Peruvian bark, and other tonics, he was perfectly recovered, and discharged to his duty.

* The flowers of zinc have been found an useful application to fordid ulcers from gunshot-wounds, and other causes, when strewed upon the part by means of a barber’s puff. Among the wounds at Boston, we had a few instances of tetanus.
tanus, both when amputation was performed, and when it was not necessary. All the instances of this affection which I saw, were fatal, although we tried opium, musk, and aether, in large quantities, both externally and internally. Nor did blisters give any relief. In one case, this symptom did not come on till a fortnight after the patient was wounded, and when he was judged in a fair way for recovery. He was shot through the thigh and arm, both very near the articulation. I heard of an officer who had this symptom, and recovered. He was shot through the abdomen. There was one amputation of the humerus at the articulation, and the patient did well.

* * * *

Mr Matthew Guthrie, Surgeon at St Peter's burgh, in a letter to Dr Hope, gives the following account of a curious stone lately found in Russia.

'I have just received a paper upon a curious stone, with a piece of it, for the purpose of experiments, from Mr Krafft, professor of natural philosophy in the imperial academy. He has also subjoined
a lift of experiments, which he thinks should be made upon it, as he remarks that it bids fair to make the best hygrometer ever discovered, from the circumstances of its having two determined points of moisture and dryness.

He informs me, that it was found by the late unfortunate Professor Lowitz, who was put to death by the rebel Pugatcheff for being a scholar. He was one of those academicians who were sent by her Majesty into the most distant parts of the empire, with a view of making discoveries. Among his papers were found a few remarks on this stone, of which the following is as literal a translation as possible:

Upon the banks, on the right side of Kami-shink, near the castle Demitrieff, is found a sort of stone, something like a slate, resembling a dark grey or blue grind-stone. Some, however, are of a yellow cast, and some have their opposite sides of different colours. This stone, when wet, may be easily cut with a knife, but when dry, it is much harder.

In this last stone it has the remarkable effect, that, on the tongue being applied to it, it lays hold of it so fast, that it is with difficulty they are
are separated; and, if it be not very soon removed, it will draw blood with it. The separation, in every case, must be effected with great circumspection, otherwise the skin will follow the stone. It attracts any thing that is wet or moist, so that if you put a wet finger to it, it will stick: And it drinks up moisture with the greatest avidity. If, however, it be put into water for some minutes, so as to be fully saturated, it loses its absorbing power for a little, which it recovers as it dries.

'Another quality of this stone is, that when put into the fire, it may be made red-hot, without cracking or sustaining any damage; on the contrary, its absorbing power is increased by it; but care must be taken that it be well dried first; for if it contains any moisture when put into the fire, it will burst in pieces.

'This is the substance of the memorandum found among the papers of Mr Lowitz. Mr Krafft proposes to have the following experiments tried upon it.

1. To know the quantity of water which it will contain when fully saturated with that fluid.
2. To find the time in which it absorbs a given quantity.
3. To compare its weight when dry and when full of water.
4. To find the time it takes in parting with a given quantity of water.
5. To discover whether it will imbibe every day the same quantity.
6. To discover how far the changes of the atmosphere affect the power it possesses of absorbing moisture.
7. To discover whether it always absorbs a determined quantity.

*I intend, besides these, to try several other experiments with this stone, and to send an account of the result of them for the Medical and Philosophical Commentaries of Edinburgh.*

* * *

Mr Andrew Fife has succeeded the late Mr John Innes as disector to Dr Monro. From the industry and genius which he has already shown, much may hereafter be expected. About two years ago, the annual prize-medal, given by the commissioners for improvements in Scotland,
for the best drawing in the academy which they
have established at Edinburgh, was adjudged to
him. And he has made rapid progress in many
different branches of literature.

* * *

A new edition of the treatise which Dr Cullen
delivered to his students, as a text for the physi-
ological part of his lectures, when he taught the
institutions of medicine in the university of E-
dinburgh, is now in the press, and will soon be
published.

* * *

Mr Andrew Bell, engraver at Edinburgh, an
artist of whose merit the world have already had
various specimens, is now engaged in making a
new and improved edition of the tables of the
celebrated Albinus upon the bones and muscles
of the human body. To render this work cheape-
er and more commodious, Mr Bell proposes to
publish these tables in separate parts; and, for
the same purpose, he has made a small reduction
of the original scale. The first part of this valua-
table performance will, we are informed, appear
in a few weeks.

Sect.

An address to the students of medicine at Edinburgh, introductory to a course of lectures on the theory and practice of physic. Delivered Nov. 1. 1776. By Andrew Duncan, M. D. Fellow of the royal college of physicians, Edinburgh. 12mo, Edinburgh.

Heads of lectures on the theory and practice of medicine, by the same author, 12mo, Edinburgh.

Dissertatio medica, de natura et usu lactis in diversis animalibus, auctore Thoma Young, in academia
Cademia Edinenfi artis obstetriciae professore, 8vo, Edinburgi.

Compendium anatomicum, totam rem anatomicam brevissime complectens, auctore B. D. Laurentio Heistero, M. D. editio nova, 12mo, Edinburgi.

Experiments on magnesia alba, quick-lime, and other alkaline substances, by Joseph Black, M. D. professor of chemistry in the university of Edinburgh, to which is annexed an essay on the cold produced by evaporating fluids, and on some other means of producing cold. By William Cullen, M. D. Professor of medicine in the university of Edinburgh. 12mo, Edinburgh.


Medical researches: Being an inquiry into the nature and origin of hysterics in the female constitution, and into the distinction between that disease and hypochondriac or nervous disorders. Comprehending a specification of the characteristic refinement and excellence of the female constitution and character. By Andrew Wilson, M. D. Fellow of the royal college of physicians at
at Edinburgh, and physician to the Medical Asylum, London. 8vo, London.

A modern system of natural history, containing accurate descriptions, and faithful histories of animals, vegetables, and minerals. Together with their properties and various uses in medicine, mechanics, &c. Illustrated with copper-plates, accurately drawn from nature, and beautifully engraved. By the Rev. Samuel Ward, Vicar of Cotterstock, Northamptonshire. 4 vols. 12mo.

Observations preparatory to the use of Dr. Myerbach's medicines; by J. C. Lettfrome, M. D. F. R. S. and S. A. member of the college of physicians, and physician to the general dispensary in London. The second edition, considerably enlarged. 8vo, London.

An answer to a pamphlet written by Dr. Lettfrome, intitled, observations preparatory to the use of Dr. Myerbach's medicines. 8vo, London.

Every woman her own physician, or the ladies' Medical Assistant. Containing the history and cure of the various diseases incident to women and children. 12mo, London.

A botanical arrangement of all the vegetables naturally growing in Great Britain, with an easy intro-

Les Monstres, ou les écarts de la nature, ouvrage qui renferme toutes les monstruosités que la nature produit, soit dans l’espèce humaine, soit parmi les quadrupèdes, les bipèdes, &c. en planches colorées, peintes, et gravées, par M. et Madame Reynault, auteurs de la Botanique mise à la portée de tout le monde. Folio Paris.


Le Medecin inte rprete de la nature, ou ecueil des pronostics sur le caractère des maladies, leur guerison, leurs metastases, et leurs suites funestes, traduit du Latin de M. le Docteur Louis Geoffroi

Klein,

Apparatus ad nosologiam methodicam, seu synopsis nosologiae methodicæ, in uſum studioforum, auctore Guillielmo Cullen, M. D. et in academia Edinburgena profesore, editio nova, juxta secundam ill. Culeni in quatuor partes, Edinurgi anno 1772 editam, nunc quinta parte aucta, sicollicit systemate morborum symptomatico, A. B. M. Sager proposito. 4to, Amstelodami.

Andreæ Piqueri archiatri, praxis medica ad uſum scholæ Valentinæ. Amstelodami in 8vo.


Dissertationes medicæ quas ex auctoritate reverendi admodum viri Gulielmi Robertson, SS. T. P. Academiae Edinburgenae Praefecti; nec non amplissimi senatus academici consensu et nobilissimae facultatis medicæ decreto; pro gradu doctoratus, summisque in medicina honoribus et privilegiis rite et legitime consequendis; erudito−rum
rum examini subjecerunt, Prid. Id. Septemb. 1776,

Jacobus Wood, Britannus, De actione et usu emeticorum.

Joannes Heathfield Hickes, Britannus, De natura et usu epispasticorum.

Joannes Tailour, ex Insula Sancti Christopheri, De cynanche gangrenosa.

Joannes Shepherd, Scotus, De pneumonia.

Thomas Clerk, Scoto-Britannus, De hydrocephalo.

Samuel Graham, Scoto-Britannus, De gonorrhoea virulenta.

Samuel Nicol, Americanus, De arthritide.

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MEDICAL NEWS

LIST OF NEW BOOKS
MEDICAL
AND
PHILOSOPHICAL
COMMENTARIES.

By a Society in Edinburgh.

VOLUME FOURTH.

PART III.

Non ut diu vivas curandum est, sed ut fatis. Nam ut diu vivas
fato opus est, ut fatis animo. Longa est vita si plena est. Quid illum
octaginta anni juvant per inertiam exaeit? Non vixit ille, sed in vita
moratus est; nec fero mortuus est, sed diu.

Seneca.

LONDON:
Printed for J. Murray, No. 32. Fleet-street;
W. Creech, C. Elliot, and Drummond,
Edinburgh; and T. Ewing,
Capel-street, Dublin.

M.DCC,LXXVII.
SUGAR being very deservedly considered as an essential salt, no person, it is probable, will doubt of its containing an acid of one kind or another; and this we are informed by our author may, in a crystalline form, be obtained from it by the following process.
1. To an ounce of the finest white sugar in powder, in a retort with a neck, add three ounces of strong spirit of nitre.

2. The solution being finished, and the phlogiston of the spirit of nitre mostly exhaled, let a receiver be properly fitted to the retort, and luted, and the liquor then made to boil gently.

3. When the solution has obtained a brownish colour, add three ounces more of spirit of nitre, and let the ebullition be continued till the fumes of the acid are almost gone.

4. The liquor being at length emptied into a larger vessel, and exposed to a proper degree of cold, quadrangular prismatic crystals are observed to form; which, being collected and dried on soft paper, are found to weigh about 109 grains.

5. The remaining liquid being again boiled in the same retort, with two ounces of fresh spirit of nitre, till the red vapours begin to disappear; and being then in the same manner exposed to crystallize, about 43 grains of saline spiculae are obtained.

6. To the liquor that still remains, about two to ounces more of spirit of nitre being added, and afterwards
afterwards the whole being, both by boiling and evaporation, reduced to a dry mass, a brown, saline, gelatinous kind of substance is produced, which, when thoroughly dry, is found to weigh about half a dram.

In the same manner a similar acid, we are told, may be obtained from different saccharine substances, as gum arabic, honey, &c.; but from none in such quantities, or so pure, as from fine sugar.

This salt appears to possess some qualities peculiar to itself, and others in common with saline substances in general.

1. It is endowed with a remarkably sharp taste, about twenty grains of it giving a considerable degree of acidity to a large tankard of water.

2. It produces a red colour on being added to any of the blue vegetable infusions, that of indigo only excepted.

3. It produces an effervescence on being added to such alkaline, earthy, or metallic substances, as happen to be combined with the vitriolic acid.

4. This salt may be dissolved in its own weight of
of boiling distilled water; the liquor, when cold, however, deposits large quantities of crystals of different forms.

5. These crystals can be combined with all the different acids, viz. the vitriolic, nitrous, marine, and acetous.

6. One hundred parts of boiling spirits of wine, dissolve about fifty-six of these saccharine crystals, but not more than forty when not so warm. A solution thus obtained soon becomes turbid, and deposits a mucous sediment, of about the 40th part of the weight of all the acid made use of. When cold, irregular scaly crystals are obtained from it, which, when thoroughly dry, become perfectly white.

With rectified spirits of wine, and these saccharine crystals, aether may be formed; which differs, however, from common aether, in its not being easily set on fire, without being previously heated, and, when on fire, it burns with a blue in place of a white flame.

7. Vitriolic aether dissolves with difficulty the acid of sugar.

8. It combines both with the essential and expressed
pressed oils; but, by a strong fire, can be easily separated from either.

9. Being exposed to a gentle heat, in a small retort fitted to a receiver, about three tenths of the whole quantity comes over in the form of water; and, by an intense heat, it melts, and a saline white crust is sublimed, leaving in the retort a dark grey mass of about the fifth part of the weight of the crystals made use of. This residuum has an empyreumatic smell, gives a dark colour to concentrated spirit of vitriol, a yellow tinge to spirit of nitre, but is dissolved by the marine acid, without occasioning any alteration in its appearance. The sublimed salt easily recovers the crystalline form, and does not appear to be in any respect changed by the operation, further than in having become more pure. The liquor contained in the receiver occasions a precipitation on being added to lime-water; and, on separating the receiver from the retort, a vast quantity of an elastic vapour rushes out, of a pungent empyreumatic odour. About 100 cubic inches of such air may be obtained from half an ounce of the crystals.

The acid of sugar being a second time submitted to a subliming process, white fumes are sent over,
over, which, when cold, appear to be an acid glaffy-coloured liquor, but which cannot be again crystallized. Such parts of the fats as adhere to the sides and necks of the vessels, do not appear to be in the least changed by the process. These, when exposed a third time to sublimation, produced such elastic vapours as burst the receiver.

*Alkali Vegetable Saccharatum.*—Crystals can scarcely be obtained from acid of sugar exactly saturated with the vegetable alkali; but are easily procured by making either the acid or alkali preponderate in the mixture.

*Alkali Mineral Saccharatum.*—Two parts of lately formed mineral alkali, combined with one of acid of sugar, produces a salt very difficult of solution.

*Alkali Volatile Saccharatum.*—Six parts of a pure volatile alkali, can be saturated with one of the acid of sugar; and the mixture, on evaporation, affords a quadrangular prismatic salt.

*Calx Saccharata.*—Lime is so strongly attracted by the acid of sugar, as to be separated from it by no other means than the intervention of
a strong heat. From this circumstance, the utility of lime in the purification of sugar becomes evident; for, in the juice of the sugar-cane, there is such a superabundance of acid, as effectually prevents its concretion, till that saline matter is at least in part destroyed; and nothing has hitherto been found so effectual in that respect as lime, which, by combining with the acid, either carries it to the bottom of the boiler, or to the top, from whence it is easily skimmed off. From lime being used in considerable quantities in the purification of sugar, many have imagined, that large portions of it remain even in the finest sugar. This opinion, however, our author affirms to be erroneous, as the strictest analysis has never been able to detect the smallest particle of lime in purified sugar.

*Terra ponderosa saccharata.*—The acid of sugar being saturated with any of the heavier earths, immediately deposits a quantity of pellucid angular crystals, scarcely soluble in water.

*Magnesia saccharata.*—The acid of sugar dissolves magnesia, and from the solution may be obtained a neutral salt, in the form of a white powder, which, unless the acid prevailed, is neither soluble in water nor spirit of wine. Magnesia
fia seems to have a stronger affinity to the acid of sugar than any of the alkaline salts; hence any of the latter may be separated from it by the addition of magnesia.

Argilla faccharata.—Forty-two parts of the earth of allum properly purified, may, by digestion, be dissolved in 53 of acid of sugar; the solution on evaporation does not afford crystals, but a yellow pellucid mass, of a sweetish, and somewhat astringent taste, which, in a moist air, liquefies, and thereby receives two thirds of addition in weight.

Aurum faccharatum.—Gold is not, even by digestion, affected by the acid of sugar; but, being precipitated by a fixed alkali, and afterwards thoroughly washed in warm water, it is then rendered black by it, though not entirely dissolved. Neither is platina dissolved in this acid, unless previously precipitated by a fixed alkali. In the same manner too, though silver itself is not soluble in the acid of sugar, yet it comes to be acted upon by it, when precipitated by an alkali.

Hydrargyrus faccharatus.—Quicksilver is not in the least affected by this saccharine acid, unless previously deprived of its phlogiston; in which state
flattens it becomes soluble in it; and, from a solution formed by the two, is obtained a whitish powder, not soluble in water, unless the acid had prevailed. Lead, digested in the acid of sugar, is rendered black, but not dissolved by it, unless previously calcined; and Copper is considerably affected by it, but becomes more soluble in it, by being previously precipitated by an alkali.

*Ferrum saccharatum.*—Iron is quickly dissolved in the acid of sugar, and affords, on evaporation, prismatic yellow-coloured crystals, which are easily soluble in water. Fifty-five parts of the acid dissolve forty-five of iron.

*Stannum saccharatum.*—Tin, digested in the acid of sugar, with the assistance of heat, turns first black, and is afterwards covered with a greyish-coloured powder; the calx often is also soluble in the same acid. Bismuth and arsenic are both soluble in this acid, as is likewise cobalt; cobalt, dissolved in it, yields a quantity of yellow-coloured crystals, which, as they contain a large proportion of the acid, are readily soluble in water. By the addition of common salt to a solution of this kind, a sympathetic ink may be obtained. Zinc is soluble in the saccharine acid, as is likewise, in some
some degree, the calx and glass of antimony; regulus of antimony is only rendered black by it.

Acidi sacchari attractiones electivae.—The affinity of acid of sugar with other bodies, appears by experiment to stand in the following order. It unites most readily with lime; then follow the heavier kinds of earths, magnesia, vegetable alkali, mineral alkali, volatile alkali, and, lastly, clays.

Towards the conclusion of the dissertation, our author observes, that, by some, it may, perhaps, be imagined, that the acid of nitre, made use of in these experiments, may have a considerable share in the production of what he has termed the acid of sugar. But, although he acknowledges, that this acid cannot in any way be obtained but by the assistance of spirit of nitre; yet he is thoroughly convinced, that it does not in any degree enter into its composition.
II.

Experiments and Observations in an heated Room.

Although different circumstances have prevented us from giving, as early as we could have wished, an analysis of the paper now before us, and although the facts which it contains have been much the subject of conversation, yet, we presume, that the following account of it will not now be unacceptable to any of our readers who do not possess the original work.

Doctor Boerhaave, from a single experiment or two, having long ago laid it down as a maxim, that no living animal can long support a degree of heat much above that of its own temperature, the opinion, till of late, was scarcely controverted by any one. It now appears, however, from the result of many reiterated experiments, that animals can live with ease in such high degrees of heat, as some time ago would have been thought more than enough for soon putting a period to their existence. Several experiments on this subject were made some time ago in France; those here related by Dr Blagden, were set on foot and carried on by Dr Fordyce of London, who,
who, it is to be hoped, will, some time or other, communicate, in a more ample manner, the results of them to the public.

Doctor Cullen long ago suggested several arguments to show, that life itself has a power of generating heat, independent of any chemical or mechanical means; for, before his time, the received opinions were, that the heat of animals arose either from friction or fermentation. The Doctor likewise, we are informed, is of opinion, that animals are possessed of a power of generating cold, whenever the heat of the atmosphere exceeds the proper temperature of their bodies. Governor Ellis, in the year 1758, observed, that a man can live in air of a greater heat than that of his body, and that the body in this situation continues at its usual temperature. The Abbe Chappe d’Auteroche informs us, that the Russians use their baths heated to 60° of Reaumur’s thermometer, about 160° of Fahrenheit’s, without taking notice, however, of the heat of their bodies when bathing. With a view to add further evidence to these extraordinary facts, and to ascertain the real effects of such great degrees of heat on the human body, Doctor Fordyce tried the following experiments. He procured a suite of rooms, of which the hottest was heated by flues in the floor,
floor, and by pouring upon it boiling water; and the second was heated by the same flues, which passed through its floor to the third. The first room was nearly circular, about ten or twelve feet in diameter and height, and covered with a dome, in the top of which was a small window. The second and third rooms were square, and both furnished with a sky-light. There was no chimney in these rooms, nor any vent for the air, excepting through crevices at the door. In the first room were placed three thermometers; one in the hottest part of it, another in the coolest part, and a third on the table, to be used occasionally in the course of the experiment.

Experiment 1/2. In the first room the highest thermometer stood at 120°, the lowest at 110°. In the second room the heat was from 90° to 85°; and the third room felt moderately hot, while the external air was below the freezing point. About three hours after breakfast, Dr Fordyce having taken off all his clothes, except his shirt, in the third room, and being furnished with wooden shoes, tied on with lilt, entered into the second room, and laid five minutes in a heat of 90°, when he began to sweat gently. He then entered the first room, and stood in the part heat-
ed to 110°; in about half a minute his shirt became so wet that he was obliged to throw it aside, and then the water poured down in streams over his whole body. Having remained ten minutes in this heat of 110°, he removed to the part of the room heated to 120°; and, after staying there twenty minutes, he found that the thermometer placed under his tongue, and held in his hand, stood just at 100°, and that his urine was of the same temperature. His pulse had gradually risen till it made 145 pulsations in a minute. The external circulation was greatly increased, the veins had become very large, and an universal redness had diffused itself over the body, attended with a strong feeling of heat; his respiration, however, was but little affected. Here Dr Fordyce remarks, that the moisture of his skin most probably proceeded chiefly from the condensation of the vapour in the room upon his body. He concluded this experiment in the second room, by plunging into water heated to 100°, and, after being wiped dry, was carried home in a chair; but the circulation did not subside for two hours, after which he walked out in the open air, and scarcely felt the cold.

Expe-
Experiment 2d. In the first room the thermometer varied from 132° to 130°; the lowest flood at 119°. Doctor Fordyce having undressed in an adjoining chamber, went into the heat of 119°; in half a minute the water poured down in streams over his whole body, so as to keep that part of the floor where he stood constantly wet. Having remained there fifteen minutes, he went into the heat of 130°; at this time the heat of his body was 100°, and his pulse beat 126 times in a minute. While the Doctor stood in this situation, he ordered a Florence flask to be brought in, filled with water, heated to 100°, and a dry cloth, with which he wiped the surface of the flask quite dry; but it immediately became wet again, and streams of water poured down its sides, which continued till the heat of the water within had risen to 122°, at which time the Doctor went out of the room, after having remained fifteen minutes in an heat of 130°. Just before leaving the room, his pulse made 139 beats in a minute; but the heat under his tongue, in his hand, and of his urine, did not exceed 100°. Here Doctor Fordyce observes, that, as there was no evaporation, but constantly a condensation of vapour on his body, no cold was generated but

Vol. IV. T

by
by the animal powers. The Doctor dressed himself at the conclusion of the experiment, in a room where the thermometer stood at 43°, and immediately went out into the open air, without feeling the least inconvenience; on which he remarks, that the transition from very great heat to cold, is not so hurtful as might be expected, because the external circulation is so excited as not to be readily overcome by the cold.

Dr Fordyce has since had occasion, in making other experiments, to go frequently into a much greater heat, where the air was dry, and to stay there a much longer time, without being affected nearly so much, for which he assigns two reasons; that dry air does not communicate its heat like air saturated with moisture, and that the evaporation from the body, which takes place when the air is dry, afflicts its living powers in producing cold.

In a third experiment, at which were present, along with Dr Fordyce, the honourable Captain Phips, Mr Banks, Dr Solander, and Dr Blagden, the room made use of was an oblong square, 14 feet by 12 in length and width, and 11 in height; it was heated by a round stove or cockle, of cast iron, which stood in the middle, with a
tube for the smoke, carried from it through one of the side-walls. On first entering the room, the mercury, in a thermometer which had been suspended there, stood above the 150th degree. In this heat the gentlemen remained upwards of twenty minutes, and returned again some hours thereafter, when the heat was increased to the 198th degree. As it was found, however, that the heat soon diminished by so many people being admitted at the same time, it was agreed that only one person should go in at a time. Soon afterwards Dr Solander entered the room alone, when the mercury stood at 210°, but, during three minutes that he remained in it, it sunk to 196°. Mr Banks closed the whole, by going in when the thermometer stood above 211°. He remained seven minutes, in which time the quicksilver had sunk to 198°. The air heated to these high degrees felt unpleasantly hot, but was very bearable; the most uneasy feeling was a sense of scorching in the face and legs; the legs particularly suffered very much, by being exposed more fully than any other part to the body of the flame, heated red-hot by the fire within. The respiration was not at all affected; it became neither quick nor laborious; the only difference was, the want
want of that refreshing sensation which always accompanies a full inspiration of cool air. Mr Banks sweated profusely, but no one else. The most striking effects that occurred, says Dr Blagden, proceeded from our power of preserving our natural temperature, although placed in a degree of heat greatly superior to it. Whenever they breathed on a thermometer, the quicksilver sunk several degrees. Every expiration, especially if made with any degree of violence, gave a very pleasant impression of coolness to the nostrils; in the same manner too, breathing on the fingers cooled them agreeably; and Dr Blagden observes, that, on touching his side, it felt cold like a corpse, and yet the actual heat of his body was 98°, about a degree higher than its ordinary temperature. The gentlemen who had been the subjects of these experiments, felt no disagreeable effects from them, farther than a shaking of the hands, with some degree of languor and debility; which however soon went off.

