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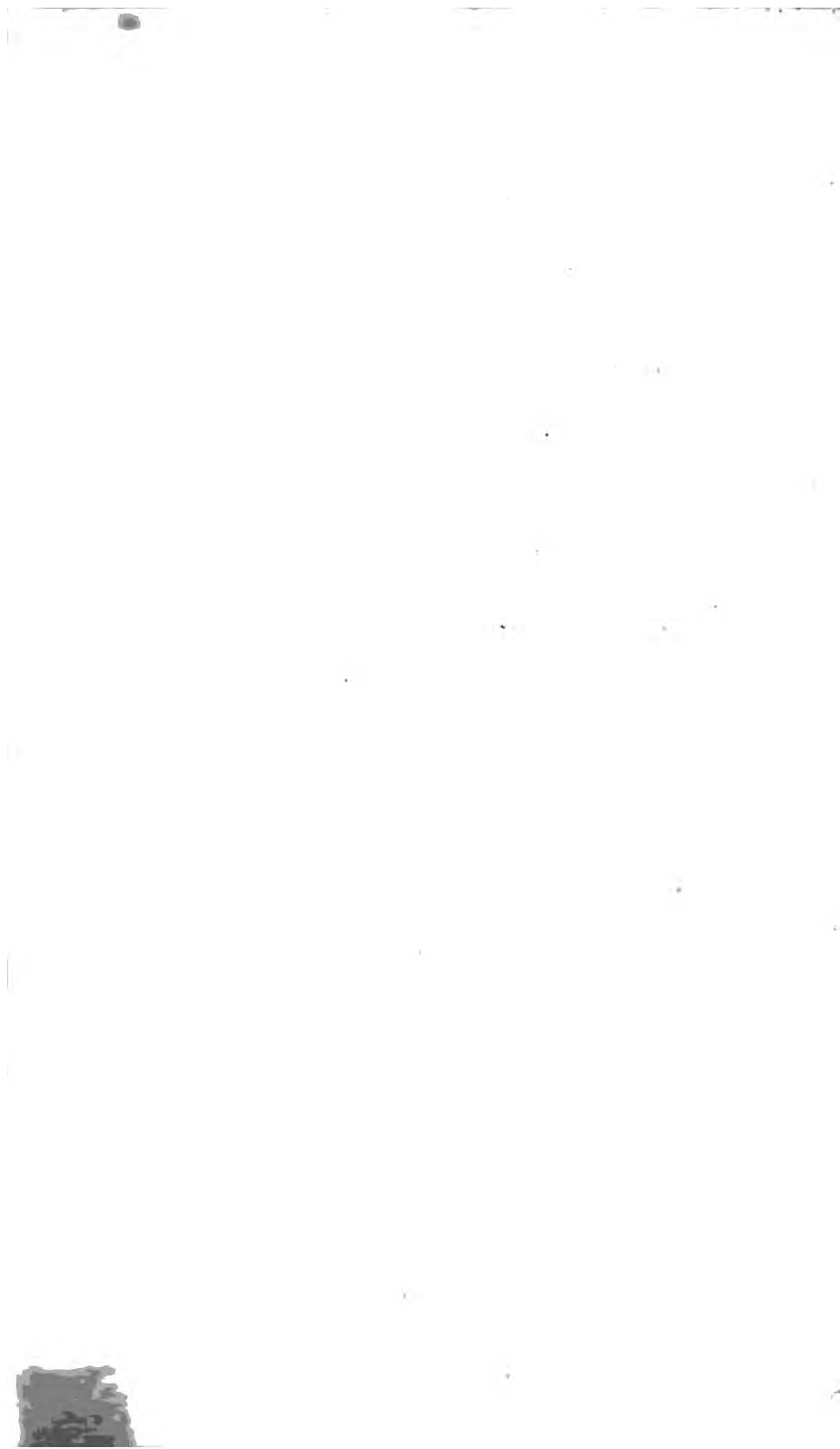
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THE
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CONDUCTED BY

T. BRADLEY, M.D.

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V O L. X.

FROM JUNE TO DECEMBER, 1803.



L O N D O N