In a subsequent paper, in the same volume of the Transactions, we are told by Dr Blagden, that, in some other experiments on the same subject, Dr Fordyce and he had found, that even the 260th degree of Fahrenheit’s thermometer could be submitted
mitted to with tolerable ease; several gentlemen having, at different times, gone into the room heated to that degree. And, in order more clearly to evince the fallacy of Boerhaave's experiment, with respect to the effects of such high degrees of heat on animals, a bitch, weighing 32 pounds, was shut up in the heated room, when the thermometer stood at 220°. She remained in it half an hour; and, although the heat during that time had risen to the 236th degree, the animal shewed no other uneasiness than panting and holding out its tongue, appeared perfectly brisk and lively on getting into the cold air, and remained so at the time the paper was wrote, being more than a month from the time the experiment was made. To prove, says Dr Blagden, that there was no fallacy in the degree of heat shewn by the thermometer, but that the air which we breathed was capable of producing all the well-known effects of such an heat on inanimate matter, we put some eggs and a beef-flake upon a tin frame, placed near the standard thermometer, and farther distant from the cockle than from the wall of the room. In about twenty minutes the eggs were roasted quite hard, and in 47 minutes the flake was not only dressed, but almost dry.
Another beef-steak was rather overdone in 33 minutes.

Two similar earthen vessels, one containing pure water, and the other an equal quantity of the same water, with a bit of wax, were put upon a piece of wood in the heated room. In one hour and a half, the pure water was heated to $114^\circ$ of the thermometer, whilst that with the wax had acquired an heat of $152^\circ$, part of the wax having melted and formed a film on the surface of the water, which prevented the evaporation. The pure water never came near the boiling point, but continued stationary above an hour, at a much lower degree; a small quantity of oil was then dropped into it, as had before been done to that with the wax; in consequence of which, the water in both came at length to boil very briskly. A saturated solution of salt water put into the room, was found to heat more quickly, and to a higher degree than pure water, probably because it evaporated less; but it could not be brought to boil till oil was added, by means of which, it came into a brisk ebullition, and consequently had acquired an heat of $230^\circ$. Perhaps no experiments hitherto made furnish more remarkable instances of the cooling effect of evaporation.
ration than these last facts; a power which now appears to be much greater than has been commonly suspected.

III.

Experiments on Water obtained from the melted Ice of Sea-water, to ascertain whether it be fresh or not; and to determine its specific gravity with respect to other Water.—Also experiments to find the degree of cold, in which Sea-water begins to freeze. By Mr Edward Nairne.—Vide Phil. Transactions, Vol. LXVI. 4to, London.

It having been suggested, in a conversation at which Mr Nairne was present, that the ice of sea-water is not fresh; and that, if the ice found near the poles be really so, it must probably be the ice of fresh water, discharged from large rivers in those parts; in order to ascertain the matter, he instituted several experiments. These experiments served at the same time to determine the difference of gravity between the water obtained from melted ice of sea-water, and of sea-water itself, and for finding the degree of cold, in which the latter be-

T 4

gins
gins to freeze. The water made use of in these experiments was taken up off the north Foreland.

On the 27th January 1776, at ten o’clock in the evening, a jar 3½ inches in diameter, and 6½ inches deep, was filled with sea-water, and exposed to the open air, the thermometer standing at 15°. On taking it in next day at noon, it was found frozen very hard, except a very little at the bottom, which remained quite fluid; it was then set by a stove of 56° to thaw. When the jar had continued in that degree of heat, about eight hours, the ice was found to measure about 3½ inches in length, and two in diameter. In order to clear it from any of the brine that might adhere to it, it was washed in a peal of pump water, and then set in a sieve to drain off the water it had been washed in. On the 29th of January, the before-mentioned ice was set in a basin in a heat of 46°, in which it continued nine hours before the whole was dissolved; the bulb of a thermometer rested on the ice during the time of the solution, and continued without variation at 32°. The water thus obtained, was to the palate perfectly free from any taste of salt.
COMMENTARIES

In order to ascertain the comparative gravity of this water, a bottle was filled with it to a certain mark in its neck, which was very narrow, and the bottle so filled was carefully weighed. The same bottle was afterwards weighed, filled to the same mark in its neck, with sea-water, and other waters successively, which were all brought to the same degree of heat by a thermometer. The results were,

Grains.

Water obtained from melted ice of sea-water . . . . 1614
Distilled rain water . . . 1612
Water, consisting of rain and snow waters 1615
Sea-water . . . . 1653
Residuum of sea-water, from which the ice before-mentioned had been taken 1659

To find the degree of cold in which sea-water begins to freeze, the following experiments were made. There was exposed to the open air, a decanter filled with sea-water, in which a thermometer was suspended, the bulb of which reached to the middle of the widest part of the decanter; a jelly-glass, filled with the same water, in which also a thermometer was put, resting on the bottom, was placed in the same exposure. The result may be seen in the following table.

January
<table>
<thead>
<tr>
<th>Vessels</th>
<th>Time</th>
<th>Immered Therm</th>
<th>Therm. in the open air</th>
<th>Effects, &amp;c.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decanter, Jelly glass, Decanter, Jelly glass,</td>
<td>11:30 A.M.</td>
<td></td>
<td></td>
<td>A number of beautiful feathered crystals appeared in the jelly glass; they began to shoot from the top, which was covered with ice, towards the bottom; when they reached it, the thermometer rose immediately from 25 to 28.5.</td>
</tr>
<tr>
<td></td>
<td>12:0</td>
<td>33</td>
<td>25 to 28.5</td>
<td>Ice began to form in the decanter, though hardly perceptible at the edge of the water.</td>
</tr>
<tr>
<td></td>
<td>12:15</td>
<td>31</td>
<td>8.5</td>
<td>Crystals of a laminated appearance began to shoot downwards obliquely from the ice at the surface, which at the edge of the water was barely two-tenths of an inch thick; no appearance of ice in the middle of the surface.</td>
</tr>
<tr>
<td></td>
<td>12:30</td>
<td>30</td>
<td>28.5</td>
<td>Crystals began to shoot round the neck of the decanter close to the glass.</td>
</tr>
<tr>
<td></td>
<td>1:0 P.M.</td>
<td>27.5</td>
<td></td>
<td>The inside became covered with finely feathered crystals, which made it impossible to observe the height of the thermometer, without raising it till the quicksilver in the tube appeared above the ice.</td>
</tr>
<tr>
<td></td>
<td>1:15</td>
<td>28.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4:0</td>
<td>28.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
January 29. at eight o'clock in the evening, were exposed to the open air two similar jars, each 5½ inches deep and 1½ in diameter; one, for the sake of distinction, may be called A, the other B. A was filled with sea-water; B with water taken out of a water tub, which was a mixture of rain and snow water. In A two thermometers were placed; one rested on the bottom; the upper part of the ball of the other was a quarter of an inch only below the surface of the water; one thermometer was also placed in B, resting on the bottom. The following table shows the result.

<table>
<thead>
<tr>
<th>Time</th>
<th>Therm. at the top</th>
<th>Therm. at the bottom</th>
<th>Therm. in the open air</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 P.M.</td>
<td>60°</td>
<td>60°</td>
<td>19.5</td>
</tr>
<tr>
<td>8 15'</td>
<td>40°</td>
<td>33°</td>
<td></td>
</tr>
<tr>
<td>8 25'</td>
<td>35°</td>
<td>39.5</td>
<td></td>
</tr>
<tr>
<td>8 35'</td>
<td>31°</td>
<td>26.5</td>
<td></td>
</tr>
</tbody>
</table>

The surface of the water in B covered with ice.

Surface as before.
No appearance of ice.
The ice on the surface increased.
Ice began to appear on the surface.
Quite frozen.
Crystals over every part of the glass.
As before.

N. B. During the time in which these observations were made, the thermometer in the open air rose half of a division.
The following table shews the result of some further observations on the effects of cold on the sea-water in the jar A of the last table, which had been thawed in order to be now exposed again to the open air. The thermometers in the jar continued in the same situation as before.

**January 30, 1776. A. M.**

<table>
<thead>
<tr>
<th>Time</th>
<th>Therm. at the top</th>
<th>Therm. at the bottom</th>
<th>Therm. in the open air</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 h</td>
<td>34.5</td>
<td>35.5</td>
<td>16.5</td>
</tr>
<tr>
<td>10</td>
<td>30.5</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>28.5</td>
<td>30.5</td>
<td>28.5</td>
</tr>
<tr>
<td>10</td>
<td>28</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>27.4</td>
<td>24.5</td>
<td>18.5</td>
</tr>
<tr>
<td>11 1/2</td>
<td>27</td>
<td>28.5</td>
<td></td>
</tr>
<tr>
<td>11 45</td>
<td>26.5</td>
<td>28.5</td>
<td>19.5</td>
</tr>
</tbody>
</table>

The water fluid.

Ice began to be formed about the glass at the edge of the water.

Still continued to have ice only about the edge of the water.

The surface of the water rendered flagrant by the ice.

The crystals had almost reached the bottom.

During the half minute employed in this observation, the crystals reached the bottom of the jar; the lower thermometer rose almost instantaneously from 24.5 to 28.5, and was immediately rendered obscure by the ice.

The jar was taken in from the open air, and the lower thermometer lifted out of the ice to a sufficient height for the observation.

From these observations it seems that the freezing point of sea-water should be fixed in Fahrenheit's scale at 28.5.

As
As the water, when it began to freeze in two experiments, exhibited phaenomena different from any formerly observed, it may not be improper to subjoin an account of them.

At fourteen minutes after eight in the morning of January 31st, the jar B, containing the same water, viz. a mixture of rain and snow water, was set in a window; the evening before having placed a second thermometer in it, the bulb of which was just below the surface of the water. This, as well as the thermometer at the bottom, stood at 27.5, and the water was perfectly fluid; the thermometer placed near the jar within the window was at 23.5. At twenty-seven minutes after eight, it began to freeze at the bottom of the jar, the thermometers at the top and bottom standing alike at 27°. The instant the crystals began to encompass the ball of the thermometer below, which they very soon did after it began to freeze, the quicksilver rose in it to 32°, the upper one continuing at 27°. The crystals continued to shoot upwards, and, in less than half a minute, reached the bulb of the thermometer at the surface, which immediately rose to 32°.

At
At ten minutes before six in the evening of the same day, the jar A of the second table was placed in the open air, its contents the same, viz. sea-water. The thermometers in it were likewise the same, not having been moved; they both stood at $34^\circ$; that in the open air at $19.5$. At six o'clock the thermometer above was at $31^\circ$, that below at $28.5$. At this time some ice was discovered on the surface of the water; but, as it was by candle-light, its first appearance could not be discerned. At ten minutes after six, the thermometer above was at $29^\circ$, that below at $26.5$. At fifteen minutes after six, the upper thermometer at $28.5$, that below at $25$. At seventeen minutes after six, both the thermometers stood at $28.5$; crystals having risen from the bottom covered the ball of that below, on which it rose instantly from $25^\circ$ to $28.5$. The thermometer in the open air continued as at first, viz. at $19.5$.

The scale of all the thermometers used in these experiments was Fahrenheit's.
IV.


Dr. Musgrave introduces his subject by observing, that the worm fever, as it is called, is a disorder to which children are generally liable, and that it very frequently eludes the skill of the physician. He concludes, therefore, that it will not be unacceptable to the public, if he shall lay before them a method of treating that disease, which, in several instances of his own practice, has been attended with success; and which, from the immediate relief it gives the patients, he concludes to be specifically adapted to the cure of it, and not successful by accident only.

The difficulty of curing what is called a worm fever, arises, according to our author, from its being frequently attributed to worms, when the cause of the disorder is of a quite different nature. He does not mean to deny, that worms do sometimes abound in the human body, nor that
that the irritation caused by them does sometimes produce a fever; but he apprehends these cases to be much more uncommon than is generally imagined, and that great mischief is done by treating some of the disorders of children as worm cases, which really are not so. Dr Hunter, it is observed, is of the same opinion on this point, and he has, we are told, dissected great numbers of children who have been supposed to die of worm fevers, and whose complaints were of course treated as proceeding from worms, in whom, however, there appeared, upon dissection, to be not only no worms, but evident proofs of the disorder having been of very different natures.

The spurious worm fever, as Dr Musgrave terms it, has, in all the instances he has seen of it, arisen evidently from the children having been indulged with too great quantities of fruit; though a poor cold diet may, he thinks, occasionally give birth to it. Every sort of fruit eaten in excess will probably produce it; but an immoderate use of cherries seems to be the most common cause of it. The approach of this disorder has a different appearance, according as it arises from a habit of eating fruit in rather too large
large quantities, or from an excessive quantity eaten at one time. In the former case, the patient gradually grows weak and languid; his colour becomes pale and livid; his belly swells and grows hard; his appetite and digestion are destroyed; his nights grow restless, or, at least, his sleep is much disturbed with startings, and then the fever soon follows; in the progress of which, the patient grows comatose, and at times convulsed; in which state, when the event is fatal, he dies. The pulse at the wrist, though quick, is never strong or hard; the carotids, however, beat with great violence, and elevate the skin so as to be distinctly seen at a distance. The heat is at times considerable, especially in the trunk; though at other times, when the brain is much oppressed, it is little more than natural. It is sometimes accompanied by a violent pain of the epigastric region, though more commonly the pain is slight, and terminates in a coma; some degree of pain, however, seems to be inseparable from it; so as clearly to distinguish this disorder from other comatose affections.

Where a large quantity of fruit has been eaten at once, the attack of the disorder is instantaneous, and its progress rapid; the patient often passing,
passing, in the space of a few hours, from apparently perfect health, to a stupid, comatose, and almost dying state. The symptoms of the fever, when formed, are in both cases nearly the same, except that, in this latter sort, a little purulent matter is sometimes discharged, both by vomit and stool, from the very first day. The stools, in both cases, exhibit sometimes a kind of curd resembling curdled milk, at other times a floating substance is observed in them, and sometimes a number of little threads and pellicles, and now and then a single worm.

Strong purgatives, or purges frequently repeated in this disorder, are greatly condemned by our author, as they in general not only aggravate the symptoms already present, but are sometimes the origin of convulsions. Bloodletting is not to be thought of in any stage of the disorder.

Although frequent purging, however, is not recommended, yet a single vomit and purge are advised in the beginning of the disorder, with a view to evacuate such indigested matter and mucus as happens to remain in the stomach and bowels. These having operated properly, there is seldom occasion for repeating them; and it is sufficient,
sufficient, if the body be coifive, to throw up, every second or third day, a clyster, composed of half a dram of aloes, dissolved in five ounces of infusion of chamomile.

The principal part of the cure, however, depends upon external applications to the bowels and stomach; and, as the cause of the disorder is of a cold nature, the applications must be warm, cordial, and invigorating; and their action must be promoted by constant actual heat. The following is the form recommended. B. Fol. absinth. et rutae, æq. p. aeg. aq. pur. q. f. F. decoc·tum saturetisimum, quo calide foveatur regio ventriculi et abdomen, quarta vel quinta que hora, per horae quadrans. Magna ex herbis coctis post fetus ulum iisdem partibus perpetuo appositor teneatur, et quoties refriererit, aliud calidum opponatur. For internal use, the following is all that has been found necessary. B. Aq. cinnam. sp. cinnamon. ten. æq. Δ. ol. amygdal. dulc. Δ. fyr. balsamic. drachm. iii. M. et tempore usu fortiter concitantur in phiala. Capiat, pro ratione aetatis, drachm. ii. ad 3vi. 3tia quaque hora.

When any nervous symptoms come on, or remain after the disorder is abated, they are easily removed.
removed by giving a pill of four grains of asfa
foetida once or twice a-day.

The diagnostics of worms are very uncertain;
but even in real worm cases, the treatment above
recommended would, it is imagined, be much
more efficacious than the practice commonly had
recourse to. As worms either find the constitu-
tution weakly, or very soon make it so, the fre-
quent repetition of purges, particularly mercuri-
als, cannot but have a pernicious effect. Bar-
foot is still more exceptionable, being in truth
to be ranked rather among poisons than medi-
cines. Worm-seed and bitters are too offensive
to the palate and stomach to be long persifted in.
The powder of corraline creates disgust by its
quantity; and the infusion of pink root is well
known to occasion now and then vertiginous
complaints and fits.

Fomenting the belly night and morning with a
strong decoction of rue and wormwood, is much
recommended. It is a perfectly safe remedy, and,
by invigorating the bowels, has thereby a con-
siderable influence in rendering them capable of
expelling such worms as they happen to contain.
After the fomentation, it is advised to anoint the
belly with a liniment, composed of one part of
effential
essential oil of rue, and two parts of a decoction of rue in sweet oil. Of internal medicines, the best is astra foetida, with an aloetic pill or two at proper intervals.

The diet of children disposed to worms, should be warm and nourishing, consisting in part at least of animal food, which is not the worse for being a little seasoned. Their drink may be any kind of beer that is well hoped, with now and then a small draught of porter or negus. A total abstinence from butter is not so necessary, perhaps, as is generally imagined. Poor cheese must by all means be avoided; but such as is rich and pungent, in a moderate quantity, is particularly serviceable. In the spurious worm fever, the patient should be supported occasionally by small quantities of broth; and, at the close of it, when the appetite returns, the first food given should be of the kinds above recommended.

The diet here directed will, perhaps, be thought extraordinary, as the general idea is at present, that, in the management of children, nothing is so much to be avoided as repletion and rich food. It is no doubt an error to feed children too well, or to indulge them with wine and rich sauces; but it is equally an error to confine them to too
strict or too poor a diet, which weakens their digestion, and renders them much more subject to disorders of every kind, but, particularly, to disorders of the bowels. In regard to the spurious worm fever, if it be true that acid fruits too plentifully eaten, are the general cause of it, it follows as a consequence, that a warm nutritious diet, moderately used, will most effectually counteract the mischief, and soonest restore the natural powers of the stomach. Besides, if the disorder does not readily yield to the methods here directed, as there are many examples, and soine have happened to our author, of its terminating by an inflammation, and suppuration of the navel, it is highly advisable to keep this probability in view, and, by a moderate allowance of animal food, to support those powers of nature, from which only such a happy crisis is to be expected.
IN consequence of the celebrated Stork's publications on the virtues of hemlock, innumerable trials were made of it in this, as well as in other countries. It did not, however, in any degree, answer the expectations formed of it; so that many practitioners began long ago to conclude, either: that more had been said upon the efficacy of the medicine than in reality it deserved; or, that the preparations of it used in this country, differed materially from those made use of at Vienna. That the latter conjecture was the most probable, no person could doubt who had perused, and given credit to Stork's publications; and, in the treatise before us, are related a variety of cases, most of which tend equally to the confirmation of the same opinion. For more full information, the treatise itself must be had recourse
recourse to; all of the most remarkable cases, however, are here selected.

Case III. A woman, aged 27 years, had, for a year and half, laboured under a total want of use of her right leg, owing to a considerable hard swelling around the knee joint. This disorder she imagined to be the remains of a goutish complaint, which, for the space of three weeks, she had formerly been troubled with. In other respects she enjoyed good health.

A purgative being premised, she began, on the 4th of August, to the use of cicuta; sixteen grains of the extract were ordered twice a day, together with an external application of the plant, in the form of a fomentation, to the part affected.

On the 8th of August, three doses a day, of sixteen grains each, were prescribed: These were continued daily till the 24th, when each dose was so much increased, as that a dram of the extract came to be exhibited every twenty-four hours.

5th September, This day the patient perceived a tingling kind of pain in the swelling; there was no difference, however, in it as to softness; but the joint, though formerly stiff and rigid, became now, in some degree, moveable.

10th,
10th, The knee somewhat softer, and the motion of the leg more considerable.

She was afterwards gently purged two or three times, and continued taking two doses of cicut, of a scruple each daily, till the 23d of October, when the swelling was entirely removed, and a free use of the joint restored. For a debility of that leg, which remained for some time, a fomentation of aromatic herbs was prescribed, which soon effected a complete cure, and the patient has since that time, we are told, remained perfectly well.

Case X. A man, aged 40, was brought to the hospital, with a large scorbutic ulcer on the outer part of his right leg; the disease was of a twelve-month's standing, and, besides the ulcer, the under part of the leg was so much swelled as to form one continued hard tumor, from that downwards over the whole foot. For the space of three months, all the remedies commonly had recourse to in such cases, were administered, but with no evident advantage. It was resolved, therefore, to see what effects cicut would produce.

On the 19th of November, he began to take sixteen grains of the extract, twice a day; and linen cloths soaked in an infusion of the herb, were
were kept constantly applied to the fore. At this time, the swelling of the leg and foot were equally considerable as when the patient was first admitted; the ulcer, however, had spread farther; its margins were ragged, and from the bottom of the fore, several small tubercles had arisen. The colour of the parts affected was various, the matter afforded was fanious, and the patient complained of very severe pains. In other respects, however, he enjoyed good health. By the 27th of the month, the fore looked much better, had got a more natural red appearance, the inequalities in the bottom were diminished, and the leg and foot were not so tense as formerly.

On the 6th of December, the fore was considerably filled up; in place of fanies, thin pus was now discharged, the swelling was much lessened, and the patient complained of little or no pain. The same treatment was continued till the 20th of the month, when the fore was so far reduced as to afford only a very small quantity of pus. Its margins were become equal, and shewed a tendency to cicatrize, and the swelling of the leg and foot was entirely removed.

At this time, the remedies, which had till then been continued, were laid aside; and the only application
application made use of, was a plaster of cicuta to the sore. The patient had all along taken a laxative every sixth or seventh morning. By the middle of January, the sore was completely and firmly cicatrized; and the patient was in every respect so well by the end of the month, as to be then dismissed, and allowed to go to his ordinary labour.

Case XI. A woman, aged thirty, laboured under a hard ischirrous tumor of the left breast; the swelling was of a livid colour, and so considerable in size, as to render that breast three times as large as the other; the pain attending it was so violent as to render respiration very difficult. The patient, at the time of applying for assistance, was much emaciated, had a very sickly complection, and her strength was so much impaired, as to give very small hopes of a cure being obtained.

In this situation she was ordered an anodyne, together with a decoction of farfaparilla; as likewise the following mixture: ῥ. Aq. flor. rhacad, 3vii.; extract. cicut. 3i.; fyr. diacodiæ 3ifs. m. cochlearia ii. omni bilorio fumend. At the same time, a decoction of cicuta was frequently applied as a fomentation to the breast. By the following day,
the pain was considerably relieved, and the patient slept a little, at intervals. On the 7th day, small ulcers broke out in different parts of the breast, discharging large quantities of very acrid fancies. The bottom and lips of the ulcers were of a leaden colour; the pains were not so constant, but the patient now complained of a burning heat, which she had not formerly done. Hitherto she had taken at the rate of a dram of extr. cicutaæ in the twenty-four hours; but, as it seemed to agree well with her, the quantity was now doubled. The decoction of farfa. without the anodyne, was continued, and externally was applied, empl. de cicuta, together with the fomentation formerly mentioned. These remedies produced such remarkable good effects, that, in less than three months, several hard glands, which in the course of treatment had been discovered in the arm-pit, were rendered soft, and the different ulcers so far cicatrized as to render farther use of cicuta unnecessary. To this remarkable cure, many of the faculty at Vienna, we are told, were witnesses, particularly Dr Stork and Mr Gasser professor of anatomy there.

Cæse XIII. A boy thirteen years of age had laboured under a white swelling in the joint of his
his left knee, for the space of six months. Different remedies had been tried, but with no advantage; it was therefore resolved to see what effects would be produced by cicuta. The extract was ordered, internally, in the form of pills, and a fomentation was applied outwardly. These were the only medicines prescribed, except a gentle purge, repeated at proper intervals. They were employed for the first time on the third February; by the 21st of the month, the swelling was much softened, and, by the 1st of March, it was in every respect considerably better. On the 23d of April he was dismissed perfectly cured.

Case XXXV. A boy, aged eleven years, had, for six months, laboured under a very bad species of tinea capitis. During the first six weeks after his admission to the hospital, a variety of remedies were had recourse to, with no advantage, and at last he was put upon a course of cicuta, both internally and externally. Sixteen grains of the extract were exhibited twice a day, and the head was washed twice a day with the decoction of the plant. No other medicine was prescribed, excepting a gentle laxative now and then, and, in
less than two months, the disorder was entirely removed.

Case XXXVIII. A man, aged twenty five years, had, for several months, been troubled with pains in his joints, which increased always at night; and on his fauces were several ulcerations, which arose from the lues venerea. A gentle purge was first ordered, and afterwards a decoction of cicuta was prescribed, both as a medicine inwardly, and as a gargle for washing the sores in the throat. In the space of eight days, the pains were much relieved, and the ulcers had a more clean appearance. The quantity of cicuta was then increased, and in a very short time he was dismissed perfectly cured.

Case XXXIX. A woman, twenty-eight years of age, had, for four months, laboured under a gonorrhoea, the matter of which was so acrid, as to excoriate, to a great degree, the neighbouring parts. A gentle laxative being prescribed, the decoction of cicuta was immediately prescribed to be taken internally. In the course of a few days, the urine was voided with much less difficulty, and the ulcerations were not near so painful. In little more than a month, a perfect cure was obtained, without the use of any other remedies,
remedies, excepting that of some mild restoratives, towards the end of the disorder.

We are here informed by the author, that he has, on many occasions, experienced the good effects of cicutà in venereal cases, similar to the two last.

Cafe XL. We are here presented with a case of scurvy, in which cicutà was used with great advantage. A woman, aged forty, had, for a year, laboured under a scorbutic ulcer in one of her legs; it extended from the external maleolus of the foot to the middle of the leg; its edges were ragged, and it was altogether foul and forbid. The patient complained of pains in her joints, and her gums were very easily caused to bleed. Cicutà was immediately ordered, both internally, and outwardly, in the form of fomentation to the sore. In a few days the ulcer was rendered quite clean, and in less than five weeks a complete cure was obtained.

In this collection by Mr Collin, are related, in all, 41 cases, in which cicutà was employed. In all glandular swellings, it produced remarkable good effects, as it did in a variety of very bad ulcers. In very old oblitinate cancers, although
although it frequently failed in effecting complete
cures, yet it almost always tended to mitigate the
pains, and to convert the fumes usually discharged
from such sores, into matter of a more bland pu-
rulent nature.

VI.

De usu noxic et salubri Vesicantium. Vid. Solo-
monis Theophili de Meza, M. D. Diatribae
Medicae tres. 8vo, Hafniæ.

After a short account of the natural histo-
ry of cantharides, the chemical analysis of
these insects, and the phænomena commonly ob-
erved from their application, our author proceeds
to consider with what propriety they are had re-
course to, in several disorders, in which they are
very generally used.

The use of blisters in convulsive diseases is first
taken notice of; and Mr de Meza observes, that
in all such complaints they will be serviceable or
hurtful, according to the particular nature and
occasional cause of the disease. Convulsions, he
thinks,
thinks, may proceed from three different sets of causes, viz. from repletion, inanition, and irritation. When repletion from too great a quantity of blood seems to be the cause of the disorder, venesection should always precede the use of blisters, and then they are frequently of service. In repletion, too, from a superabundancy of serum, they are the principal remedy to be depended on.

In convulsions proceeding from the second set of causes, inanition, our author does not think blisters can ever be applicable: For, if the inanition has been induced, either by too great discharge of blood or serum, farther evacuations by epispastics would certainly, he thinks, be adding fuel to the fire, and could not probably answer any one good purpose. When irritation about the head seems to be the cause of such disorders, blisters, applied to the extremities may sometimes be of service, by occasioning a derivation to those parts of such humours as may have happened to produce them.

**VERTIGO.**

Vertigo, we are told, may proceed from six different causes, viz. 1, From a sanguineous plethora.
2. From a foulness in the primæ viae. 3. From debility in consequence of excessive evacuations. 4. From compression. 5. From poisons of different kinds, as opium, mercury, fumes of charcoal, &c.; and, 6. From a serofa colluvies, in consequence of the stoppage of issues, ulcers, or any other habitual drains. In this last species of the disease, blisters are much recommended; but, in none of the others, can they ever, we are told, be used with advantage.

**A P O P L E X Y.**

Very different opinions are delivered, by different authors, with respect to the use of blisters in apoplectic and the several somatoæ disorders; by some they are much recommended, and by others we are desired to use them with the greatest caution. In order to reconcile these opposite opinions, the different causes that may be supposed to produce apoplexy are here enumerated. 1. Such disorders are frequently induced by phlethora, and congestions of blood about the head. 2. By pituitous and serous collections in the head. 3. By compression of the jugular veins. 4. By fanguineous and serous extravasations in the ventricles of the brain. 5. By the transla-
tion to the head of the different excretions, on these being unnaturally retained in the system.
6. By narcotics and opiates; and, 7. By sympathy from other diseases.

In apoplexy from a sanguineous plethora, blood-letting is recommended as almost the only remedy to be depended on; and, in that species of the disorder, blisters are never admissible till considerable quantities of blood have been drawn off. The third species of causes enumerated may sometimes, we are told, though not often, be removed by a chirurgical operation. Extravasations in the ventricles of the brain commonly prove fatal, though, in some instances, drastic purgatives have appeared to be of service in such cases. Poisonous narcotics are most effectually removed by emetics; and vinegar, we are told, is the best corrector of an over-dose of opium.

Apoplexy that appears to proceed from any other disorder, must be cured by medicines most proper for the removal of the original disease. From what has been said, it would appear, that the use of blisters in apoplexy is very limited; and they are recommended by our author, in such cases only as arise, either from a superabundance.
dancy of serum in the constitution, or from a translation to the brain of such humours as in a state of health ought to be excreted.

**P A L S Y.**

When in palsy a plethoric state of the system takes place, blisters, our author thinks, can never, with safety, be had recourse to; but, in all such disorders as are connected with, or seem to depend upon a relaxed set of fibres, a moist atmosphere, or the presence of too much serum in the system, blisters are then the principal remedies to be depended on. They are likewise of service, too, in such species of palsy as are produced by poisons of different kinds, especially those of a metallic nature; but, in these cases, the use of strong emetics and purgatives must always be premised.

**D E L I R I U M.**

As our author elsewhere treats of delirium when conjoined with the putrid and nervous fevers, his observations upon it here are confined to the phrenitis and hydrophobia.

In phrenitis, after plentiful evacuations of blood, blisters are much recommended, not, however,
however, to the head, but to the extremities; for, as in all such cases, there evidently appears to be a great determination to the head, whatever can occasion a derivation to the extremities, will most likely be of service; and this our author alleges may, in some measure, be effected by blisters. In real cases of hydrophobia, no remedies whatever can probably be of much service; but, as it is of consequence to preserve the parts bit by bit by mad animals as long open as possible, blisters for that purpose are said to answer very effectually.

DOLOR.

The first case of pain instanced by our author, is headach. Of this complaint he says there are three distinct species. 1. The idiopathic, proceeding from some fixed cause in the brain itself; this he considers in general as incurable. 2. The symptomatic, proceeding most commonly from some disorder in the stomach; this, he says, must be cured by emetics, and other remedies most proper for the original disease. 3. The metastatic, arising from a translation of serum, or other matter, to the head; from different parts of the body. In this species of headach, together with

\[\text{X} \ 3\ \text{pediluvia},\]
pediluvia, are recommended blisters both to the neck and thighs.

In pains of the ears, attended with purulent, or serous discharges, blisters may frequently be of use; but, for the removal of pain only, as it commonly, in these cases, proceeds from inflammation, bloodletting is more warmly recommended. In toothach, our author does not imagine blisters can ever be of much service; for, when inflammation is the cause of the pain, nothing will so effectually relieve it as bloodletting; and pain from a caries tooth can only be removed by extraction of the tooth itself. In rheumatic pains of the joints, blisters, applied to the parts affected, are often known to prove efficacious. In such pains as are frequently connected with scurvy, we are desired never to use them, as the blistered parts are very apt to mortify; but, in pains proceeding from a repulsion of scabies, or itch, nothing, we are told, proves so effectual. A case is here stated of an intense pain along the arm, which resisted all the ordinary applications, and was cured by the application of blisters only, after it was suspected to proceed from the disappearance of an inveterate itch.
COMMENTARIES.

In arthritic pains, whether of the head, breast, or stomach, blisters, as stimulants, are much recommended by our author, either to the feet, or to such parts of the extremities as the disease has formerly been seated in.

Such pains as proceed from some species of colic, particularly from the colica pictorum, may, we are told, be frequently relieved by the application of blisters to the part affected.

INFLAMMATIONS.

A variety of diseases, attended with topical inflammation, are here enumerated, in which blisters are much recommended; particularly, ophthalmia, angina, peripneumony, pleurisy, inflammatory affections of the diaphragm, stomach, &c.

DISEASES OF THE BREAST.

Asthma is the disorder first taken notice of under this head. In the moist or humeral asthma, blisters are said to be of use, both as evacuants, and as serving to derive from the part affected, towards the situation on which they are applied. They are not, however, recommended in any other species of the disease. In coughs, attended with tough viscid expectoration,
tion, blisters are advised to be had recourse to; but, on no account, ought they to be used in coughs of a more dry nature. In chincough, after the use of vomits, gentle laxatives, and pectorals, blisters to the back are recommended as useful.

**DROPSY.**

Mr de Meza does not imagine that blisters can ever be of service in any of the encysted or internal species of dropsy; but they are used, he says, with advantage, in what he terms the external hydrocephalus, viz. in such watery swellings of the head as are confined to the common teguments. In all such disorders of the eyes as are attended with plentiful secretions of tears, blisters are much recommended by our author.

**CUTANEOUS DISEASES.**

In obstinate cases of impetigo and scabies, blisters, applied even to the affected parts, have been attended, we are informed, with the greatest advantage. A case is here related, of a very inconstant instance of impetigo in a young lady, which, after resisting all the usual remedies, was speedily cured by the application of a large blister to the parts.
parts principally affected. The blistered part was kept open for about a fortnight, by means of inflamed ointment; and the cure was so complete, that no vestige of the disease could afterwards be observed.

FEBRILE DISORDERS.

Fevers are the last class of diseases taken notice of in the treatise before us. In fevers of the intermittent kind, except when symptoms of a comatose nature occur, blisters are very seldom laid to be necessary. Nor are they admissible in the ardent inflammatory fever, till after repeated blood-lettings, and other necessary evacuations. In putrid fevers, when stimulants are requisite, blisters are recommended as the most effectual; in such disorders, however, they sometimes, we are told by our author, terminated in mortification. In every stage of the nervous fever, blisters are much extolled by Mr de Meza, not only as stimulants, but as solvents of that viscid state of the fluids, on which such fevers are by many supposed to depend. In the meagles, blisters are seldom necessary, excepting with a view to moderate the cough, which frequently, towards the end of the disease, becomes the most troublesome symptom.
ptom. Neither are they often thought requisite by Mr de Meza, in the small pox; he speaks, however, of his having frequently seen them of considerable service in the secondary fever of the confluent kind; and a case is related, in which blisters applied to the legs produced a very speedy cure, after the cool regimen had failed, although attended to, from the commencement of the disease, with the greatest exactness:

VII.

A Discourse upon some late Improvements of the Means for preserving the Health of Mariners, delivered at the anniversary Meeting of the Royal Society, Nov. 30. 1776. By Sir John Pringle, Baronet, President. Published by their order. 4to, London

The endeavours used by Captain Cook, in his late voyage round the world, for preserving the health of his sailors, were so remarkably successful, as to induce the royal society, at their anniversary meeting in November last, to confer upon him Sir Godfrey Copley's medal; the society
ciety having no hesitation in pronouncing Captain Cook's paper on the subject, the most deserving of any which, for the year, had come before them. It was on this occasion, that the present discourse was delivered, with a view, we are told, of explaining more fully the means employed by Captain Cook, than he himself had leisure to do in his paper; and, as all the information contained in this discourse, was either obtained directly from the Captain himself, or from some of his most intimate friends, since his departure on his present voyage, every circumstance related in it must be considered, therefore, as exceedingly valuable.

Captain Cook sailed in his Majesty's ship the Resolution, with a company of a hundred and eighteen men, and performed a voyage of three years and eighteen days, throughout all the climates, from fifty-two degrees north, to seventy-one degrees south, with the loss of only one man by a disease; and even that man, we are informed in a note, began so early to complain of a cough, and other consumptive symptoms, that his lungs must have been affected before he went abroad.

In order to set in a more striking point of view the advantages of the late improvements for preserving the health of mariners, Sir John Pringle here
here enumerates some of the many dreadful catastrophes, which, in former times, universally attended long voyages at sea, and even at such a late period as the voyage performed by Lord Anson. The consequences of such attempts were so lamentable, as to make every reader reflect with regret, upon the want of sea-faring people then laboured under with respect to nautical medical assistance; and in which branch of the art, we are now happily possessed of such very useful experience, that a voyage round the world, we are told, may be undertaken with less danger to health, than a common tour in Europe.

Before proceeding to enumerate the means fallen upon by Captain Cook for preserving the health of his sailors, we are favoured, by our author, with some observations on the nature of scurvy; it being the disease to which seamen are most remarkably exposed, and which they, on every occasion, should guard most particularly against.

The scurvy has, by some, been attributed to the coldness of the air, which checks perspiration; and it is said, therefore, to be the epidemic distemper of the northern nations, and particularly of
of those around the Baltic. Sir John Pringle, however, is of opinion, that, in these countries, scurvy is produced almost entirely from the inhabitants being forced to live on salt provisions for at least one half of the year; from their having few or no greens nor fruit in the winter, little fermented liquors, and living in damp, foul, ill- aired houses. And that it is not the coldness of a climate which occasions this disease, is rendered evident, by its being never known among the Laplanders, one of the most northerly nations; these people being probably preserved from it, by their not being obliged, at any time, to live upon salted provisions, as they are always plentifully supplied with fresh flesh by their rein-deer.

All the several occasional causes of scurvy, as well those above mentioned as others, tend greatly to induce a septic resolution, or beginning corruption of the whole habit, which our author, in a former publication, long ago endeavoured to establish as the immediate cause of the disease; and on this point he is still of the same opinion. He is confirmed in it from a variety of circumstances, but, particularly, from finding, on examination, that, from whatever in nautical practice has either of old been approved, or of late been introduced...
roduced into the navy, it appears, that, though the means vary in form, and in their mode of operating, yet they all some way contribute towards preventing putrefaction, whether of the air in the closer parts of a ship, of the meats, of the water, of the cloaths and bedding, or of the body itself.

The first thing taken notice of by Captain Cook in his list of stores, is malt, of which was made sweet wort, and given not only to those who had manifest symptoms of the scurvy, but to such also as were judged to be most liable to it, in the quantity of two or three pints a day, to each man, or in such proportion as the surgeon thought necessary, which sometimes amounted to three quarts in twenty-four hours. Its effects were so remarkable as to make it to be considered by Captain Cook, as one of the best antiscorbutic sea-medicines yet found out. Our author is of opinion with Doctor McBride, that it is to the fixed air afforded by the wort, that all its virtues are to be attributed; and, in confirmation of the theory, mentions several articles which are known to contain great quantities of fixed air, and which are all esteemed as powerful antiscorbutics. Wine, cyder, and other vinous produc-
tions from fruit, as also the various kinds of beer, are all known to be useful in this respect, ino-
much, that it is a constant observation, we are in-
formed, that, in long cruizes, the scurvy is never
seen while the small beer holds out at full allow-
ance, but that, when, it is all expended, the dis-
order soon appears. It were to be wished, there-
fore, our author observes, that this wholesome
beverage could be renewed at sea; but our ships
afford not sufficient conveniency. The Russians,
however, he informs us, prepare, at sea as well as
land, a liquor of a middle quality between wort
and small beer, in the following manner: They
take ground malt and rye-meal in a certain pro-
portion, which they knead into small loaves, and
bake in the oven. These they occasionally in-
fuse in a proper quantity of warm water, which
begins so soon to ferment, that, in the space of
twenty-four hours, their beverage is completed,
in the production of a small, brisk, acidulous li-
quor, which they call quas, palatable to them-
elves, and not disagreeable to the taste of stran-
gers. On the authority of the late Dr Mounfey,
who had the best opportunities of knowing, we
are informed, that quas is the common drink,
both of the fleets and armies of the Russian em-
pire;
pire; that it is particularly good against scurvy; and that, although he had been at pains to inquire both at Moscow and St Petersburg, to discover some instances of the jail-fever, he could not, in the several prisons of these large cities, (although they were full of malefactors), find that such a distemper was ever known among them. He could discover no other reason for the healthful condition of these men, than the kind of diet they used, which was the same with that of the common people of the country, who not being able to purchase flesh meat, live mostly on rye-bread, and drink quas.

From the above information, says our author, it would appear, that rye-meal assists both in quickening the fermentation, and adding more fixed air, since malt alone could not so readily produce so acidulous and brisk a liquor. And there is little doubt, he thinks, that, whenever the other grains can be brought to a proper degree of fermentation, they will more or less in the same way become useful. That oats will, he is satisfied from a piece of intelligence he obtained from the Captain of a large ship of war, who, being on a cruise, and the scurvy breaking out among his men, put them upon a kind of food which
which he had, in some parts of the country, seen used, and which he thought might be of service on that occasion. This food in the north is called soins, and is prepared in the following manner. Some oat-meal is put into a wooden vessel, hot water is powered upon it, and the infusion continues, till the liquor begins to taste sourish, that is, till a fermentation comes on, which, in a place moderately warm, may be in the space of two days. The water is then poured off from the grounds, and boiled down to the consistence of a jelly. This he ordered to be made, and dealt out in meffes, being first sweetened with sugar, and seasoned with some prize-wine he had taken, which turned sour, yet improved the taste, and made this aliment no less palatable than medicinal. Upon this diet chiefly, and abstaining from salted meats, the scurvy sick quite recovered on board; and not in that voyage only, but in all his subsequent cruizes during the late war, without his being once obliged to send any of them on shore, because they could not get well at sea.

Although it is probably to the fixed air, contained in fruits, greens, and fermented liquors, that their efficacy in scurvy is in a great measure
to be attributed; yet the acid which enters their several compositions, is by our author imagined to have no inconsiderable influence. If it be objected to this, that the mineral acids, which contain little nor no fixed air, have been tried in scurvy with little success, he answers, that, in those trials, they have never been sufficiently diluted, the elixir of vitriol being commonly given in such small quantities of water, that it is not probable such an austere drink can ever get beyond the first passages, considering the delicate sensibility of the mouths of the lacteals. He therefore proposes, that, on a deficiency of malt at sea, such men as are threatened with scurvy, should be ordered to drink three quarts of water in the day, acidulated in the proportion of ten drops of spirit of salt to to each quart, or of thirteen drops of weak spirit of vitriol to the same measure. Captain Cook, when speaking of the effects of the rob of lemons in scurvy, does not say much in its favours; owing, as our author conjectures, to his having been desired to give it out in such small quantities as could not readily produce any good effects.

The wort and acid juices were only dispensed as medicines, but the next article was of more extensive
extensive use, viz. the four kraut, (four cabbage) a dish of universal request in Germany. The acidity is acquired by its spontaneous fermentation, and it was the four taste which made it the more acceptable to all who eat it. To its farther recommendation, it may be added, that it held out good to the last of the voyage.

Portable soup is another article of which Captain Cook availed himself not a little. This concentrated broth being freed from all fat, and having, by long boiling, evaporated the most putrescent parts of the meat, is reduced to the consistence of a glue, which in effect it is, and will, like other glues, in a dry place, keep sound for years together. It hath been said, that broths turn four on keeping, though made without any vegetable. Now, whether any acid be thus formed, may be a question. Our author, however, is inclined to think, that the gelatinous parts of animal substances, such as compose these cakes, are not of a nature much disposed to putrify. But, however that may be, since Captain Cook observes, that this soup was the means of making his people eat a greater quantity of greens than they otherwise would have done, in so far, says he, we must allow it to have been virtually antiseptic.
So much for those articles, which of late have been supplied to all the King’s ships on long voyages, and in which, therefore, Captain Cook claims no other merit than the prudent dispensation of them; but the following regulations, being either wholly new, or improved hints, from some of his experienced friends, he may justly appropriate to himself.

First, then, he put his people at three watches instead of two, (which is the general practice at sea) that is, he divided the whole crew into three companies, and, by putting each company upon the watch by turns, four hours at a time, every man had eight hours free, for four of duty: Whereas at watch and watch, the half of the men being upon duty at once, with returns of it every four hours, they can have but broken sleeps, and, when exposed to wet, they have not time to get dry before they lie down. In the torrid zone, the men were shaded from the scorching heat of the sun by a covering over the deck; and when under the antarctic circle, a coat was provided for each man, of a substantial woolen stuff, with the addition of a hood for covering their heads. This garb, termed by the sailors, their Magellan jacket, was found very comfortable for working
in rain and snow, and among the broken ice in the high latitudes of the south. The greatest attention was paid to cleanliness; the ship's company, one morning in the week, passed in review before the Captain, who saw that every man had changed his linen, and was, in other respects, as clean and neat as circumstances would permit.

It is now well known to seamen, of what consequence it is to have the hammocks and bedding kept as dry and well-aired as possible, insomuch that every fair day, they are commonly ordered upon deck. In the voyage performed by Captain Cook, they were not only on such days brought upon deck, but every bundle was unlash'd, and so spread out, that all the parts of it were exposed to the air.

With a view to purify the ship itself, attention was not only given to wash and scrape the decks regularly, as is usually done, but every part below deck was kept sweet by means of portable fires. Some wood being put into a proper stove or grate, is lighted, and carried successively from one part of the ship to another; care being taken to retain it so long in each apartment, as seems necessary for driving out the foul air, and occasioning
occasionaling an admission of a fresh atmosphere. These fires, it is apprehended, might be of use by the acid fumes afforded from the wood, which would, probably in some degree, act as an antiseptic; but the most obvious advantage accruing from them, was their drying up the moisture in those places where there was the least circulation of air. Whilst the fires were burning, some men were employed in rubbing hard, with canvas or oakum, every part of the inside of the ship that was damp and accessibl e. Even the sink or well, which, from the mephitic vapours contained in it, has often proved fatal to sailors, was not only rendered safe but sweet, by means of an iron pot filled with fire, and let down to burn in it.

The credit of Dr Hales's ventilator not being as yet thoroughly established in the navy, it was not had recourse to by Captain Cook; the wind-sails, however, were used; and on some occasions, were most serviceable, particularly between the tropics. They have this disadvantage, however, that, in hard gales of wind, they cannot be put up, and in dead calms, when they are most wanted, they have no sort of influence.

Captain Cook, we are informed, was so lucky as to be plentifully supplied with a very material article,
article, viz. fresh water, during the whole voyage. He was not without an apparatus for distilling sea-water; and, though he could not obtain nearly so much as was expected from the invention, yet he sometimes availed himself of it. Within the southern tropic, in the pacific ocean, he found so many islands well stored with springs, that he was never without a sufficiency of fresh water for every purpose; and so anxious was he to have his water quite sweet, that, whenever an opportunity offered, he emptied what he had taken in but a few days before, and filled his casks anew. In passing from the Cape of Good Hope to New-Zeeland, in the frozen zone of the south, four months were taken up; and, although land was not seen for all that time, yet there was always the greatest plenty of fresh water to be got. These very shoals and floating mountains of ice among which the ship steered, were the means of giving a plentiful supply of what was most wanted. It had been said that those stupendous masses of ice, called mountains, melted into fresh water; though Grantz, the relator of that paradox, doth not imagine they originate from the sea; but that they are first formed in the
the great rivers of the north, and being carried down into the ocean, are afterwards increased to that enormous height, by the snow that falls upon them. But, that all frozen sea water would thaw into fresh, had either never been asserted, or had met with little credit. This is certain, that Captain Cook expected no such transmutation, and therefore was agreeably surprized to find he had one difficulty less to encounter, that of preserving the health of his men so long on salt provisions, with a scanty allowance of corrupted water, or what he could procure by distillation. The melted ice of the sea, was not only sweet, but soft, and so wholesome as to shew, among numerous other instances, the fallacy of human reason unsupported by experiments. An ancient of great authority had assigned, from theory, bad qualities to melted snow; and, from that period to the present times, this prejudice had not been quite removed.

In this circumnavigation we are informed, that, amidst fleets and falls of snow, fogs, and much moist weather, the Resolution enjoyed the same good state of health she had done in the temperate and torrid zones. It appears only, from the surgeon's
surgeon's journal, that, towards the end of the first course, viz. between the Cape of Good Hope and New-Zeeland, some of the crew began to complain of scurvy; but the disease made little progress, except in one, who had become early an invalid from another cause.

We cannot conclude this account without taking notice of the justly merited encomiums, which, throughout the whole, Sir John Pringle has frequently occasion to pay to Mr Patten, the surgeon of the Resolution. His care, attention, and knowledge in his profession, had unquestionably no inconsiderable share in accomplishing an event which, when compared with transactions of a similar nature, of but recent date, may justly be reckoned even miraculous. That a company of near one hundred and twenty men, engaged for above three years in a voyage through every climate, should, during all that period, during all these exposures to the causes of morbid affections, have lost only one man by disease, is an event, which has never occurred, and probably will never hereafter be equalled.

S E C T.
The History of a Case of Hieranos successfully treated by the Flowers of Zinc. By Dr William White, Physician at York.

Mrs S. a lady of about 42 years of age, lufty, and, to appearance, of a very healthy habit, sent to desire my assistance, and gave me the following account of herself. She always had a very weak system of nerves; any sudden surprise will render her speechless for an hour or two, as I myself have seen. An emetic, which she is very often necessitated to take on account of violent nauseas and vertigo, which only give way after quitting a great quantity of phlegm.
phlegm from her stomach, always had that effect. As she could not live without frequent emetics, and, at the same time, dreaded their constant effect, she desired me to try some medicine of another kind; at length I found that the acetum scilliticum had a happy effect. She often takes it, and it is never followed by any degree of aphonia. Such is the peculiarity of this lady's constitution, that the gum guaiacum, in whatever form, always is followed by loss of sight for some hours, by which effect she unerringly knows when it has been given her, however disguised.

She had good health till the eleventh year of her age, and was then taken with the chorea fancti viti, which held her a long time. About sixteen she was seized with the hieranofos, which, notwithstanding the advice of three physicians at home, and many elsewhere, continued incessantly for three years. She was then reduced to an extreme degree of weakness, and past any hopes of recovery, her disorder being so singular, as to terrify her friends, who desired her death, as the only release from her sufferings.

All the classes of nervous medicines were repeatedly tried, musk, opium, caftor, camphor, valerian, the cortex, chalybeates, cold and
and hot bathing, &c. A ptyalism was raised with calomel, without any effect. Issues were cut in both legs and arms; blisters alone gave her relief, and that only for a short time, during the serous discharge. After three years the disease gradually abated, by taking some pills of Ward’s. I have seen her several times affected with it in a slight degree for a few hours, after any thing which hurries her spirits. This she patiently suffered, as every thing had been done which medicine could afford her.

In November she began to be much worse than usual; and, from what she could recollect of her former sufferings, thought she was going quickly to be as bad as in her first attack; sending for me, I observed as follows.

Complains of a violent pain in the right side of her face, and universal erratic pains and eeriness. A scorching heat all over the skin, except her feet up to the ancles, which are as cold as marble. Pulse not quickened, but full; mouth dry, but no great thirst; body coltive, which is indeed her natural habit, so as to oblige her to the frequent use of magnesia. Regular as to the menies, the return of which she expects in five or
six days. Appetite good, rather voracious; but her spirits are always low after a full meal, especially dinner. Has a violent pain in the loins, which often shifts into first one hip, then the other; the leg of which side is then affected with stupor and numbness, so that she drags it after in walking. Faulters in her speech at times, but this continues not long.

All the muscles in her body in strong convulsive motions, not all at the same time, but successively; e.g. her face is violently affected, nose, eyelids, &c. and her whole head, which is thrown violently backward, and often twitched from one side to the other, with violent pain. From hence it removes into the arms, first one, then the other; these being deserted, one, or both legs immediately become convulsed with violent and incessant motions: Thus, all the external parts of her body are, by turns, affected.

She is all the time perfectly sensible, and knows what limb is going to be next affected, by a sensation of something running into it from the part already convulsed, which she cannot describe in words; but she has frequently told me the part going to be affected, which I always found to be true,
true, though the transition is surprisingly quick. A slight pressure upon the part gives ease, perhaps by giving tension to the muscles; but, attempting once to hold her head tight, she told me she could not bear it, as it increased her pains, which might arise from forcibly preventing the free contractions of the convulsed muscles. She is easiest in a prone posture. Such has been her situation upwards of 48 hours, with scarce a moment’s remission, by which she complains of great and universal foreneces. No words can convey an adequate idea of her odd appearance; and I do not in the least wonder that, in the times of ignorance and superstition, such diseases were ascribed to supernatural causes and the agency of demons.

As she had formerly, in a similar situation, taken so many powerful medicines without success, I own, had not the zinc occurred to me, I should have despaired of trying them again; but, as she was desirous of taking any thing prescribed, I ordered a blister ad nucham, et florum zinci, gr. i. in a pill, twice a day, washed down with a cordial julep. This was on the 28th of November.

29. Blister has discharged greatly; pulse less full; no convulsions this morning; complains
of a numbness in the right cheek, where her pain was; pain in her loins easier; no numbness in either leg; spirits good this morning. She doubled the dose of her pills this day.

30. Had some slight twitchings in the night, but of short continuance; none this morning; feels not the least sensible effect from the pills; scarce any sleep the two last nights; feet quite warm; pulse natural; an itching, but no scorching heat in the skin; has taken some magnesia, sum. pil. ii. ter die.

December 1. Has had a good night; no convulsions since I saw her yesterday; no perceptible effects from her pills; in other respects, as before. Took nine pills this day.

2. No complaint since yesterday; blister almost healed. Sum. pil. iv. ter die.

5. On a journey, did not see my patient.

4. No return of the spasms since I saw her last; complains of sickness and headach, to which she is very subject, for which I ordered her to take an emetic of acet. scillit. in the evening.

6. Discharged much phlegm, by the puke, as usual; nerves quite firm to-day, and is in all respects in good health. Medicines discontinued.

Singular
II.

Singular Effects from a slight wound in the Thigh.  
By Dr William Scott Physician at Hawick, Roxburgh-shire.

A man about thirty years of age, a mason by trade, cleaving a piece of wood with a blunt hatchet, it flpt off, and made a wound about two inches above the knee, an inch and half in length, not much deeper than the skin. He was then ten or twelve miles from home, but was carried to his own house next day, when I was called to visit him. The wound had bled but little, and was attended with no great pain; I dressed it with dry dressing, and a poultice of bread and milk was put over it. Every thing seemed to go on very well, and in five days he went again to work; but, in the afternoon, a deal in the scaffold gave way, and that leg, which had before been wounded, was sprained. This brought on a great pain and inflammation on the knee, which increased daily; but, upon the application of poultices and tomentations, the pain abated.
ted. It still, however, at times, returned, and began to discharge a great quantity of thin matter, like whey, so as to go through many cloths, as likewise the bed-cloaths, sometimes down to the floor. When I probed the wound, there was a sinus, about three inches above the wound, almost all round, except a small space in the under part, but no deeper than just below the skin, which contained the matter. When the discharge at any time stopped, the most excruciating pains run all round the knee, till it emptied itself to the degree already described. The pain generally returned in the afternoon, with great violence, and continued till it was relieved by a free discharge in the morning. In that condition he continued for fifteen days, when another physician was called, who advised that a large incision should be made. However, that night I visited him, and ordered three calomel boluses, for three nights successively, and a dose of salt and senna the fourth day. These had surprising effects; for, upon taking the first bolus, the pain abated, and the swelling of the knee and leg, which was great before, every day diminished; upon taking the purgative, the discharge from the wound dried up. I repeated the bolus and physic every week.
week, for three weeks together. In a fortnight after he went to work, and now is in perfect health. Every bolus opened him, and brought off foetid stuff; and, upon taking the physic, the smell was so strongly foetid, that every stool was obliged to be carried out, otherwise no one could stay in the room. Every time the boluses and physic were taken, more or less of that stuff was discharged.

III.

_Fatty Substances voided by Stool_. By Dr. William Scott, Physician, Hawick.

A Servant girl, about four or five and twenty years of age, after working hard, in warm weather, cutting down corn, was seized with a pain in her stomach, loathing of food, obstruction of the menes, colics, and pains from flatulency. As the colics frequently seized her, injections, analodynes, and sacred elixir were administered. After that I gave vomits, and rhubarb boluses, with calomel. Upon taking two or three of these, the
COMMENTARIES.

She began to void, by stool, fatty substances, in great numbers, about the size of nuts, beans, peas, &c. When these were thrown into the fire they burnt like tallow, which they, in every respect, resembled. After passing these in small quantities for three weeks, she got clear of all her complaints, and has now continued in very good health for these several years.

IV.

Observations on Venereal Warts. By Mr William Dease, Surgeon, Dublin.

Among the many obstinate complaints that accompany venereal infections, I do not know any more hard, sometimes, to remove, than venereal warts, so as not to appear again; nor do I know any case in which the persisting too long in a course of mercurials is attended with worse consequences; of which the following cases are strong examples.

I. A young gentleman, sometime in 1772, contracted a clap, for which, I believe, he under-
went no regular treatment. Three months after, he came to me for advice about an abscess on the verge of the anus. He told me, that, before it appeared, he had a swelling in the groin, which went back. As the abscess was full of matter, I opened it, and finding the rectum thin and bare, I simply divided it. Every thing went on well; after the suppuration was compleatly formed, as there was a strong presumption he was poxed, I advised him to rub in a dram of mercurial ointment every second night; but with this he would not comply; so I put him on a course of the mercurial pill, with a decoction of sarsaparilla. In three weeks he seemed quite well; but then he shewed me, for the first time, three or four warts he had behind the glans penis. I rubbed them down with lunar caustic, and enjoined him to use, at least for three weeks more, the pills and decoction. The warts disappeared, as he followed my advice; and, after that, he went into the country, where he soon recovered his former robust habit of body.

Four months after, he came to me, and shewed me the warts grown again; but said he never enjoyed better health, and would take no medicine, but begged I would give him some caustic, which
I did; and thereby he occasionally took them down, and continued in perfect health for a year, from the time I first had the care of him. But then another abscess, on the other side of the anus, similar to the first, appeared, which I opened in the same manner I had done before.

Another gentleman of the profession was now called in, and, in consultation, was of opinion the patient was still poxed, and that it was absolutely necessary he should be salivated. I urged, that, though there was a probability it might be so, yet, as I had often seen warts remain after repeated salivations, when it might be presumed the virus was subdued, and the complaint but local; and, as our patient had, at present, a dry husky cough and hoarseness, it would be better to treat him in a more gentle manner, and wait the effect. This advice was not received, and his friends put him under the care of the other gentleman, who removed him to a nursekeeper’s, where he had him nine weeks in a salivation. His sore soon healed, but the warts remained unaltered; his strength was much exhausted, and, the last week, he began to spit blood. It was now found, altho’ too late, that mercurials would not do; and, as the last resource, he was sent to Wicklow,
Wicklow, it being the beginning of May, to drink goats whey; but spitting of pus soon succeeded to that of blood, attended with a constant pain in the breast, colliquative sweats, purgings at times, &c. Three weeks before he died, I saw him, and he shewed me the warts still unchanged. He died, to the last degree consumptive, in August.

II. In 1772, A young man, about twenty-one or twenty-two, in company with some other young men, being all drunk, lay with a common prostitute. They were all diseased in consequence. He had a troublesome heat in making urine, but no running, and soon after a number of warts appeared on the glans, and behind it. He went from one practitioner to another, in the country, and took a variety of mercurials, without any alteration, but when he took them down by caustic; which produced but a temporary effect, as they soon sprung up afresh. He at last came up to Dublin to have my advice: He had now been for a year diseased, and never had any other venereal appearance; his constitution seemed only affected by the great quantity of medicine he had taken.

As
As there seemed to be no doubt of his being poxed, the different treatments he underwent, having been by no means regular, I advised him to stay under my care for some time, to which he consented. I began with bleeding and gentle purging; and put him on a soft mild diet, &c. and made him take the warm bath. After twelve days preparation, during which time he bathed twelve times, I began with the mercurial frictions, using only a dram of ointment each time; and he continued them so as not to let the mercury affect his mouth; he left the warts without any application, and waited the event. In six weeks, not finding them likely to go off, I rubbed them with the lunar caustic; but in a little time they grew up as big as ever. I then had recourse to the lapis infernalis, and made the whole interior part of the prepuce, and exterior of the glans slough off; but still they grew up again; and, after he had been under my care for ten weeks, during which time he rubbed in five ounces of ointment, the two last of which made him spit, to see the effect, I was obliged to send him into the country, in danger of a hectic, the warts being as large as ever.

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With
With goats whey, and a milk diet, he recovered in a short time; but the uneasiness of mind he suffered, made him apply to practitioners in the country, when he took, as he told me, a vast quantity of pills, &c. He came up to Dublin once more, after being ten months in the country; it was in June, and he was much in the same situation as when I first saw him, affected with no other complaint but the warts. In consultation with two gentlemen of the profession, it was agreed he should pass, after the necessary preparations, through a course of frictions, which was continued for eight weeks without having much effect on his mouth. What most encouraged us was, that the first four weeks, the warts seemed to wither and drop off, but, in the latter end, grew up a fresh. We tried every kind of escharotic, strong and weak, those mentioned in the Medical Observations, mercurial purges, &c. to no purpose. At length we left them off, and put him on the extract of cicuta, and a light decoction of bark.

He now began, after four months from the time he came up to town, to grow weak, sweat at night, and spit some blood. He was very much emaciated, and lost his appetite, his legs swelled, and his pulse was extremely quick. Re-
coursfe was had in vain to affes milk, Seltzer water, Peruvian bark, &c. He went, in October 1774, to the country, and died in December following, consumptive, the warts remaining as large as ever. The lungs in both these patients seemed to be the parts chiefly affected.

III. A coachman, after some c'aps, not regularly treated, had warts behind the glans, and at the opening of the meatus urinarius. He applied to me at St Nicholas's Hospital, in 1770, where he was twice salivated that year, and took a variety of medicines; he had them often consumed by caustic; but still they are at present, 1776, as big as they were when I saw them first. He rubs them down, from time to time, with lunar caustic, is robust and strong, enjoys excellent health, has been married these four years, and has had three healthy children. The mother had never the least complaint, and he has taken no kind of medicine since the first year.
MR Cruikshank of London, in a letter to Dr Duncan, communicates the following observations.

"I described at lectures, a few days ago, a disease which is not unfrequent here; and, at the same time, gave the method of cure, as proposed by Mr Hunter. On conversing afterwards, with some of the gentlemen from Edinburgh, who do us the honour of attending in Wind-mill street, I understood it was new to them. I imagine, therefore, that an account of it, through the medium of your Commentary, may not be unacceptable to the public.

It sometimes happens, that pieces of cartilage, or bone covered by cartilage, are found loose in the
the cavity of the joint of the knee. These are of different sizes. Some of them I have seen, were as large as common garden beans. They are generally flat, oblong, having their edges rounded. It is seldom we find more than one of these loose cartilages in a joint; I have sometimes, however, seen two. I formerly considered them as belonging to the patella; and that, like the ossa triquetra in the scull, they owed their origin to distinct points of ossification. My having since found one entirely cartilaginous, and another, which, though bone covered by cartilage, was formed on the lower end of the femur, has convinced me I was wrong. In the last mentioned case, there was a cavity in the lower end of the femur, corresponding to the loose bone, showing that they had been connected with one another; though, as both surfaces were nearly smooth, the manner of their connection was not evident. I should suppose that, during their growing, these cartilages and bones are connected to the neighbouring parts by vessels; and that, when either their determined growth is finished, or their size is too large for the easy motion of the joint, they become loose. When they become loose, the synovia, from the irritation they induce,
is secreted in greater quantity; the capsular ligament becomes distended; the knee appears swelled; a degree of stiffness takes place in the motion of the joint, with more or less of external inflammation. There is also the distinct feel of a fluid underneath; and the loose bit of cartilage gets frequently above the condyles of the femur, on the outer or inside of the knee, and may be laid hold of with the thumb and finger through the integuments. I have a recent case just now in my eye, and have daily an opportunity of feeling one of these cartilages in the living subject. When the patient has walked much, the synovia is sensibly increased, and on remaining more quiet, for two or three days, is as sensibly diminished. The bits of cartilage (for the patient tells me he sometimes feels a smaller one than that which I have felt) mean while, lie either in the centre of the joint, and consequently out of the reach of being felt, or on the outside or inside of the condyles of the femur, where they may be easily laid hold of, and worked between the fingers from the lower to the upper part of the joint. The patient has observed these cartilages for some months past, during which time, they have never produced any very great inconvenience,
ence, or confined him to the house. The symptoms, however, are not always so mild, and an operation becomes frequently necessary. Much seems to depend on the surgeon, whether this operation shall be a dangerous one or not.

Mr Hunter recommends the removing them by incision; but thinks the particular spot where the operation is to be performed, as well as the manner of operating, deserve the greatest attention. There is a part within the cavity of the joint of the knee, which receives the base of the patella, during the extension of the leg. It partakes more of the nature of cellular membrane, than capsular ligament, and lies under the lower extremities of the vasti and crureus muscles, before they are inserted into the patella. Mr Hunter proposes to lay hold of the cartilage or bone, and cut down upon them, at this place; the incision, he thinks, should be no larger than just to allow of their being easily thrust out. A stitch or two is then to be passed through the divided integuments, and the lips of the wound, by these means, are to be brought together. These stitches, however, must not pass into the cavity of the joint; instead of uniting the parts in this case, they would act as setons, and produce inflammation,
mation, in place of preventing it. To be convinced of this last assertion, he says, one needs only to be put in mind of the introduction of a section into the tunica vaginalis testis, for the radical cure of the hydrocele. The aim of the surgeon, then, is, if possible, to heal the wound by the first intention. A piece of sticking plaster, with proper bandage, and position of the joint, may even make stitches in the integuments unnecessary. Mr Hunter recollects six or seven cases, in which these cartilages were removed by excision, though not just in the manner recommended. All of these, excepting one, did well. The operation in this one was attended with great inflammation, and followed by an ankylosis of the joint. I have been told of two cases, which came under the care of a surgeon in this country, within these few months, and which terminated ill. Whether this want of success was owing to some oversight in the operator, or to the operation itself, I have not been able to learn. There are constitutions where any wound, much more a penetrating wound into the cavity of the joint of the knee, will be attended with danger.

The circumstances which the operator has most to avoid, Mr Hunter asserts, is the exposing the cavity.
cavity of the joint to much; the lacerating or bruising of the capsular ligament; the not properly closing the orifice in the integuments; or the employing a blunt or dirty instrument in the dividing them. All, or any of these circumstances, he thinks, will produce inflammation of the joint, and render the operation exceedingly dangerous. But, in tolerably sound constitutions, the operation now recommended, performed with the necessary precautions, he is convinced, is as safe a one as most operations in surgery.

When the cavity of the joint has inflamed, the danger, he owns, is very great. Ligament and cartilage, the substances composing joints, have fewer vessels than any other parts, perhaps, of an animal body; they inflame, suppurate, or go through the usual processes of parts under irritation, with greater difficulty; and, when they have gone through them, the consequences are generally destructive of the ordinary intentions of these processes; the joint anchylopes, and is destroyed instead of being recovered. The irritation, meanwhile, attending such fruitless processes, generally proves fatal.
The following gentlemen have been lately named foreign members of the Royal Society of medicine established in the course of the last year by an order of council at Paris.

John Fothergill, M. D.
Thomas Glaes, M. D.
Henry Quin, M. D.
George Cleghorn, M. D.
James Lind, M. D.
David Macbride, M. D.
Thomas Percival, M. D.
Samuel Foart Simmons, M. D.

Translation of part of a letter from Dr de Limbourg, F. R. S. physician at the Spaw, to Dr Simmons.

"The Vienna priest you mention, seems to be the same who has made so much noise in other parts of Germany, particularly at Elwangen."
gen. His name is Gesner. I had a long correspondence concerning him with a man of learning and distinguished reputation, who is first physician to an Elector, and very far from being credulous on any other occasion, yet so firmly persuaded of the reality of the curate Gesner's miracles, that he was at length somewhat piqued at my want of faith. The celebrated De Haen sided with Gesner, and published, a work, De Miraculis, which was suppressed, and much has been said of him in different journals; but this archiater gave me an account of some wonderful facts, which have appeared in none of those publications, and of which he himself was witness, with several others, (physicians and divines) of different religions, who were assembled for this purpose by order of the Elector of Bavaria. Gesner, placing his right hand on the forehead, and the left on the occiput, in the name of Jesus commanded epileptical patients to be attacked with their fits, and hysterical patients to have sudden convulsions, with, or without delirium, cries, laughter, &c. or he would command fainting, or St Vitus's
Vitus’s dance; and in all these things he was instantly obeyed, and the moment he said, ‘Get up,’ they were cured. I ventured to suppose, that these tricks were similar to those which made so much noise at the deacon’s tomb at Paris formerly, and I pleaded the effects of fear, credulity, &c. on the imagination of those people; but my arguments were not sufficient to convince the learned Archiater, who attested to me the cure of more than three thousand patients in this way. But the affair ended by the curate’s being forbidden to perform any more of his miracles in Germany; and for some time past I have heard nothing of him.”

* * *

Extract of a letter from Dr Simmons to Dr Duncan.

“In my way to the German Spa last year, I visited the prior of the English Dominican convent at Louvain, who is famous for his skill in the management of bees. This ingenious friar, who is every day making some curious experiments on this subject, has discovered, that the pure honey we have been used to procure from Narbonne, Spain, and Minorca, is to be met with in every
every country. It is frequently collected by the bees after gentle showers, and when the hops (of which there are considerable plantations in the Austrian Netherlands) are covered with honey-dew, he never fails to find it in the hive, and then he cuts out the part of the comb in which it is deposited. The bad effects of the honey-dew are well known to my countrymen the hop-planters in Kent. The good Dominican goes so far as to suppose, that these bad effects would be prevented, in some degree, were the farmers and labouring people to be more solicitous about the preservation and increase of bees. They are so much attended to in the Low Countries, that a certain farmer near Louvain sells a thousand flocks every year, at nine ecualins each (about five shillings English). The prior, who has a great number of hives in his garden, asserts, that he gets three times as much honey as is usually procured by the common management, as he is able to make his bees work when he pleases, and at any time of the year. When a colony is become too populous, he distributes the bees into different hives, and now and then he finds it necessary to collect the bees of several hives into one. He
had been unsuccessful, however, the day before I visited him, in one of his experiments; for, having deprived a hive of its queen, the whole colony had migrated to another hive, and a battle had ensued, in which all the emigrants were killed. I was not without my fears, when I approached so great a number of hives; but the prior assured me I should be in safety, if I would carefully keep my mouth shut, and breathe very gently through my nostrils only. In this, he said, consisted the whole secret of approaching them, and in this way he turns up his hives with great unconcern, and even cuts out parts of the comb while the bees are at work. This is a curious fact, nor is it wonderful, that the breath should be disagreeable to the delicate organs of these insects."

* * * * *

The governor and assembly of the island of Jamaica have lately voted the establishment of two botanical gardens there, on a plan which must tend equally to the credit of their country and the good of mankind. The intention is to use these gardens as the means of introducing into the West Indies every useful vegetable produc-
tion, which, in the great variety of climate which the island of Jamaica, in particular, affords, may have a chance of being cultivated with advantage, either for food, medicine, trade, or pleasure.

They have purchased, for this purpose, a house with seventy acres of ground adjoining to it, about eight miles from Kingston. This ground, the greatest part of which is already in a state of cultivation, has two distinct climates. The tropical climate at the foot of the hill, and that of Madeira where the house is situated. They have likewise allotted fifty acres more for another garden, in a situation still colder, being about three thousand six hundred feet above the level of the sea, for the reception of the plants of cold countries.

They have voted a very liberal salary for a botanist of philosophical knowledge and extended views, skilled in chemistry and all the branches of natural history, to act as superintendent of these gardens. Sir Basil Keith, the present governor, whose activity in promoting this scheme does him much honour, wrote some time ago to Dr Hope, Professor of botany at Edinburgh, with whom, and Sir Alexander Dick, Baronet, late President of the College of Physicians at Edin-
burgh, he had formed the outlines of this plan, requesting that he would endeavour to find out a gentleman with abilities adequate to the objects intended by such an establishment. Dr Hope recommended Dr Thomas Clarke, a young gentleman equally distinguished for genius, activity, and industry, and who has had an opportunity of improving uncommon natural abilities, by an education conducted on a plan no less liberal than judicious. The assistance which he lent to this periodical publication, while he remained at Edinburgh, demands our grateful thanks; and we still hope, notwithstanding the distance from us at which he will now be situated, that we shall not be deprived of his future aid.

Dr Clarke, after visiting the most remarkable botanists and botanical gardens in Europe, and receiving from these whatever he judged requisite for the object of his expedition, set sail from England for Jamaica some months ago, carrying along with him a collection of valuable vegetables, which may afterwards add to the riches and plenty of the West India islands.

There is the greatest reason to hope that Dr Clarke's exertions, supported by the liberal spirit of
of the governor and assembly, will be productive of those important ends the projectors of this scheme have had in view. Should these ends be in any degree accomplished, we do but justice to the merit of Matthew Wallen, Esq; member of the assembly, in publicly mentioning him, as one of the first and greatest promoters of this undertaking.

* * *

Dr Duncan, who, during the last winter-session, read lectures at Edinburgh on the theory and practice of medicine to a very numerous class, has also carried into execution the scheme which he proposed of giving lectures on the cases of patients subjected to chronic diseases. These lectures were attended by above an hundred students, and, at the request of several of these gentlemen, who mean to spend the summer-months in Edinburgh, Dr Duncan proposes to begin another course of lectures of the same nature, about the middle of May.

While these lectures are more immediately intended for the instruction of students, they are also the means of furnishing the indigent with advice and medicines gratis, when subjected to chronic diseases.
diseases. The number in such a situation, who have applied for aid, has induced Dr Duncan to propose to the consideration of the charitable and humane, a scheme for establishing at Edinburgh a public Dispensary for the relief of the poor, when subjected to diseases of such a nature, as either to render them improper objects for admission into an hospital, or not to require it.

Although such an institution might seem to be particularly proper at Edinburgh, as the managers of the Royal Infirmary, which is the only charity at that place for the relief of the poor in time of sickness, have, for many years past, abolished any regular establishment for out patients, and have gone to the utmost extent of their funds in relieving the necessities of those whose diseases require admission into an hospital; yet this scheme is likely to meet with much opposition. But, as it has received the patronage of some gentlemen, whose influence is extensive, whose sentiments are liberal, and whose conduct is steady, the probability is, that it will at least have a fair trial. The inhabitants in general will then be able to judge of the advantages and disadvantages of such scheme, not on fallacious reasoning, but on the sure ground of experience.

This
This charity is proposed to be conducted upon such a plan, that the medicine-money obtained from students will be almost, if not altogether, sufficient for defraying the annual expence of it. Aid from the generous is only necessary for defraying that expence which must attend the first establishment of such a scheme. As a subscription for that purpose is already begun, it is probable, that a regular establishment of the kind now mentioned, will take place at Edinburgh by the beginning of next winter; and it may afford an opportunity for giving cafe-lectures, which, if they be judiciously conducted, cannot fail of being highly instructive to students of medicine.
A Discourse upon some late improvements of the means for preserving the health of mariners, delivered at the anniversary meeting of the Royal Society, November 30. 1776. By Sir John Pringle Bart, President. London.

A short account of the present epidemic cough and fever, in a Letter to Dr de la Cour at Bath. By William Grant, M. D. 8vo, London.


A Philosophical Essay concerning light, by Bryen Higgins, M. D. 8vo, London.

De Arthritide primigena et regulari Gulielmi Musgrave, M. D. apud Exonienfes olim practici, opus posthumum, quod nunc primum publici juris facit Samuel Musgrave, M. D. authoris pronepos. 8vo, London.

Dissertatio Medica inauguralis de Rubeola, auctore Sam. Foart Simmons, Anglus, 4to, Lugd. Bat.

A New Medical Dictionary, or general repository of physic, containing an explanation of the terms, and a description of the various particulars relating to anatomy, physiology, &c. By G. Motherby, M. D. Folio. London.

Recueil d' observations fur les differentes methodes proposées pour guerir la maladie epidemique qui attaque les betes à corne, sur les moyens de la reconnoitre par tout ou elle se pourra manifester, et sur la maniere de desinfecter les etables, par Mr Felix Vicq d' Azyr medicin, envoye, par les ordres du Roi, dans les provinces ou regne la contagion. 4to, Paris.

Instrucfions fur la maniere de desinfecter les villages; par le meme. 4to, Paris.
Observations sur les fièvres putrides et malignes, avec des reflexions sur la nature et la cause immédiate de la fièvre; par M. Fournier médecin de la faculté de Montpellier, de la société royale des sciences, médecin pensionné de la ville de Dijon, médecin des étates généraux du Duché de Burgogne, et inspecteur des eaux minérales et medicinales, tant de France qu’étrangères. 8vo, A. Dijon.

Chymie hydraulique pour extraire les fels essentiels des vegetaux, des animaux, et des minéraux, par le moyen de l’eau pure; par Mr le Comte de la Garaye; nouvelle edition, revue, corrigée, et augmentée des notes, par M. Parmentier. 12mo, a Paris.

Traité de la dissolution des metaux; par M. Monet, des academies royales des sciences de Stockholm, de Turin, de Rouen, et de la société litteraire d’Auvergne. 12mo, Amsterdam.

De novorum ossium, in integris aut maximis, ob morbos, deperditionibus, regeneratione, experimenta; ubi, maxima materiae affinitate, breviter de fracturis et de vi quam natura impedirit in ossibus elongandis dum crescent. Auctore Michaelo Troja, medicinae doctor Neapoli, et chirurgo
chirurgo latere in regali S. Jacobi nosocomio Lutetiae Parissorum.

Memoire pour servir au traitement d'une fièvre epidemique, fait et imprimé par ordre du gouvernement; par M. Marnet, docteur en medicine de l'université de Montpelier, agregé au college des medecins a Dijon, agregé honoraire du college royal de medicine de Nancy, centeur royal, secretaire perpetuel de l'academie des sciences, arts, et belles lettres de Dijon, &c. 8vo, a Dijon.

Traité de la petite verole, tirée des commentaires de G. V. Swieten, sur les aphorismes de Boerhaave, avec la methode curative de M. de Haen, premier professeur de medicine pratique a Vienne en Autriche. 12mo, Paris.

Institution des fourds et des muets, par la voie des signes methodiques; ouvrage qui contient le projet d'une langue univercille, par l'entermise des signes naturels affujettis a une methode. 12mo, Paris.

Observations sur la perte de sang des femmes en couches, avec le moyen de les guerir, par M. le Roux, maître en chirurgie a Dijon, et chirurgien de l'hospital general de la meme ville. 8vo, a Paris et a Dijon.
Cours d'acouchements, distribué en trente leçons, avec l'exposition sommaire de la matière qu'on doit expliquer dans chacune d'elles, rédigé pour l'instruction des élèves, par ordre des états du pays et Comité de Hainault. 12mo, Mons.


Raymundi Vieussens, doctoris medici Monspelienis, neurographia universalis; hoc est omnium corporis humani nervorum, simul et cerebri medullaeque spinalis, descriptio anatomica, &c. Nova editio. 4to, Tolosae.

Les plantes purgatives d'usage, tirées du jardin du Roi et de celui des M. M. les apothecaires de Paris, représentées avec leur couleur naturelle, et imprimées selon le nouvel art, avec leurs vertus et leurs qualités, auxquelles on a joint, a la dissection de leur fleur et de leur fruit, le Species plantarum.
plantarum Linnaei, &c. par M. Dagoty pere, anatomiste et botaniste pensionné du Roi.

Avis au peuple sur l'amélioration de ses terres et la santé de ses bestiaux. 12mo, Paris et Avignon.

Supplement au traité de M. Petit, sur les maladies chirurgicales, et les opération qui leur conviennent, redigé par M. Lefne. 8vo, Paris.

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COMMENTARIES.

By a Society in Edinburgh.

Trahimur omnes laudis studio, et optimus quique maxime gloria ducitur.  CICERO.

VOLUME FOURTH.

PART IV.

LONDON:
Printed for J. Murray, No. 32. Fleet-street;
W. Creech, C. Elliot, and
M. Drummond, Edinburgh;
M.DCC.LXXVII.
MEDICAL COMMENTARIES.

SECT. I.
An Account of Books.

I.

DOCTOR COSTE, who has favoured the public with this elegant and accurate edition of Dr Mead's works, has lately, through the
the interest of his friend and patron M. de Voltaire, been appointed physician to the military hospital at Calais. The works of our celebrated countryman are so universally studied and admired, that, had this translation of them been merely a literal one, we should have contented ourselves with barely announcing it in our catalogue of new publications; but it is enriched with so many learned notes and additions, that it seems to have a particular claim to our attention. It is with no little pleasure we observe the honour done to this country, by the pains that have been bestowed on the continent on the works of Dr Mead. Dr Lorry had before published, at Paris, a Latin edition of such of them as had before appeared only in English. 'The Latin writings of this celebrated physician,' says Dr Lorry, in his preface, 'have occasioned all Europe to envy England the possession of the works he had printed only in his own language.' Other editions have been published by Mortier and Cavelier. Dr Coste has carefully consulted all these, and thus has been enabled to render his own a very complete one. He has not omitted even the dissertation on the medals of Smyrna, though it is not to be met with in the London quarto edition. In
the preface to this work, the editor, after having pointed out the plan he has adopted, gives some account of the life of this author. To the essay on the viper, Dr Cofte has added some observations to prove the utility of eau de luce, which had been recommended as a remedy against the bite of this reptile, by M. de Jussieu, so long ago as 1747. This medicine derives its virtues in these cases from its volatile alkali.

The editor’s zeal has led him to vindicate Dr Mead and Baglivi’s account of the tarantula, in opposition to the Abbé Nollet; but it is now well known, that the wonderful effects ascribed to that insect are fabulous.

There are several instances of spontaneous hydrophobia mentioned by Dr Mead and other authors. The editor has added one to the number, and it is a very interesting one. It happened to a young lady, on the 6th day of a putrid fever. The dread of water continued during fourteen days. This melancholy scene passed in a convent, in which the patient had been confined more than a year, so that there could be no suspicion of her having been bit by a mad animal. The patient recovered; and Dr Cofte imputes his success in a great measure to the use of glysters, which
which were thrown up five or six times every day.

In his notes to the essay on venomous exhalations, the editor has vindicated the waters of Paris, from an aspersion made against them by Dr Lister, in his journey to Paris, and cited by Dr Mead. He contends, that the inhabitants of the quarter that is supplied by the water of Arcueil, are not more subject to calculous concretions than those of other parts of the city; and that the greatest part of the patients who are cut for the stone, every year at Paris, come from the provinces, being drawn thither by the celebrity of the surgeons, or the convenience of the hospitals. In another part of the same essay, the editor, in a very long and curious note, has undertaken to rectify the mistakes of medical authors, who, on the testimony of Juvenal, 'quis tumidum guttur miratur in Alpibus?' have followed each other in giving great necks to all the inhabitants of the Alps, and ascribed them to the use of snow water; but Dr Coûte, who was born in the neighbourhood of the Alps, affirms, that the bronchocele is not more common there than it is in many of the provinces of France. He observes, that the city of Geneva is the only situation
situation near those mountains where the imputation of Juvenal is justified. One meets there with many swelled necks, and particularly in women; but he is of opinion, that their cause is not to be looked for in the use of snow-water; because it is well known, that the water derived from those mountains, is filtered through beds of earth and gravel before it reaches the lake of Geneva; and he is rather induced to ascribe this enlargement of the thyroid gland to the Genevèse manner of living. He observes, that they consume a prodigious quantity of milk; that they eat a great deal of farinaceous food, and that they drink but very little wine, especially the poorer sort of people, who are more subject to this disease than the rich; and it is a fact, that at Montmerian, Chambéry, and other places, where people live after the French manner, these swellings are very rare.

The editor, in an introduction to the discourse on the plague, ventures to suppose, that Dr Mead, in attempting to refute the opinion of some French physicians, who ascribe the propagation of the disease in many instances to fear, has gone into a contrary extreme, in denying altogether its effects in this way. He gives the following, a-
among other observations, in support of his argument. The fact happened during the last plague at Marseilles. In the general disorder of the town, a great number of dead bodies had been heaped together in a certain part of the city. The putrid odor which exhaled from them could not fail to spread the contagion. The governor of the city, who was a man of great fortitude and humanity, saw this, and, like another Decius, determined to devote himself to death. He took with him fourscore grenadiers, who were directed to remove the bodies to a deep pit he had caused to be got ready for this purpose. The governor not only attended in person to see this business executed, but was the first to begin it, by drawing, with his own hands, one of the bodies from the heap. Eight of the grenadiers perished on the spot; at night 79 of them were dead; the 80th man survived only during a few days, while the governor, who had voluntarily entered on this business, and who had felt no perturbation of mind in the execution of it, remained free from any infection.

Dr Mead thought, with good reason, that the fudor Anglicus was of foreign origin, as it had made great destruction in Germany and other countries.
countries. The ingenious editor observes, in a note, that this disease is sometimes epidemic in Picardy, but that it is not properly speaking an ephemera, as described in England, as it runs into the 3d, 5th, and even to the 7th day. M. Bellot, who resided a long time in that province, has written a very good thesis on this subject. *An febri putridae Picardii Sueæ dicitæ, sudorifera? Affirm. propugn.* Paris, 1733.

In a note to that part of the medical precepts, in which Dr Mead has introduced the famous case of Lady Page, Dr Coste mentions a living instance of Dropsy in a still more extraordinary degree. The patient, who is a female of the name of Thibaut, resides at Nancy, where the editor has often seen her. She is now about 38 years of age, and, in the space of three years, has been taped 98 times, and between 16 and 18 Paris pints of water have been drawn off at each operation. Lately the liquor drawn off has been of a purulent nature; and at the last operation, before the writing of this note, about a pint of pus came away. The patient’s abdomen is constantly hard and elevated, but in other respects she enjoys tolerable health.

For
For many other interesting observations we beg leave to refer our readers to the work itself, the limits of this publication not permitting us to enter more minutely into its merits; we cannot dismiss it, however, without remarking, that the learned editor has enriched it with many elegant engravings, particularly of the Smyrna medals; and there can be no doubt, but that, on any future re-publication of Dr Mead's works in English, the editors will be enabled to derive much useful information from the present accurate edition by Dr Coste.

II.


Medicine being almost entirely a conjectural art, and the human body, in which its operations are carried on, being in different subjects so various, that no general conclusions can be formed from the effects of remedies on individuals, no rational theory of disorders, our author
author is of opinion, can ever be obtained. There is no difficulty, however, he thinks, in discovering many relations, which the main component parts of the body have to one another; thus, whatever difference there may be in the elements of the human frame, there is yet no individual in whom the heart and arteries do not propel the blood, and the veins reconvey it, in whom the muscles are not the immediate, and the nerves the primary cause of motion. These relations, he thinks, are probably unalterable, and may therefore become the object of science; and that science also may be increased by the discovery of new relations. It is the intention of this treatise, we are informed, to add one more to those already known, by shewing, that, when the human body is disordered, the first morbid impression is made upon the nerves, the other parts receiving the miasma entirely from them; that, when health is restored, the first salutary impression is also made upon them; and that they are, of course, the grand medium through which health and sickness are produced.

In order to demonstrate the great influence of the nervous system, both in the production and
and cure of diseases, Dr Musgrave sets out with shewing, to what degree the circulation of the blood depends upon the nerves. Nobody will doubt, but that the circulation is, in a certain sense, quickened or retarded by the nerves; for the heart being muscular, and its power of course depending upon the nerves, it must contract with greater or less force, in proportion as the power communicated by its proper nerves, is greater or less. Our author, however, imagines, that the nerves have likewise a considerable power, in lessening or increasing the velocity of the blood, even after it leaves the heart. The opinion, he thinks, is rendered certain, from the consideration of some phaenomena which evidently depend upon the nerves, because they proceed from intellectual causes; that is, from vivid impressions which certain ideas make in the mind. The facts alluded to are, the erection of the penis from lascivious ideas, and the accumulation of blood in the face from anger or shame. The locality of such appearances is a convincing argument, he says, of their being produced by some cause entirely distinct from the force of the heart; for the blood being thrown to every part of the body at once by the heart, whatever phaenomena
phaenomena are produced by it, cannot be confined to a single part, but ought of necessity, if no other cause intervened, to affect the whole body. The phaenomena taken notice of proceed, according to our author, entirely from a constriction of the veins; because the successive dilatation and contraction of the arteries, however smart, could not, he thinks, occasion any permanent congestion of the blood. He acknowledges, that no genuine muscular fibres surrounding the veins have ever been demonstrated; it is certain, however, he says, that their coats are continually on the stretch, and have a perpetual conatus to contract upon the fluid that passes through them. It is from this latent contraction, he observes, that Baron Haller explains some phaenomena, observed first by himself, viz. the flowing of the blood, contrary to gravity, and contrary to the laws of the circulation, towards any aperture of a neighbouring vein.

Having endeavoured to prove the existence of a contractile power in the veins, our author next proceeds to shew, that it must, in a great measure, be regulated by the influence of the nerves. Among the different reasons adduced in support of this opinion, the paleness occasioned
ed by fear, is mentioned as one. Such a paleness, he says, must evidently arise from some change in the blood-vessels; and being frequently not a momentary phaenomenon, it can hardly, he thinks, be imputed to the action of the heart and arteries being suspended, which, except in cases of absolute fainting, must always be momentary. It must therefore, he says, be referred to a diminution of the ordinary tonic constriction of the veins, which occasioning the blood to be more readily transmitted through them, less of it than usual passes into the small cutaneous vessels. The following position may therefore, he thinks, be considered at least as probable, viz. that there is a certain tonic influence exerted by the nerves upon the venous system, by which it is kept in a due state of constriction; that an increase of this force increases the constriction, and obstructs the circulation of the blood; and that, on the contrary, a diminution of it diminishes the constriction, and suffers the blood to flow through them without resistance.

It adds greatly to the probability of this doctrine, we are told, that the epilepsy, which is a powerful stimulus to the whole nervous system,
is attended also with so violent a constringion of the veins, that the blood cannot enter them, so that, on dissecting those who have died in the fits, no blood has been any where found except in the arteries. As this is the strongest instance that can be given of stimulated nerves, so a fainting fit is the strongest instance of their relaxation, in which, as formerly observed, the cutaneous vessels are left empty, the blood passing without any resistance through the large internal veins.

Where a particular nerve is stimulated, there is generally, if not always, says our author, a proportionable constringion of the adjoining venulae; the most simple instance of this is the tumor and inflammation occasioned by a thorn sticking in any sensible part. Did the veins, in these cases, transmit the blood as readily and freely as usual, there could be no such tumor and congestion as there commonly is, even when there is no fever, and when, of course, the pulsations of the heart are not increased in number.

These, and other instances which might be adduced, serve to prove the influence of the nerves on the venous system. And the arteries being all encircled with a muscular coat, and every thing
thing muscular being actuated by nerves, it would, our author thinks, be altogether unnecessary to enter into a formal proof of the arterial system being subject to constriction from the same cause.

Animal heat is the next subject that comes under our author's consideration. The two prevailing opinions on this point are, one, that it arises from an intestine fermentation of the animal juices; and the other, that heat is produced by the attrition of these juices with the solid tubes through which they circulate. After refuting both these opinions, several arguments are advanced to shew, that on the nerves animal heat entirely depends. One principal cause of increased heat in the body, is pain, which, says our author, appears, by an infinity of experiments, to be an affection of the nerves only; but the most unexceptionable instance of heat being increased by an affection of the nerves, is, when the cause of the affection is wholly intellectual. Thus, grief, joy, shame, anger, &c. cannot, it is imagined, act in any other manner in the production of heat, than through the medium of the brain and nerves.

Dr
Dr. Musgrave now proceeds to shew, that irritations of the nerves have frequently a considerable influence in producing a corrupted state of the animal fluids. That the nerves, he says, when irritated, have a power of corrupting the fluids, is decisively proved by the experiments of Haller, who found, that, by tying the nerve of the eight pair near the carotid, the matters contained in the stomach of the animal, which was a rabbit, fell immediately into a state of perfect putrefaction. On this principle, our author accounts for such vomitings of offensive bilious matters, as frequently occur in fractures of the skull, where we know the injury to be confined to the brain. The stimulus of gravel in the ureters, or of a strangulated hernia, is likewise well known to have much the same effect.

It is frequently observed, that, in blood-letting, the first and second cups are covered with an inflammatory crust, which is not found in any of the subsequent. This had commonly been attributed to the greater velocity, with which the first stream issues from the vein. But the late Mr. Hewson observed this difference, even when there was no difference in the velocity, nor indeed, as far as he could perceive, in any other circumstance.
circumstance. He was of opinion, therefore, that the properties of the blood itself are changed during the evacuation; and if we admit, says our author, what from many other phenomena seems probable, that the state of the fluids depends upon the state of the nerves, it then becomes easy to conceive, that the febrile stimulus may be so much abated by drawing off the first or second cup, that a third cup, though drawn at the same time, may approach nearer to the state and appearances of healthy blood.

In the fourth chapter of Dr Mulgrave's treatise, dropy is taken into consideration. It will perhaps, he says, be thought extravagant, even to suggest, that the dropy arises from a disorder of the nerves, and not rather from a corruption of the fluids, or else from a rupture of the lymphatics. Yet, if it be considered, that dropy, in many cases, is not an original disorder, but the consequence of some other, such as fevers or obstructions of the viscera, by which are meant, hardness, attended with more or less pain; and if it can be made appear, that the original disorder was an affection of the nerves, we may safely infer, he thinks, that the dropy is so too. Several instances are afterwards quoted from different
different authors, not only of dropsy being produced by disorders seemingly of the nervous kind, but likewise of nervous diseases which appeared to originate from dropsy; and this, says our author, must be considered as the strongest possible proof of dropsy being owing to an affection of the nerves.

In the following chapter, Dr. Mufgrave endeavours to prove, that all disorders are probably disorders of the nerves. If, says he, the positions already laid down are probable, that the nerves cause great irregularities in the circulation, that they increase animal heat, that they alter the nature and properties of animal fluids, and, lastly, that their unwholesomeness produces dropsy; it seems no great stride in reasoning, to infer, that all disorders of the body are produced through this medium, and are in fact disorders of the nerves. Many ingenious arguments are advanced in support of the opinion; of these, the three following seem to be the most material: 1st, That it is now pretty generally allowed, that obstruction, the cause formerly assigned for all, except nervous disorders, is wholly inadequate to the effect. 2dly, That the external causes to which the greater number of disorders are
are universally, and seemingly with good reason, attributed, are plainly such whose primary action is exerted upon the nerves. And, 3dly, The disorders produced by poison, appear to be caused, not by the operation of the poison on the fluids, and the conveyance of it by them to the different parts of the body, but, on the contrary, by the irritation and corruption of the nerves, previously to the alterations produced in the fluids. As a proof of which, it may be observed, our author thinks, that the operation of poisons is, in some instances, too quick, and in others too slow, to admit of our attributing the propagation of it to the circulation of the fluids.

Doctor Musgrave now proceeds to show the probability of medicines curing disorders acting wholly through the nerves. We cannot, he thinks, on any other supposition, account for the astonishing effects frequently produced on the system by very small quantities of different medicines, such as antimony, mercury, &c. It is often observed, too, that remedies which give great relief when first applied, in a short time lose their virtue, and become wholly inert; now, says he, if their efficacy depended upon any change made in the fluids, it ought to be increased, rather
rather than diminished by repeated doses; just as every drop of acid added to an alkali brings it nearer and nearer to a neutral state. But, if we suppose that medicines act principally on the nerves, nothing can be more natural than that the stimulus should be strongest when first applied, and gradually grow weaker as the nerve by habit grows more callous and insensible. Independently, however, of the probability of the supposition, there are many cases in which we may positively say, that the cure of the disorder arises from some change in the nerves. This is evident in such diseases as are cured by change of air, music, aether externally applied, the effluvia of burnt feathers, matricaria, asa foetida, &c. Most of these, says our author, are unquestionable instances of medicines acting by the nerves, and cannot but create a suspicion, that medicines received into the stomach, act principally through them; and this consideration, he thinks, should prevent us from disparaging the efficacy of plasters, fomentations, embrocations, and other external applications, so much as is commonly done. The consequences of this opinion, in many cases, has been, that the patient has been deprived of effectual succour, the physician has lost opportunities
of gaining reputation, and great advantage has been given to ignorant people, who, not knowing the theories of the learned, have therefore not been misled by them, but have followed what is not unfrequently a better guide, traditional experience. After mentioning, as a farther confirmation of the doctrine, several instances of mental causes acting both in the production and cure of disorders, our author next proceeds to consider the several methods of relieving irritation.

The methods of relieving irritation may, he says, be referred to two general classes; those which relax and moderate the force of the nerves, and those which destroy the first stimulus, by substituting a second. Under the first class are comprehended, bleeding, purging, emollient washes and poultries, with oily liniments. In the second division may be ranked opium, and the bark, with every sort of nervous and corroborant medicine. That opium in reality acts by a stimulating quality, appears, says our author, from its effects when given in an over-dose, or when applied to an inflamed part; in the first case, it produces vomiting and convulsions; in the last, it gives excruciating pain. And that the bark
bark also has a degree of irritation, will not be denied, when it so frequently purges, and when its taste is so evidently pungent upon the tongue, especially if sore and tender. All kinds of feto-tid, bitter, and aromatic medicines, give equally certain marks of an irritating power. Camphor, in particular, has a most evident pungency. Now, says our author, there is not one of these substances that does not, in some instance or other, destroy a previous subsisting irritation. When the irritation arises from the suffering of a particular part, nothing so certainly relieves it as opium. If, from natural debility of the nerves, gummous medicines, and if, from the attack of an intermittent fever, the bark in general is an expeditious remedy.

III.


The publication before us, having been chiefly intended by the author as a text-book for his academical lectures, nothing very full or parti-
particular can be expected on any of the subjects treated upon. He speaks in general of the diseases of women at different periods of life; viz. of young girls; of married women; of diseases that occur in pregnancy; of puerperal disorders; of such as attend nursing; and, lastly, of those to which women are liable at more advanced periods of life.

The diseases of women are, by our author, divided into two classes, what he terms universales and particulares. Among the former are comprehended many disorders to which men are liable in common with women. And the second includes all such diseases as are peculiar to women. It is to disorders of this last class that our author’s observations are chiefly confined.

Diseases of unmarried women are first taken into consideration; the most material of these are, either a suppression, or too great a flow of the menstes, the fluor albus, chlorosis, hysterical affections, and furor uterinus. The most common causes of disorders of this kind, we are told, are plethora; a vitiated state of the genitals; a deficiency or some other morbid affection of the menstrual flux; venereal desires; too great a degree of sensibility and irritability; too great tight-ness
ness, either in ordinary apparel, or in such ligatures and machines as are had recourse to for correcting any deformities of shape; and, lastly, such customs and other circumstances in life, as do not properly correspond with the nature of the climate in which they are practised.

From a variety of causes, but especially from the plethoric state of the system which occurs in pregnancy, together with the great increase of size and change of situation which the uterus undergoes, women, during that period, become liable to many disorders, not only of the abdomen, but likewise of the head and breast. Pains of the joints are also then common; as likewise cramps, oedematous and erysipelasous swellings, varices, haemorrhages, ulcers, swellings of the labia pudendae, together with many other disorders of the genitals. Women in labour again become subject to a different set of complaints, particularly to false pains, difficult and slow births, uterine haemorrhages that succeed the delivery, and convulsions. These last set of disorders may, we are told, depend on three different causes, viz. the mother, child, or midwife.

In the sixth chapter of Dr Van Doevern’s dissertation, are enumerated the several puerperal disorders
disorders, the principal of which are, debility, pains in the abdomen, a morbid exclusion of the secundines, a diminution, suppression, or redundancy of the lochia, inflammation of the uterus, with its consequences, abscess and gangrene, the milk fever, purple fever, diarrhoea; and, lastly, that fever which seems peculiar to inlying women, termed the puerperal fever.

In the following chapter, such diseases as occur to nurses are taken notice of; and these, our author observes, proceed, in general, either from a diseased state of the secretion or excretion of the milk, or from some peculiarities in the breasts which render them unfit for the purpose of suckling.

In the last section are taken into consideration, such disorders as women at more advanced periods of life become liable to. Some of these may be the consequence of old age, but the greatest proportion, we are told, proceed from a stoppage of the menes; which not only occasions affections of the uterus and the contiguous viscera, but of the whole body. An occurrence which, at this period of life, is far from uncommon, is, says our author, a convincing proof of the plethoric state of the system which then often prevails; and
and that is, the frequent appearances of the menses long after the usual period at which they leave women; some instances, he says, have occurred of their returning at the sixtieth and even seventieth year of life.

IV.

Caroli Josephi Oehme Dissertatio Inauguralis, de Morbis recens natorum Chirurgicis. 4to, Lipsiae.

INDEPENDENT of the many hereditary disorders which children receive from their parents, such as lues venerea, arthritis, &c. there are others to which different parts of the body become liable, either from original mal-conformation, or from necessary violence in such labours as happen to prove difficult.

It is to such of the latter as more especially require the assistance of surgery, that our author’s observations are entirely confined. He treats successively of tumors and depressions in the head from difficult births, of open fures, hydrocephalus, hernia cerebri, spina bifida, diseases of the lips and eye-lids, of the tongue and fauces, of disorders
orders of the breast, such as abscesses in the breasts and bronchocele; of diseases of the umbilicus; all the variety of herniae; affections of the scrotum, urethra, penis, anus; and, lastly, are considered disorders of the extremities and common teguments.

In the cure of the hare-lip, the uniting bandage made with threads, which decussate, is much recommended. This invention, which by many had been attributed to the English, our author gives the credit of to a surgeon in Leipzig, who, we are told, was the first who ever had recourse to it.

In that species of ranula which occurs in newborn infants, extirpation by the actual cautery is recommended both by Levrette and Delevrye; our author, however, points out a different treatment. If the abscess be only a collection of pus, he advises it merely to be opened; but, if contained in a cyst, the cyst, he says, must be destroyed, otherwise the tumor is very apt to regenerate.

The history of a bronchocele, or rather trachiocele, which came under our author's inspection, is here related. It occurred in a new-born child;
child; and the tumor was so large, as to extend from the ear and cheek of the right side, down to the breast and very near the abdomen. It appeared evidently to communicate with the aspera arteria, and to depend on an eruption of air; for, during inspiration, and when the boy cried violently, the tumor increased; and, on the contrary, its size was regularly diminished in the time of expiration. The patient having been under the management of a different practitioner, the treatment had recourse to is not mentioned. In a similar case, however, our author would recommend astringent spiritous fomentations, with a view to get the better of any laxity of parts that may prevail. And, if a continuance of such applications should not effect a cure, he would even advise the tumor to be opened, so that the diseased fissure may be detected, and a coalescence, by proper bandages, be obtained. Another instance is mentioned of a congenital bronchocele, which appeared, however, to be of the stramous kind. Swellings of this nature we are advised to let remain to a more advanced age, when either resolution or extirpation may, with greater safety, be had recourse to.

Such
Such tumors and abscesses as frequently occur in the breasts of infants, are commonly attributed to the milk or serum which collect in them not being properly pressed out. This our author allows, is sometimes the case, but he is of opinion, that they more frequently proceed from the tight bandages which are commonly, though very improperly, applied to new-born children.

In treating of the different species of exomphalous, our author describes a particular kind of tumor in the hypogastric region, to which infants are liable three or four days after birth. It frequently extends from the pubis to the umbilicus, attended with much pain and hardness. By dissection after death, tumors of this kind appear evidently to be of an inflammatory nature; both the abdominal muscles and peritoneum are commonly found affected. They proceed, according to our author, from the blood in the umbilical cord not being properly pressed out on the ligature being put on immediately after birth. Children, we are told, frequently die of this complaint: The remedies recommended are, glysters, emollient fomentations, and plasters of the same kind.
A full account is given by our author of the congenital hernia, in which the intestines descend by the process of the peritoneum, and lie in immediate contact with the testes. A similar process, he says, is found in women surrounding the round ligament of the womb; and a description is here given of what may be termed a congenital hydrocele, in which the water collected is contained in this process of the peritoneum.

V.

_Dissertatio Inauguralis Chemico-medico de optima acetum concentratum, ejusdemque Naphtha, consistiendo ratione, utriusque affectionibus et usu medico._ Auctore Jo. Christoph. Westendorf. 4to, Goettingae.

_Before_ proceeding to treat of the naphtha which may be obtained from vinegar, Mr Westendorf first enumerates the several methods commonly had recourse to for the purification of that acid, viz. by means of cold, rectification, and distillation, either from verdigris, or from a saturated solution of salt of tartar. He recommends,
mends, however, for this purpose, an article which, he says, is superior to every other, viz. the mineral alkali obtained from soda. From a saturated solution of this salt with vinegar, either of wine or beer, are procured crystals, in shape resembling Glauber's salts; these our author recommends in preference to terra foliata tartari, as being not only more easily procured, but in reality more efficacious. To this salt in powder a half quantity of oil of vitriol must be added; and, from the mixture, may be obtained, by distillation, the strongest concentrated vinegar. A mercantile pound of the salt treated in this manner yields, it is said, a pound of vinegar, apothecaries weight.

For the preparation of naphtha, let an equal quantity of rectified spirit of wine be added to this acid; and the mixture being put into a retort, let nearly a half of the whole be drawn off by a distillation on a very gentle fire. To the liquid thus obtained, about a sixteenth part of salt of tartar, dissolved in four parts of water, being added, the naphtha immediately separates, and swims like oil upon the surface. The longer the digestion subsisted of the acid and spirit of wine, the larger always will be the proportion of naphtha. Its flavour is similar to that
that of Rhenish wine, and it is recommended by our author as an anodyne, and antispasmodic, especially in the tussis convulsiva of children. The dose must be somewhat larger we are told, than that of the vitriolic naphtha.

Concentrated vinegar prepared in the manner directed, does not act upon gold itself; but dissolves the calcæs of gold, as also those of silver, mercury, copper, lead, tin, and iron. Iron dissolved in it affords a red crystalline salt, of a sweetish, and somewhat astringent taste, and which gives to water a blood-red colour. With pure salt of tartar it yields long pointed crystals, which melt either in the open air, or with a very gentle heat.

Volatile salt ammoniac saturated with this acid, forms a limpid neutral liquid, which does not crystallize; but, when distilled in a retort, there comes over, together with a fluid, an icy pellucid kind of substance, easily soluble by heat, and which appears to be a true neutral salt.

This concentrated acid dissolves, we are told, calcareous earths, earth of allum, magnesia, phosphorus of urine, distilled oil of anthos, gum galbanum, copal, and camphor. It quickly co-

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agulates blood, which is likewise so much hardened by it, as, in a few days, to be easily broke into pieces. Even blood, dissolved by putrefaction, is not only coagulated by it, but is soon rendered perfectly sweet.

The following articles stand in the order of affinity which they bear to this acid; phlogiston; fixed alkaline salts; calcareous earths; volatile salt of urine; zinc; lead; mercury; regulus of antimony; silver; tin; iron; copper; gold.

The peculiarities of this acid are, that it is stronger than the other vegetable acids, and is also more volatile, penetrating, pure, and simple. It is so particularly antiseptic, as to act powerfully in putrid disorders, in doses of twenty guts, given every hour in any convenient drink. It promotes sweat and urine: Is recommended in cases of gangrene, and of putrid sore throats; in both cases it is directed to be mixed with an equal proportion of honey of roses. The steams of it, received by the mouth, are advised in cases of angina; and it is greatly extolled in putrid scorbatic ulcers, in carious bones, spoiled teeth, and wasted gums.
VI.


The term chronic weakness is here used by Dr Withers, to distinguish this species of weakness from that which occurs in acute diseases; the one coming on suddenly, whilst the other steals upon the patient by slow degrees. It is a term which is sufficiently understood by every one who is in the least conversant with medical writings; it being a disorder to which persons of all ages, of both sexes, of every temperament, and in every climate, are liable.

The disease, we are told, usually begins with morbid affections of the stomach, such as flatulence, acidity, heartburn, and costiveness. A diminution of appetite, and a slight dejection of spirits, soon occur; the muscular strength is impaired, and the patient feels a languor, together with an unusual aversion to motion. This disposition to indolence continually grows stronger, and a sense of weariness is easily induced.

By degrees these symptoms increase; the aliment is often taken without appetite, and is very imperfectly
imperfectly digested; hence arise distention of the bowels with air, and a regurgitation into the mouth, of the matter contained in the stomach. The head becomes affected with pain and giddiness, the belly is sometimes lax, and at other times an obstinate costiveness takes place. The contractions of the heart are sometimes slow, but generally frequent, and always weak; in consequence of this, insensible perspiration becomes languid, and the skin appears dry and contracted. In process of time the patient’s strength is so much exhausted, as that the least exertion of muscular motion exhausts the nervous system, destroys the appetite, produces sickness, palpitation of the heart, and quickness of breathing. The mind becomes as much affected as the body; its efforts are weak and fluctuating; it is unfit for deep reflection, or close attention to any particular subject. The memory is greatly impaired, and not exercised without a sensation of uneasiness; and that even in patients who before were remarkable for their firmness, vivacity, and acuteness of understanding. The system is all along exceedingly irritable; and, in the progress of the disorder, this irritability increases to such a degree, as to become a source of great uneasiness to the patient.
patient. Hectic fever at last takes place, which ending in nocturnal sweats, a colliquative diarrhoea, or hydropic swellings, the patient is thus, after an uncertain term of years, exhausted and carried off.

These are the principal symptoms of the disorder, as enumerated by Dr Withers; for all the various forms, however, which in different patients it puts on, the treatise itself must be consulted.

Our author now proceeds to the consideration of the several causes which may tend to the production of chronic weakness. It is probable, he thinks, that the immediate and proximate cause, consists principally in an increased mobility of the nervous system, and in a diminished cohesion of the particles of matter which constitute the simple solid. This opinion, he thinks, is confirmed by the symptoms of the disorder, as already enumerated, and will be farther supported, he says, from the consideration not only of the predisposing and occasional causes, but also of the method of treatment. The occasional causes being all such as weaken the nerves, and relax the whole constitution; and the method of cure consisting chiefly of the application of these means, which are
are efficacious in restoring the enervated fibres to a state of vigour.

A variety of occasional causes are here enumerated, the most material of which seem to be the following; hereditary weakness; too great a fulness of blood, from whatever cause it may have been induced; neglect of exercise; sudden and violent exertions of strength; want of sleep; the compression of any important organ, as may be frequently met with among women, from too tight lacing of their stays. Impure air is mentioned as a common cause of chronic weakness, hence large towns, and all places of public resort, are said to be very improper situations for patients labouring under such symptoms. Too copious a flow of the milk in nursing is another frequent cause; excess in venery; much exposure to heat; all such causes as weaken the stomach, destroy eventually, we are told, the tone of the whole system. Besides these, he enumerates excess of mental application, together with different affections of the mind, such as grief, fear, anxiety, &c.; the unnecessary and imprudent use of remedies, particularly of blood-letting, emetics, and purgatives; an imprudent use either of stimulants or sedatives, as instanced in the use of bitters long continued, of tobacco, opium and
and other narcotics. The unnatural and imprudent treatment of pregnant and lying-in women, is taken notice of as another cause of this troublesome disorder; and that especially with respect to keeping women in that situation too warm, too great freedom in prescribing evacuations; and an unnecessary use of instruments. The last cause mentioned, is that species of weakness which is frequently the consequence of fevers and other acute diseases.

In the following section of his dissertation, Dr Withers treats of the distinction and prognostic of chronic weakness. Palsy is the first disorder taken notice of, with which it may be confounded. Weakness, our author observes, is a predominant symptom in palsy; but it is weakness attended with diminished sensibility; a morbid state of irritability, on the contrary, accompanies chronic weakness.

The hypochondriac disorder is, frequently, we are told, mistaken for chronic weakness. When it occurs in a relaxed constitution, it constitutes indeed the same disease, the symptoms and treatment being the same; but, if it occurs in a person morbidly rigid, it is different in its nature, and requires a different method of cure, the strengthening
strengthening remedies useful in one case, being found hurtful in the other. In all such disorders, therefore, it is of the utmost consequence to observe whether the patient be of a relaxed or rigid constitution.

Hysterical affections are distinguished from this disease by the occurrence of fits, with the sensation of a ball in the throat, arising from a spasmodic affection of that part, which sometimes threatens strangulation.

Chronic weakness, when accompanied with hectic symptoms, is, frequently, it is said, mistaken for a low nervous fever; by attending particularly, however, to the several symptoms of the two disorders, there can be no great risk of their being confounded. We are next warned against confounding this disorder with gout, the symptoms of which are sometimes similar; and the chlorosis, it is said, is generally no other complaint than chronic weakness.

The prognostic must be formed from the consideration of many particulars, viz. the temperament, age, sex, and profession of the patient; the causes which appeared to produce the disorder, the violence or mildness of the different symptoms,
toms, and the particular stage of the complaint at the time.

The method of cure in chronic weakness, is the subject of the last section. The author having had frequent opportunities of treating this disorder, the remedies pointed out shall be such only, he says, as by experience have been found successful.

The indications laid down for the accomplishment of a cure are three.

1. To avoid the occasional causes of the disorder.

2. To obviate particular symptoms that aggravate the complaint. And,

3. To restore the tone and vigour of the system.

With respect to the first indication, the several occasional causes already enumerated must be carefully avoided, particularly full living, indolence; and, if the unwholesomeness of a profession has contributed much to bring on the complaint, that profession must be discontinued, otherwise the disorder cannot possibly be removed. If the air of a large town disagree with a patient, and weaken him, the country air is naturally to be preferred. Coolness being of great consequence, the fires in common sitting rooms should be small, so
so as to preserve the air of a moderate temperature. In bed the patient is directed to lie on a matrafs, in preference to feathers; and to keep himself always so cool as not to encourage a copious perspiration. Too copious an evacuation of the seminal fluid should be cautiously avoided; as likewise excess of study, which is so powerful an occasional cause of chronic weakness, we are told, that very few men of learning are free from the disease.

In the second indication mentioned, viz. the obviating of such symptoms as seem to aggravate the complaint, we are favoured particularly with remarks on the following symptoms; indigestion, heartburn, and acidity, cholic-pains, coltiveness, dejection of spirits, and want of sleep. When indigestion comes any great length, it is particularly necessary to pay great attention to the diet; and a mixture of animal and vegetable food is recommended as the most proper. A diet consisting entirely of flesh meat, has already been said to be too nutritive; and vegetables alone as certainly produce indigestion, flatulency, pain, acidity, and purging; a mixture of the two, therefore, forms the best diet in this disease. To obviate indigestion, the aliment should be taken
at every meal in moderate quantities, and of the most wholesome kind, dressed in the simplest manner. In general, we are told, the flesh of old animals is more easily digested than that of young ones, as affording a greater stimulus to the stomach; but, on this point, as different sorts of animal food agree with different constitutions, nothing farther can be said, than that the patient must be regulated by his appetite, and by repeated trials. With respect to vegetables, the same general rule must be observed, taking care always to employ such as are found to be most easily digested.

Tea and coffee, which are to be considered as parts of diet, are, we are told, in consequence of their sedative quality, found to be sometimes serviceable in chronic weaknesses, especially if attended with spasmodic affections. But, when used strong, or in too great quantity, they often prove injurious to the nervous system, by occasioning tremors, heartburn, acidity, watchfulness, and dejection of spirits.

The too liberal use of wine, or of any spirituous liquors, accustoms the stomach to an unnatural stimulus, which increases its action, and consequently destroys its tone; the stomach, especially
ally in children, should be cautiously preserved from the action of strong stimulants of every kind. From the neglect of this precaution, children, at very early periods of life, are found to labour under chronic weakness, complicated with gout and other maladies.

Although wines, however, as well as other fermented liquors, are, when imprudently taken, justly considered as poisons; yet a few glasses of good wine after dinner and after supper, are frequently serviceable, our author observes, in disorders of this kind; and that quantity will generally, he says, be found sufficient, unless the patient has been previously accustomed to drink freely. Wine thus moderately used, he observes, obviates putrefcency, and promotes digestion; and gently stimulates without weakening the constitution.

When the patient is much troubled with heartburn, and acidity of the first passages, absorbent, demulcent, and emetic remedies are recommended. Absorbents, it is observed, by uniring with the acid in the intestines, form a neutral salt; and by this means obviates the acidity which is a frequent cause of the heartburn. We are cautioned, however, against using these medicines to
to excess; for, by destroying totally the acid of
the stomach, they promote, it is said, a putrid
tendency in the animal fluids.

Colic-pains frequently depend upon too great
a distention of the alimentary canal, in conse-
quence of over-plentiful meals; in such cases,
they are removed by a more moderate way of
living. When such pains, however, seem to be
of a spasmodic nature, as they frequently are,
opium, falt of hartshorn, muilk, and aether, are
recommended.

CONSTIVENESS is another symptom frequently
troublesome in chronic weakness, and must, by
attention to diet, and the use of mild laxatives,
be particularly guarded against.

Dejection of spirits is the next symptom taken
notice of by Dr Withers. It generally requires
he observes, the utmost attention of the practi-
tioner, to palliate or remove it, as it is common-
ly connected with alarming apprehensions, timi-
dity of mind, and some degree of false imagina-
tion. The principal circumstances to be attend-
ed to, in this case, as remedies, are, to keep the
mind constantly engaged in business, or amuse-
ment, and to take regular and moderate exer-
cise. Want of sleep is another very troublesome
symptom
symptom common in this disorder. It often arises, we are told, from the patient’s lying too many hours in bed; seven or eight hours is recommended as sufficient for any person to indulge in. Exercise, and even moderate labour, are advised as the best incentives to sleep; with the want of which the active and laborious part of mankind are seldom troubled. Sometimes, however, it is necessary to have recourse to antispasmodics, and opiates.

There are several other symptoms, which, at times, occur in chronic weakness, which, as they commonly depend on the general debility of the system, are to be removed by tonics, and such other remedies as are found serviceable for the disease in general.

The last indication to be attended to is, to restore the tone and vigour of the system. This important change is to be effected by the use of astringents, stimulants, and tonics. These remedies, when prudently administered, strengthen the system; but they are often, we are told, employed in such an improper manner, as to disagree with the patient, and increase the disease.

The astringent remedies here recommended, are, uva ursi, oak bark, campeachy wood, tormentil
mentil and bistort; as likewise allum, and galls. The boles, dragons blood, and Japan earth, are likewise recommended; but their operation is said to be weak and uncertain.

Stimulants are a class of remedies that are extremely numerous; the following articles of this kind are recommended as the most efficacious, viz. peppermint, cinnamon, lavender, canella alba, cloves, ginger, camphor, gum guaiac, Virginian snake-root, balsams, mustard, horse-radish, castor, asa foetida, aether, salt of hartshorn, wine, spirits, and common salt. Stimulants are especially advised in chronic weakness, when that disease is accompanied with great languor and torpor of the living powers. They excite, we are told, the action of the nervous system, accelerate the circulation, promote the discharge by the skin, and eliminate from the blood those putrescent particles, which are often retained in consequence of languor and debility. They increase the peristaltic motion of the alimentary tube; they retard fermentation, prevent acidity, and forward the digestion of the aliment. By this means, the appetite is improved, and the process of nutrition carried on in a more perfect manner.

Tonics
Tonics are the last set of remedies taken notice of. The articles particularly recommended are, cold bathing, the preparations of steel, chalybeate waters, bitters, and the Peruvian bark.

With respect to cold bathing, the degree of coldness in the water should be proportioned to the patient’s strength of constitution; for, if the water be too cold, it will prevent, we are told, that salutary re-action of the heart and arteries, which is indicated after bathing by the sensation of a gentle universal warmth. To promote the re-action of the vascular and nervous systems, the patient is advised to have acquired, by exercise, a moderate degree of heat before going into the water. Among the several steel medicines had recourse to in chronic weaknesses, the chalybeate water of Scarborough is particularly recommended; as likewise those of Spa, Pyrmont, and Harrogate.

Bitters, together with the Peruvian bark, are recommended as valuable remedies in the cure of chronic weakness. The articles enumerated are, gentian, chamomile, tansy, orange-peel, simaruba, zedoary, eleuthera, and columbo root.
In the exhibition of Jesuits bark, the powder, when it agrees with the stomach, is recommend-
ed as the best preparation of it; and the cold infusion is said to be stronger than the decoction.

VII.

Societatis Medicae Havniensis Collectanea, cum fi-

The society to whom we are indebted for this work, consists principally of physicians of eminence at Copenhagen. But, besides practitioners in that city, they have adopted also into their number several foreign members. Among others, Drs Cullen and Duncan, of Edinburgh, have had that honour conferred upon them.

From the industry of Dr Tode, regius professor of medicine, and one of the court-physicians at Copenhagen, who holds the office of secretary to this society, we entertain the pleasing hope that, from their labours, our work may often be enriched. The present volume contains about forty papers; but, without mentioning the titles of each of these, we shall give some account of what we reckon the most important.

Vol. IV. E e D e
De eximia salis tartari efficacia in rachitide.
Auctore Petro Christiano Abildgaard.—The subject of this case was a boy of seven years old, who laboured under rickets to a great degree. His inferior extremities were become stiff and immoveable; the abdomen flaccid; he was emaciated with a diarrhoea and constant sweatings; and had five fistulous ulcers all running at the same time.

The following mixture was prescribed, of which four ounces was taken daily. 8, decoct. cort. Peruvian. 3viii. salis tartari, 3fs. M.

In the course of a month, the patient was so far recovered as to be able to rise from his bed, and to walk with some support. At that time, the bark was changed for rubia tintorum; and in less than four months the boy got so well, as to be able to walk with the assistance of a crutch, and the ulcers by that time were mostly cataractous.

The salt of tartar was the only remedy which our author says he here depended on; and he has, on different occasions, seen rickety people cured by a watery solution of that salt alone.

Infania a morbo capitis externo observata. A Frid. Gab. Got. Sibbern.—In a girl labouring under mania, a slight swelling was observed on the left side
side of the head, near to the sagittal and lambdoid sutures. By the application of gum plasters, the tumor came to such a size as rendered it necessary to open it. On an incision being made into it, a thin kind of serum was discharged, and the cranium at that part was found carious. From the time the swelling was opened, the patient began to recover, and came gradually to the use of her senses. By proper management the sore was healed up. In the course of treatment it appeared, that the patient had formerly laboured under tinea capitis; which made our author suspect the tumor in question to have proceeded from a retrocession of that disorder; and endeavours were accordingly used to occasion a return of the eruption, but without effect.

Herpetis exedentis curatio. Auct. Frid. Lud. Bang.—A patient had laboured for two years under a herpes exedens on one of the hands; the fingers were much swelled, excoriated, and in some parts ulcerated; and the matter discharged was a thin ichor. A dose of jalap was prescribed every fourth morning as a purgative; and an electuary was ordered, consisting of two parts of Jesuits barks and one of faiafras. As external applications, he was directed to use ole-

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um
umpalmae, and frequent bathing of the parts, as soon as the skin was so strong as to admit of it. In a few weeks, by a continuation of this treatment, the disease was removed.

Observationes circa ærem in sanguine et humoribus contentum, quibus sémul nova pathologia scorbuti adjungitur. Auctore Jo. Henr. Schonheyder.—The nature, origin, and effects of this species of air, is here inquired into by our author; and his opinion is, that the greatest part of it is transmitted immediately to the blood, in a semiflask from the alimentary canal. He is not of Dr M'Bride’s opinion, with respect to the scurvy proceeding from a deficiency of fixed air in the system; but imagines that disease to depend entirely on an alkalescent flask of the fluids; and recommends, therefore, a course of acids, as the best method of treatment.

De placenta in orificio uteri irradiicata. Auctore Mathia Saxtorph.—This particular situation of the placenta occurred so frequently in the course of a short time to our author, that he is led to conclude, that particular kinds of births may, at different periods, become epidemic as well as other diseases. Eight cases of it, we are told,
told, occurred to him in the space of six months; whereas, in the former part of his practice, and in the course of three thousand six hundred labours, he had never observed more than one single case similar to these.

Haemorrhagies in the last month of pregnancy, preface, we are told, this situation of the placenta. One of the women, alluded to by our author, sustained five returns of haemorrhagies; another three returns, and in two they returned only twice. The labour-pains in such cases are always so weak, and come on so insensibly, that they are sometimes scarcely perceived. For putting a flop to the flux of blood after the birth is over, gentle pressure with the hands upon the abdomen is recommended as the most effectual remedy.

_De simplicissima methodo tractandis puerperis, in domo obstetricia regia Havniensi, anno 1773 observata._ Auctore Jo. Philip. Rogert.—The greatest simplicity, we are told, is observed in every circumstance relating to delivery in this hospital for lying-in women. The woman is never placed in the chair in which she is to be delivered, till the internal orifice of the womb is so much dilated, as to allow the child's head to protrude externally. The

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perinaeum
perinaeum is directed not to be depressed by the midwife, as is commonly done, but merely to be supported by the hand, so as to prevent any risk of its being ruptured. The placenta, after being thoroughly separated from the uterus, is extracted; but, although an entire separation may not take place till twenty hours even after delivery, no force whatever is used in taking it away. In no case whatever, but when the greatest danger is evident, should the hand, we are told, be introduced into the uterus. In the evening of the second day after delivery, an injection is ordered, with a view to diminish or prevent the milk-fever.

These, and other directions, are given with respect to natural births; and, so great is the proportion of natural births to others, that, out of three hundred and thirty-seven, which occurred in the preceding year, two hundred and ninety-five were of that kind. When such births advance flowly, blood-letting, with small doses of laudanum, are recommended as the best remedies for bringing them quickly forward.

In cases of difficult labour from an oblique situation of the womb, if the obliquity is not considerable, we are directed to trust entirely to nature. And when more considerable, before the forceps
forceps are had recourse to, blood-letting is advised, together with anodynes, camphor, and nitre.

No kind of roller or bandage whatever is allowed to be applied to the abdomen after delivery, so that the flux of the lochia is always exceedingly free; and this, our author thinks a most material circumstance in every labour, as no other evacuation so effectually prevents inflammation.

Among all the deliveries our author had been present at in this hospital, only two cases of puerperal fever occurred. One of the patients recovered, and the other was carried off on the fourth day after delivery. On opening the body after death, the abdomen was found full of a purulent foetid matter, which seemed to adhere to the intestines. The omentum was almost entirely putrified; the uterus externally appeared contracted, and slightly inflamed towards its bottom. On being laid open, it was found filled with coagulated blood; in its neck it was entirely shut, although the ostia cae remained open. The ovarium of the right side, as likewise the broad ligament of the womb, were almost totally mortified.
VIII.


In the first case of this collection, we are presented with observations on different subjects, of which the following seem to be the most important.

De fulmine tacito aqua vegeto minerali Goulardi concentratore feliciter curato.—The left leg was the part chiefly affected; it was greatly swelled, of a livid appearance, and perfectly insensible. Goulard's water was applied to the parts, but without any evident advantage; the proportion of lead, however, being increased, the patient, in the course of a few hours, felt a slight titillation, and began to move the limb. The same application, together with the use of the bark inwardly, being continued, a thorough recovery was very soon obtained.

De glandulae thyroideae affectu. A large swelling upon the thyroid gland, which seemed to contain matter, being laid open, a considerable quantity of extravasated blood was first discharged.
ged. Upon going deeper, the whole surface of the abscess was found covered with a hard, calcareous kind of matter. The arteries of the thyroid gland were found enlarged, constituting a spurious aneurism. The patient, we are told, soon died apoplectic.

*De abscessu in regioni inguinali.* Upon opening an abscess in the groin, the peritoneum was found to be laid bare. A plentiful suppuration enuing, that membrane exfoliated or cast off so effectually, as to leave the gut which it had covered quite naked. The wound, however, diminished daily, and in a short time was cicatrized. But the tumor returning, with an evident fluctuation of matter, it was again opened, when, together with the matter contained, there was discharged a pledgit, which, by want of proper attention, had been allowed to remain in the fore when it was formerly open. The cure now went properly on, and, in a short time, was thoroughly compleated.

*Hydrops universalis.*—In a case of obstinate dropsy, that had refixed all the usual remedies, cantharides were had recourse to with the greatest success. Four grains, diluted with a large quantity
tity of barley-water, acted as a very powerful diuretic; and a fourth part of that quantity was afterwards given at three different times. Bark, falt of wormwood, and rhubarb, were also prescribed, and, in the course of six weeks, a perfect cure was obtained. In about eighteen months, however, from that period, the disorder returned, when cantharides were again advised, but with no effect. Their failure at this time, our author attributes to the irritability of the patient's system being diminished, in consequence of a greater degree of debility which now took place. A cure, however, was again effected by recourse to incisions, falt of wormwood, bark, and rhubarb. Cantharides are much recommended by our author, in all such cases as do not yield to the usual remedies.

_Inflammatio venaefectionem secuta._—In this case is related the history of an inflammation of the arm, attended with acute pain; it had proceeded from the puncture of a nerve, our author imagines, in blood-letting, as he does not think, with Heister, Garengcoet, Haller, and others, that such an occurrence from that operation is ever owing to a punctured tendon. A cure was here
effected by the application of escharotics to the wounded nerve, as recommended by Foubert; together with cataplasms of Goulard’s saturnine water.

História valde curiosa brachii sphacelo corrupti. In a case of mortification of the arm, all the usual remedies were had recourse to without effect; the disease increased daily, and advanced so much, that the arm became gangrenous through its whole length. It became hard and black, to such a degree, as nearly to resemble dried smoked meat. It was perfectly free from all putrefaction of smell, was not attended with pain, and the patient, in other respects, enjoyed very good health. In a short time the arm separated of its own accord, and fell off from the body; no haemorrhagy occurred; and the parts with which it had been conjoined soon became so dry, as to discharge no kind of fluid whatever. The old man, the subject of this case, remained, we are informed, in perfect health.

De tendine Achillis diciisse, artificiose deligatione feliciter sanato.—The most remarkable circumstance in the history of this case, is, that such an effectual cure was obtained in the course of a fortnight,
fortnight, that the patient, at the end of that
time, went about his ordinary business without
any inconvenience.

IX.

Chirurgische Wahrnehmungen, von Johann Le-
brecht Schmucker, Königlich-Preussischen Er-
sten General-chirurgus von der Armee, &c. &c.
i. e. Chirurgical Observations, by John Le-
brecht Schmucker, first Surgeon to the Army
of the King of Prussia: In two Parts. Part I.
On Wounds and Diseases of the Head. Part II.
On Diseases of the Breast, Abdomen, and Extre-
mities. 8vo, Berlin.

The author of these observations, in his at-
tendance on the armies and hospitals of his
Prussian Majesty, having had more experience in
the several disorders treated of than can often be
supposed to fall to the share of one man; the
publication of them must, therefore, it is imagi-

ned, prove very acceptable to the public.

The greatest part of the first Part, is taken
up with the consideration of wounds of the head;
from which it appears, that both in the diagnosis, prognosis, and method of cure in such accidents, we are as yet very deficient.

One of the most unaccountable circumstances, attending affections of this nature is, that, in many cases of wounds of the head, especially in those from gun-shots, which at first, and for many days after being inflicted, appear to be attended with no kind of danger, at last turn worse, and frequently carry off the patients. Twelve cases are here related which occurred at one of the many memorable sieges of last war, which all proved fatal, after the patients, for many days, had remained perfectly free from every bad symptom; and in which, nothing outwardly appeared, farther than the bone being either merely denuded, or otherwise very slightly affected. The trepan in all of them was had recourse to, but without either being of service, or able to detect the cause of the different symptoms.

On opening the heads of such patients after death, either pus was found diffused upon the pia mater, or a gelatinous semipurulent kind of matter
matter was observed. Most frequently the brain itself appeared perfectly sound.

The cause of death in cases of this nature is attributed, by our author, chiefly to an affection of the tunica arachnoidea, and of different lymphatics. The contusion occasioned by gunshot-wounds and similar accidents, produces always, he says, an effusion and stagnation of lymph, which in cachetic debilitated subjects, (such as soldiers commonly are at the end of the campaign in a tedious war), is with difficulty absorbed, and is commonly therefore either converted into pus, or a thin ichor.

This view of the cause of the disorder, first suggested to our author the propriety of astringent applications in such cases; and he has frequently, we are told, employed them with the greatest advantage. The following is an application of this kind he has often used with success, and is a form which he seems to prefer to all others. To forty pounds of cold water, add four pounds of vinegar, sixteen ounces of nitre, and eight ounces of sal ammoniac. The part affected is ordered to be frequently well bathed with this, at the same time that blood-letting is prescribed, together with the internal use of nitre, stimulating
stimulating injections, and laxatives. In all the slighter affections of the head, the greatest success, we are told, has been observed from such a course; and, even in such as have required the trepan, our author has often, he thinks, seen it put in practice with advantage. In concussions of the brain, even without any external wound, cold epithems and fomentations are said to be very serviceable, especially if conjoined with stimulating glysters, and the application of leeches to the temples.

A variety of interesting observations, with respect to other affections of the head, are afterwards inferred. In one case, a locked jaw occurred, in consequence of a wound on the right side of the head with a sword. The trepan was twice applied, but without advantage; when a collection of matter under the temporal muscle being observed, and afterwards evacuated by cutting through that muscle, the spasm was effectually removed, and a cure of the wound easily obtained. Another case of the same kind is afterwards related, in which evacuating the matter contained below the temporal muscle proved effectual, after the trepan had been four times applied without any advantage.

Several
Several cases of gunshot-wounds in the forehead are related, in which the trepan was applied to the os frontis with the greatest advantage. In wounds of the cranium, those made with sharp cutting instruments, always terminate much more easily, we are told, than those occasioned by such as are more blunt or obtuse. Among many remarkable cases, which we are afterwards favoured with, one is related, in which part of the cortical substance of the brain was cut out with a sword, and a cure was in due time easily effected.

Violent concussions of the brain are often produced, our author observes, merely from the passage of cannon balls near to the head, without any external affection being observable. In such cases, and in all similar concussions, emetics, we are told, are commonly attended with the best effects; venaecfession, however, must always be premised to the use of these remedies. Emetics, after blood-letting, are likewise recommended by our author, in a species of blindness, which he has frequently known soldiers to be seized with from making long marches in sultry weather. In some cases, one blood-letting, and a single vomit the following day, have proved effectual;
tual; on other occasions different repetitions of both remedies have been necessary.

When treating of ophthalmia, leeches to the temples and eyelids are much recommended; but our author is greatly against scarifications of the tunica conjunctiva, as advised by many. As a corroborant for that species of relaxation, common in ophthalmia, a collyrium is recommended, of eight ounces of rose-water, two drachms of allum, and a scruple of saccharum saturni.

A full account is given by our author, of a species of blindness sometimes produced by a translation of the matter of gonorrhoea to the eyes. In such cases, antiphlogistic remedies are advised to be applied to the eyes, together with blood-letting, nitre, and other cooling medicines inwardly; at the same time, that emollient cataplasms should be applied to the penis and perinaecum, with a view to solicit a return of the discharge to these parts.

In treating of ganglia, or such tumors of the encysted kind as contain an inspissated kind of lymph, we are advised, after making a simple incision into them, to evacuate their contents, and afterwards to obtain a reunion of the parts.
by means of the dry future. In the smaller swellings of this kind, a cure, we are told, may almost always be obtained, by gentle frictions with soap dissolved in strong spirits of wine.

The second volume of our author's work commences with the consideration of disorders of the breast. Some cases are related, in which musket-bullets passed through the lungs, and which were afterwards happily cured. In wounds of the breast, tight bandages are much condemned; and, in place of a great number of small dressings, with which such wounds are commonly covered, one large dressing or cushion is rather recommended. The best method of preventing emphysematous swellings in wounds penetrating into the chest, is to enlarge and keep open, we are told, the external openings, which effectually prevents the air from within diffusing over the cellular membrane. Of many remarkable cases of wounds in the breast and abdomen related by our author, we shall here mention two. A soldier received a shot with two bullets at the same time, one of iron, and the other of lead. On the latter being extracted, as no others were at the time suspected to have entered, the sore was healed up. In the course of sixteen years, however,
ever, a large iron bullet was taken out from the region of the liver. Another soldier was wounded through the diaphragm in the right hypochondrium; and, although a paraphrenitis succeeded, attended with violent laughter, crying, and vomiting, yet a cure at last was obtained.

In treating of cancer, extirpation is mentioned as almost the only remedy to be depended on. And this operation, our author says, he has, on many occasions, had recourse to in open cancers of the mamma, with the greatest success; and that even in the very worst cases of that kind, when, to all appearance, the disease had arisen from an internal cause, and when the different symptoms of hectic had occurred. Cicuta we are desired by no means to depend on in this disease. Many experiments are here related, made with that remedy procured directly from Vienna; but, instead of being of any advantage to the patients, almost all of them seemed to suffer much from its use; in some of them, great debility was induced, and, in others, such tremors of the joints, as they did not again recover from.

Our author afterwards treats successively of the paracentesis of the abdomen, of the different species of hernia, hydrocele, aneurism, and lithotomy.
ny. In cutting for the stone, he determines, after a great deal of experience, in favour of the great apparatus, as recommended by Le Dran; as it always, he says, proves much more successful than even the lateral operation.

We are commonly directed, our author observes, in those cases of gunshot-wounds where any of the extremities are carried off, to amputate immediately above the part. In all such cases, however, amputation, he says, ought by no means to be had recourse to; for, from extensive experience on this point, he has long been convinced, that forces produced in this manner, heal with much greater ease, and with less risk to the patient, than those which are left after the amputation of any member. He even advises us not to take off such parts of splintered bones as happen to protrude in cases of this kind; for they always, he says, in due time, separate, of their own accord, a considerable way within the margin of the soft parts. A variety of cases of gunshot-wounds are related, in which, without having recourse to amputation, complete cures were obtained, although different bones had been very much shattered.
Our author concludes this publication with a variety of judicious observations on the treatment of those bit by mad dogs; and the propriety of every article recommended, is confirmed by the enumeration of different cases, which had been treated in the manner prescribed. Such wounds are directed to be immediately washed clean; and, after deep scarifications being made into them, the parts are to be immersed in warm water, with a view to encourage a flow of blood. The wounds are afterwards to be sprinkled with the powder of cantharides, and a blistering-plaster to be applied over all. This treatment must be continued for eight or ten days, and the wounds, by proper digestives, should be kept running for at least a month. Internally, frequent doses of nitre and camphor are recommended.

The extirpation of that tendon, commonly termed the worm, from the under part of the tongue in dogs, with a view to prevent their doing harm when mad, is recommended by our author, in consequence of different experiments which he himself put in practice in order to determine the propriety of it.
I.

The History of a remarkable wound in the Trachea and neighbouring parts. By Mr James Stark, Surgeon in Calcutta.

Upon the 25th day of October 1775, I was requested to visit an European that had cut his own throat, a few hours before I was called, but I was told he had still some appearance of life remaining.

When I went to the place, I found him lying upon the ground, with his throat cut from ear to ear, and an immense effusion of blood all around. Upon moving him, I found that there was
was a good deal of strength remaining, notwithstanding the great loss of blood. I therefore began to examine the wound, which had the following appearance.

The external jugular veins on both sides were perfectly divided; the carotid arteries laid bare; the trachea arteria divided from the larynx immediately above the pomum adami; the epiglottis and glottis, along with the os hyoides, perfectly detached from the rima glottidis; the pharynx cut through, except about a finger’s breadth of the back part, which was very much stretched; for the trachea thus divided, had retracted equal with the clavicles, as had also the fore part of the oesophagus, which very much stretched the remaining fibres of the pharynx. As the os hyoides was perfectly detached from the rima, consequently every muscle that arises from the different cartilages, &c. of the windpipe, and which are inserted in the os hyoides, were cut through. Finding matters in this situation, I thought any attempt would be perfectly in vain, as he must certainly expire in a few hours. However, as the effusion of blood was stopped, and he still had a good deal of strength remaining, I was willing to give him every possible
fible chance. Therefore, after washing the clotted blood from the wound, I endeavoured to attach the fore-part of the oesophagus to the pharynx with needles and waxed thread; but found it very difficult to accomplish, as the wound was very jagged, the patient averse to have anything done for himself, and the pricking of the needles brought on violent reaching to vomit, so that the contents of the stomach were evacuated by the wound. I next endeavoured to attach the trachea to the larynx, which was likewise difficult on account of the constant convulsive coughing; however, it was at last done, and the patient, in this situation, could swallow a little water, tho' the greatest part still ran out by the wound. I then applied slips of adhesive plaster near the edges of the external wound, and, by means of the quilled future, brought the lips in contact in every part, except where the threads of the internal wound protruded, and then dressed the whole with dry lint. That the more care might be taken, I had the patient carried to my own house, where I immediately ordered his belly to be opened with gysters, and that he should have nothing whatever given by the mouth; but that he should be entirely supported by nutritive gysters,
flers, administered every two hours, and that he should be kept as much at rest as possible. Next day I found him perfectly free from fever, his pulse small, but slow and regular. The weather at this time was pretty hot, and made me afraid of putrificative symptoms; I therefore ordered that he should have a gystler of strong decoction of bark twice a-day, and that he should retain them as long as possible. The second day he was much the same, only his pulse was quicker, as was his breathing; he likewise had a frequent tickling cough, but no appearance of suppuration on the wound. On the third day, a pretty plentiful discharge of matter and mucus took place, and every bad symptom disappeared, except the cough, which was rather more troublesome, from part of the matter discharged falling into the top of the windpipe. The fourth and fifth days he was much the same; but, on the sixth, matters took a very different turn, as now he had every appearance of symptomatic fever, from an absorption of matter having taken place: His skin, before moist, was now very hot and parched; pulse quick and small; the discharge from the wound very ichorous and offensive, and the parts adjacent very hot; his breathing quick, and inspiration
spiration very difficult, with a loud rattling noise; and altogether extremely restless and uneasy. As the symptoms of fever increased very fast, I now thought that he had no chance whatever; however, I ordered that hot dressings should be applied to the wound, that the number of bark glysters should be increased, and that he might be allowed to smoke a * chirrutt, for which he had a great desire, as it promotes expectoration, and perhaps might assist in bringing back a discharge of matter from the wound. He continued in this situation all the next day and the following. But, on the ninth, when I expected to have found him dead, how much was I surprised to see him perfectly free from fever, his skin moist, and a thick discharge from the wound, hardly in any degree offensive. I continued the same regimen and dressing as already mentioned, and with these new appearances conceived fresh hopes. Next morning, upon unbinding the wound, every thing looked the same, only all the stitches had given way, and the windpipe and gullet had retracted as before. Now I had a full view of the whole extent

* Tobacco leaves rolled up hard, about the size of a finger, which is lighted at one end, and the smoke drawn from it by the other put in the mouth.
extent of the wound, which was really shocking to behold; for, between the os hyoides and the clavicles, there was only one continued gash, which looked as if the windpipe and the gullet had been cut out entirely.

All along he complained very much of thirst; and, by pointing to his belly and mouth, showed evident marks of being very hungry. I had once or twice allowed him to make an attempt to swallow water, but after the first or second day he could not get down a single drop, the whole coming out at the external wound, and frequently endangering suffocation, by part falling into the top of the windpipe, and so producing violent convulsive coughs. He was at this time very much reduced, and I was afraid that I should not be able to nourish him by the present mode till a reunion took place. I therefore removed the stitches entirely, and attempted to introduce nourishment by the external wound, by means of a bent catheter that had a bladder tied to it. But the catheter had no sooner touched the top of the gullet than it produced violent efforts to vomit, and convulsive coughing, which tore the wound quite open. Finding that this method would not succeed, I laid it aside, and trusted to
strong nutritive injections only. I again put in a flitch or two in the fore part of the windpipe, but soon found that they could be of no service; for they not only prevented a reunion, but kept up a constant irritation on these sensible parts. I, therefore, next day, removed them, and only continued the flitches in the external wound; for the mucus and matter now prevented adhesive plaster from sticking: And, in order that there might be very little stress on the external flitches, I kept his chin confined close to his breast, by means of pillows under the head, and a night-cap, with straps that tied under the arm-pits. About this period, small granulations of flesh made their appearance in the wound, and I now entertained some hopes, provided he could be supported by the anus for a sufficient length of time. But his being much reduced, and his pulse hardly perceivable at this time, rendered it highly improbable. However, he continued in this way, without any unfavourable symptom, unless his being more weak, till the twenty-fourth day from the accident. On this day I was much surprised, upon coming home, to see him sitting up in bed, with a plate before him, which contained boiled rice. I asked if he had swallowed any, to which he made signs.
signs that he had, by patting his belly, and expressing great joy in his countenance. I desired he would make another attempt, and found, to my great astonishment, that he could swallow some, though by much the greatest part came out by the wound.

This discovery gave me great pleasure; I therefore allowed him to continue; and he got so much better, and could swallow so well in a few days, that I discontinued the injections. He now could speak so as to be understood, and could swallow fluids without loosing much. About the end of six weeks from the accident, the external wound healed up entirely, except over the pomum adami, which, by being a little hurt, gradually separated; and, as the separation was very slow, a small part of the external wound turned fistulous, and so left a passage into the windpipe; through which he could breathe at pleasure, though he generally breathed by the mouth, as before, and could swallow either liquids or solids, without any part coming by the wound.

I now judged him out of all danger from the accident, and allowed him to walk about the streets, by which he recovered strength, so much as to be able to walk about a quarter of a mile, and
and give his evidence before the grand jury con-
cerning the murder of an European, to which he
was the only witness.

It was now my intention, in a day or two, to
remove the callous edges of the little fistulous
hole in the fore part of the windpipe, in order
to produce a perfect union. But Christmas-eve
intervened, which was just two months from the
accident, he went out and came home in the
night drunk, but went to bed, to all appearance,
in very good health. The morning after that,
he was seen by my servant walking about with
a chirrut in his mouth, snoring, as usual. From
the quantity of liquor he had drank over night,
sickness was produced; and, in the action of vo-
miting, some of the remains of the liquor had pro-
ably got into his windpipe, for he fell back on
his bed, and expired in an instant, before any one
could come to his assistance.

As I had taken so much pains to promote his
recovery, I was sorry for the accident; but, at
the same time, I was amply rewarded for my
trouble; for it afforded an excellent opportunity
of seeing what nature had done in so extraor-
dinary a case.
After his death, in presence of three gentlemen of the faculty, the trachea and gullet were taken out from the sternum to the root of the tongue. We found that nature had effected a perfect reunion of all the injured parts. The os hyoïdes was rejoined to the windpipe in the fore part, by means of a soft but tough substance, which occupied the place of the scutiform and thyroid cartilages. The rima glottidis was attached to the sides of the os hyoïdes by a tough membranous cicatrix, which marked the extent of the wound in its first state. All the muscles that are inserted in the os hyoïdes, and originate from the cartilages, &c. had, after being cut through in the accident, retracted, and on one side formed a large and hard substance, about twice the size of the pomum adami.

Had it not been for the large cicatrix, the retraction from the division of the muscles and the small opening into the fore part of the windpipe, it could not have been perceived that any injury had been sustained. The glottis and epiglottis had regained their former situation and action, and nature had fully supplied every deficiency.

I am fully persuaded that the man would have found little or no inconvenience in his future life,
life, had he not been cut off by an accidental occurrence. I was so much convinced of this, that, before the coroner and his inquest, I, and another surgeon, gave it as our opinion, that he died by accident, and not from the wound.

This case I consider as one of the most remarkable among those of surgery; and I do not know such another upon record: Consider the situation of the wound, the parts so injured, the mode by which nature was supported for such a length of time, the climate, &c. and the cure will appear almost a miracle, hardly to be credited. However, it serves to show, in the fullest extent, that, as long as life remains, we should persevere to administer relief to the utmost of our power.

During the cure, I called in many of the medical gentlemen in Calcutta, who all declared the case incurable, and I was fully of this opinion myself; however, the event served to prove that we were all mistaken.
The History of a Puerperal affection terminating in a Discharge of Pus from the Umbilicus. By Mr James Carmichael, Surgeon at Port-Glasgow.

Jean Hillam, aged nineteen, was delivered of her first child, at the full time, after twenty-four hours hard labour, on the 12th of July 1770. The placenta was extracted instantly, and with violence. The lochia were scanty, otherwise she was in a good way. She fat up on the 17th for the whole day, and was without complaint till mid-night, when she was seized with violent pains over all her belly and back, anxiety about the praecordia, faintness, great sweatings, constant vomiting, frequent stools, with gripes, and intense thirst. To these symptoms, continuing, was added a large diffused swelling of the abdomen, which was perceived on the 22d, attended with pain about the umbilicus, which was inflamed, and a gentle suppuration followed. Her belly became very sore to the touch. On
the 30th, above four pounds of watery pus were discharged from the umbilicus, with immediate relief from all her ailments, and a moderate return of the lochia.

I accidentally saw her, for the first time, on the 14th of August. There had been a daily discharge of about four ounces of well digested pus from the navel, for a long time, but it had now decreased. The lochia still continued. She complained of great weakness, chiefly of her back, so that she walked in a bending posture forwards; she had little appetite for food; nausea and faintness, at times; great thirst; and, from the 30th of July, when the discharge first began, she could lie on the right side only. Her pulse was small and quick. She had taken very little medicine, from which she was not sensible of any relief.

In this situation I did not prescribe for her, but trusted the cure to the natural progress of the disease; and, when I saw her again, which was not till the month of November, the discharge from the umbilicus was quite gone, and she was recovering fast. I had again an opportunity of seeing her in the month of January 1771; she was
was then perfectly well, but still she could not lie on the left side.

III.

Case of violent Spasms which succeeded the Amputation of an Arm. By Mr Daniel Bullivant, Surgeon at Oakham, Rutlandshire.

MARY BERRIDGE, of Exton in the county of Rutland, made application to me some time in the year 1769, to relieve her of a contraction in the right fore-arm. This complaint had been brought on by the arm being kept too long in one position, when she was sewing; and had made its appearance about ten years before, during which time various means had been made use of to relieve her, but without any effect. On examination, I found the right fore-arm completely contracted, the hand being brought close to the pectoral muscle. The biceps flexor cubiti muscle was, as if in a state of action, shortened, and extremely rigid, and was evidently the sole cause of the contraction. As such a variety of methods had been used, I judged it would be fruitless
fruitless to make any more trials in the same way, but imagined a division of the muscle, similar to that which is used in the wry-neck, might be attended with some benefit. Accordingly, the operation was performed in the following manner: I made an incision through the common integuments, on each side of the lower part of the contracted muscle, and passed a probe in at one orifice, and out of the other. The tourniquet which had been applied, was then loosened, and the muscle being compressed on the probe, I could feel the pulse beat distinctly in the wrist. I took this method in order to avoid wounding the humeral artery. The muscle was then divided on the probe. The haemorrhage that ensued was trifling, and the bleeding soon stopped, without any ligature. The arm could now be brought from its former position, to that of a right angle; so that I was flattered with the hope of succeeding to my wish; but it was unfortunate, that, from the long continuance of the contraction, the sinovia of the elbow-joint had become so acrid (from stagnation I suppose) as to have corroded the cartilages, and even, as it appeared afterwards, to have injured the heads of the bones themselves. Joined to this, the joint swelled.
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swelled, was exceedingly painful, and at length ulcerated. The lower arm likewise became oedematous; so that amputation became absolutely requisite in order to save her life, already in danger, from the weak state she was reduced to, from the pain and discharge of the ulcerated parts. Accordingly, some time in the spring 1770, I took off the arm in the usual manner, three or four inches above the elbow. For a fortnight after the operation, nothing material ensued, except a very considerable discharge of thin matter; which, however, was beginning to lessen, when she was seized with most violent spasms in the stump of the amputated arm. The divided muscles, and the pectoral muscle were principally affected, being thrown into the most violent agitation, as often as the spasms returned, which was every four or five seconds, and gave her most excruciating pain. It is almost impossible to enumerate the different methods that were tried to relieve her, without being able to afford her the least ease. Bark, in all its preparations, was administered in very large quantities; camphor and opium in very large and unusual doses, she taking a dram of opium in twenty-four hours, none of which procured her the least alleviation.
alleviation of her pains. I have often tried the effect of compressing the flap with the tourni-
quet, binding it exceedingly tight, yet could scarce ever perceive the spasms lessened by it. The wound of the flap, during this time, though it had not a very good appearance, had gradually contracted, and would soon have cica-
trized, when I imagined a caries of the bone might possibly be the cause of the spasms. I ac-
cordingly laid the end of the bone bare by a cautic, and a small piece exfoliated, but still with-
out any kind of benefit. I afterwards separated the muscular fibres from their connection with
the edge of the bone, but still with no better suc-
cess. Frustrated thus in all my own attempts, I drew up a plate of the case, and sent it to Mr
White of Manchester, and afterward to Dr Kirk-
land of Ashby, for whose opinions I think my-
selH much indebted. Their advice was strictly
adhered to, but still with no happier effects than
before.

It was now nearly two years from the com-
mencement of my unhappy patient’s sufferings,
during which time she had scarcely slept an hour
at a time, and frequently passed whole nights
without a moment’s rest, and was reduced very
low,
low, and much emaciated, so that her life was much
to be despaired of; when it occurred to me, that
there might be some bony fibres on the edge
of the amputated bone, which, by vellicating the
contiguous fibres, might throw them into con-
traction. I ventured then on one operation more,
and, separating the fibres from the bone, fawed
about half an inch of it off. On examination,
I discovered a great number of bony fibres,
with exceeding sharp points, which had projected in
every direction, and had shot out a considerable
way into the contiguous parts. The wound di-
gested well, and cicatrized in a very short time.
The spasms too ceased from the moment the o-
peration was performed, and she never after-
wards had the slightest return.
DOCTOR Thomas Livingston, physician in Aberdeen, has lately transmitted to Dr Duncan a case extracted from the journal of the Infirmary in that city, which had been the subject of much conversation.

This patient was an unmarried woman, about 25 years of age. When she was admitted into the hospital, the physicians were informed, that, about two years and a half before that, she had been affected with a stoppage of the menses. This was attended with pain in the region of the kidneys and course of the ureters, and with difficulty in voiding her urine. Some months after this, the pains becoming more violent, and being chiefly
chiefly seated in the region of the uterus, she discharged from the vagina a large hard stone of a reddish colour, with a rough scabrous surface, which she said she was certain came from the uterus. From that time, to the day of her admission into the Infirmary, which was on the 28th of March 1777, no less than twenty-five stones of the same kind, were either voided or extracted from the vagina by different people. These stones were of different shapes and sizes, some of them weighing near to three ounces, but all of them extremely hard, and resembling iron-stone in colour.

At the time of her admission into the Infirmary, she seldom voided her urine without the assistance of the catheter; but, upon sounding, nothing particular could be discovered in the bladder. The vagina was in its natural state, and the os tineae neither more nor less dilated than ordinary. She remained about two months in the hospital, during which time, on several occasions, she complained of the pain, and other symptoms which preceded the discharge of stones: And, upon examination, stones were found sticking in the vagina. These were, as formerly, of different weights; but in colour and appearance they resembled
resembled calcined bricks. They were of a rough unequal surface and full of small knobs. Even when the largest were extracted, the os tincae did not appear to be dilated, and no symptom of laceration could be discovered.

These circumstances gave great reason to suspect some trick or imposition. Orders were therefore given, to bestow the strictest attention to her conduct. And, upon a careful search, a stone was found in her pocket, and three or four in her bed, exactly resembling those which had formerly been extracted. Upon this, she was directly interrogated, and at last confessed the whole to be an imposition. She denied that she had any accomplices, and declared, that neither her sister, nor any of her friends, who were allowed to call for her, knew or suspected her intentions. She acknowledged, that the suppression of urine was entirely voluntary, and that she called for the assistance of the catheter, in order to carry on the imposition. Her conduct was represented to the directors of the infirmary by Dr Livingston. She confessed her crime to them also, and was ordered to be dismissed as an infamous impostor.
To this history, Dr. Livingston subjoins the following remarks:

"When I was first informed of this woman's situation, and of the nature of her pretended complaints, I must honestly acknowledge, that I was much perplexed and difficult in forming any rational opinion of such an extraordinary and uncommon case. She had an unblemished character in the country where she resided. She never sought for charity of the public, though several families of distinction shewed her much compassion, in consequence of her fictitious distress. Before I saw the woman herself, I was informed of her situation, by different people, who had some of the stones in their possession, which had been extracted from the vagina, by a midwife in the country. About the beginning of this year, she went to a practitioner in the country, to whom she told her story, and he entertained her in his own family for some time, with great humanity, and extracted two very large stones from the vagina, which he shewed me afterwards. Upon conversing with him on this uncommon phaenomenon, I asked several questions about the state of the uterus and of the os tinea, immediately after the extraction of the stones; but the answers I received were not satisfactory."
satisfactory. When I hinted my suspicions of an imposi-

tion, he was much affronted; and some other people loudly exclaimed, that I had neither charity nor humanity in suspecting the poor distressed woman of such an intention.

I then begged she might be sent to the Aberdeen-Infirmary, where I would bestow every possible attention upon her case, and where she should be treated with care and tenderness; and she was accordingly recommended to my care, by a person whose benevolence and humanity do honour to his high rank in life.

Practitioners cannot be too cautious in forming opinions of uncommon or preternatural appearances. I was exceedingly embarrassed about the proper manner of detecting this impostor; for, though I was convinced from the beginning that her assertions were inconsistent and impossible, yet I durst not venture to declare my opinion, without a convincing proof of her imposition."

* * * *

Although there be many instances of substances being retained, for a considerable time, un-
changed in the stomach, yet we are persuaded, that
that the following account of a late dissection at Edinburgh, will be thought so singular, as to deserve the attention of our readers.

A man, about fifty years of age, who had, for several months, been affected with a sense of pain and oppression about the praecordia, and much vomiting after taking food, attended with obstinate constipation, swallowed two pistol bullets, with the view of procuring a free discharge by stool. The bullets were never observed to be discharged, and his complaints were nothing alleviated. At that time a circumscribed tumour could be distinctly felt, situated a little above the umbilicus on the right side.

In this situation he was admitted into the Royal Infirmary. There several medicines were employed, with a view of relieving his complaints. But, after he had remained about a fortnight in the hospital, as his complaints became daily more severe, he applied to be dismissed, and about eight days afterwards, died at his own house.

Leave was obtained for examining into the nature of this disease, by dissection, after death. This was accordingly done by two students of medicine, equally distinguished for their genius and industry, Mr Seguin Henry Jackson from London;
London; and Mr Samuel Byam Athill from Antigua. The former of these gentlemen had, with great humanity, attended this patient from the time that he left the hospital till his death; and had given him all the aid, of which a case of such a desperate nature could admit. Doctor Duncan was also present at the dissection.

The tumor which had been felt during his life, was found to be a very considerable chisorous swelling of the pylorus, extending about four or five inches on the stomach. It had received, on the outside, a deep yellow tinge from the bile. In the cavity of the stomach, besides a considerable quantity of a muddy coloured fluid resembling chocolate, which had no smell of foci-ces, the two leaden bullets were also found. They had now been lodged there for the space of two months. To all appearance, they were not in the smallest degree changed, unless, perhaps, in colour; for they were rather of a more black tinge than is commonly the case.

The internal surface of the diseased part had a very fungous appearance, and the adjoining parts of the stomach were rather horny or cartilaginous than muscular. The passage between the stomach and intestines was not wider than
would easily admit an ordinary goose-quill. The bullets could be pushed through it when considerable force was exerted. But, without this, they could not be made to pass.

This affection of the stomach was not the only morbid appearance. A large tumor was found lying on the spine. It was about four inches in length, and reached upwards to the diaphragm, being in some measure covered by its crura. From its thickness it nearly touched the cartilago ensiformis. By its bulk it seemed to have pushed the diaphragm somewhat higher, and the stomach rather lower than natural.

On examination, it was found to be an aneurism of the aorta descendens, commencing at the diaphragm, and terminating at the caeliac artery. The vertebrae to which this aneurism was attached, were very soft, and could easily be cut by a dissecting-knife, where the attachment took place.

All the other abdominal and thoracic viscera were in their natural state, except the heart, which seemed to be small. The two morbid parts mentioned above, were given to Dr Monro, in whose possession they now are.

We
We formerly mentioned, that Dr Duncan had set on foot at Edinburgh, an institution for giving lectures on the cases of patients subjected to chronical diseases, somewhat similar to the Collegium Casuale at Leyden. This institution has furnished him with some singular cases, which it is his intention to publish in a short time. And, to each case, he means to subjoin the principal remarks which he offered, with respect to it, in the lecture, of which it was the subject.

About the first of November, he will begin a course of lectures on the theory and practice of medicine; and, at the same time, another course of lectures on the cases of patients subjected to chronical diseases. For the subject of this last course, he will select the most important cases which are treated at the Dispensary. From different considerations, he was formerly induced to confine the case-lectures solely to those who were his pupils for the theory and practice of medicine. Those, however, who incline, may, hereafter, attend the case-lectures alone, for the payment of a separate fee; but such gentlemen as are his pupils for the theory and practice, will be entitled,
as before, to attend the cafe-lectures, without paying any other fee than half a guinea, as medicine-money. Every student who attends the cafe-lectures on either of these footings, will have the liberty of attending the practice at the dispensary, and will have free access to the journals which are kept at that charity, containing the cases of the patients, and the subsequent reports.

Dr Duncan has lately erected a building, for the convenience of his class, on an area in the neighbourhood of the Surgeons Hall, and immediately adjoining to the hall which is the property of the Medical Society. In this building, which is intended for a medical academy, besides a commodious teaching-room, there are several other apartments which will be appropriated to the use of his students in the prosecution of experimental inquiries on medical and philosophical subjects.

* * * *

A new edition of the treatise which was published by the late ingenious Mr John Innes of Edinburgh, under the title of A Description of the Human Muscles, chiefly as they appear on dissection, will soon be put to the press. Mr Innes,
during his lifetime, was at much pains in making corrections, improvements, and additions to this treatise. All these will be introduced into the edition of this work which is now to be published. And it will add not a little to the merit of this work, that his observations have, since his death, been subjected to the examination of a justly celebrated anatomist, from a careful perusal by whom they can sustain no injury.

* * * *

A proposal has lately been set on foot for establishing a public dispensary at Kelso, for the relief of the indigent. A plan for this institution has been lately printed, and distributed through the bounds to which it is intended that this charity should extend. It is proposed, that this institution shall be supported by annual subscriptions from those who possess ability and inclination to do acts of beneficence. And, as those who are the principal promoters of this charity are not only distinguished for such qualities, but also by their high rank in life, there can be little doubt, that this scheme will be carried into execution in the manner most conducive to public utility.

Dr.
Dr John Clarke physician in Newcastle, and Mr John Anderson surgeon there, have lately opened a subscription for establishing a public dispensary at Newcastle, for the relief of the indigent when subjected to those diseases which, by the rules of the Infirmary at that place, cannot be admitted to the benefits of that charity. Soon after this scheme was set on foot, the physicians of the Infirmary opened a subscription for the establishment of a second Dispensary, to answer the same purpose. The content which must be thus produced, may probably be the means of more ample provision being made for the necessities of the poor, when afflicted with sickness, than would otherwise be the case.

An Infirmary is now building in the town of Dumfries, which cannot fail to be a great blessing to the indigent in that neighbourhood. When it is considered that no charity can be more conducive to public utility than the affording relief to the diseased, how much is it to be wished that establishments of a similar nature took place in every
every quarter? And it is probable, that proper exertions from practitioners in medicine might be the means of producing, everywhere, charitable institutions for the relief of the poor in sickness. Wherever there is sufficient employment for a regular practitioner among the opulent inhabitants of any country, it can hardly be doubted, that a fund might be collected, if not for the maintenance of the sick poor, at least, for supplying them with medicines, without incurring an expence which they are little able to defray.

* * *

Dr Daniel Rutherford and Dr James Gregory have lately been admitted fellows of the Royal College of physicians in Edinburgh; as have Mr James Ruscel, Mr John Sheils, and Mr William Rae, of the College of Surgeons at that place.

SECT.
A TREATISE on the management of pregnant and lying-in women, and the means of curing, but more especially of preventing, the principal disorders to which they are liable, &c. The second edition, revised and enlarged. By Charles White, F. R. S. &c. 8vo. London.

Practical observations on the cure of the hectic and slow fevers, and the pulmonary consumption: To which is added, a method of treating several kinds of internal haemorrhages. By Moses Griffith, M. D. 8vo, London.

An examination of a charge brought against inoculation. By De Haen, Raft, Dimsdale, and other
other writers. By John Watkinson, M. D. 8vo, London.

Medical instructions towards the prevention and cure of chronic or flow diseases peculiar to women, &c. By John Leake, M. D. member of the Royal college of physicians London, and physician to the Westminster lying-in hospital. 8vo, London.


Experimental inquiries; part third. Containing a description of the red particles of the blood in the human subject, and in other animals; with an account of the structure and offices of the lymphatic glands, of the thymus gland, and of the spleen; being the remaining part of the observations and experiments of the late Mr William Hewfon, F. R. S. By Magnus Falconer Surgeon and teacher of anatomy. 8vo, London.

Beauties
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Beauties of natural history; or elements of Zoography, illustrated by a great variety of copperplates. 12mo, London.

A treatise on the use and abuse of mineral waters. By Hugh Smith, M. D. 8vo, London.


Discours sur quelques opinions du public, concernant la medecine prononce au mois de mars 1776 devant le college des medecins de Limoges; par M. Royer agregé a ce college, et docteur de la faculté de medecine de Montpellier. 12mo, Limoges.

Eloge historique de M. Vernage; par M. Maloet, docteur regent de la faculté de medecine de Paris, premier medecin de Madame Victoire et de Madame Sophie. 8vo, Paris.

Memoires sur les dissolvants de la pierre, avec quelques problemes de chymie, par M. Duhaume docteur en medecine. 4to, Paris.

Experiences et reflexions relatives a l’analyse du bled et des farines, par M. Parmentier, pensionnaire
fionnaire du Roi, maître en pharmacie, de l'académie royale des sciences, belles lettres, &c. de Rouen. 8vo, Paris.


Flora Parisiensis, ou descriptions et figures de toutes les plantes qui croissent aux environs de Paris. 8vo, Paris.

De pierres précieuses et des pierres fines, avec les moyens de les connoître et de les évaluer; par Dulens de la société royale de Londres, et de l'académie des inscriptions et belles lettres de Paris. 12mo, Paris.

COMMENTARIES.

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Dissertationes medicæ inaugurales, quas ex auctoritate reverendi admodum viri Gulielmi Robertson, SS. T. P. Academiae Edinburgensæ praefecti; nec non amplissimi senatus academici consensu, et nobilissimæ facultatis medicæ decreto,
cret et pro gradu doctoratus, summisque in medicina honoribus et privilegiis rite et legitime consequendis; eruditorum examini subjecerunt, Prid. Id. Junii 1777,

Stanhope Baynes, Anglo-Britannus, De hypochondrias.

Joannes Heyscham, Anglus, De rabie canina.

Joannes Shore, Virginienfis, De fluore albo.

Thomas Ruddimannus Steuart, Scoto-Britannus, De apoplexia.

David Stuart, Americanus, De mania.

Edmundus Laycock, Anglo-Britannus, De Spiritu.

Franciscus Claxton, ex India Occidentali, De haemorrhoidae.

Georgius Bell, Britannus, De physiologia plantarum.

Andreas Meafe, M. B. T. C. D. Hibernus, De cynanche tracheali.

Jacobus Melliar, Anglo-Britannus, De asphmate spasimodico.

Henricus Woolcombe, Anglo-Britannus, De hysteria.

Ellis
COMMENTS.

Ellis Button Metford, Anglus, De colica.

Alexander McLenan, Scoto-Britannus, De morborum feminiis.

Jacobus McNight, Britannus, De variola.

David Campbell, Americanus, De musices effectu in doloribus leniendis aut fugandis.

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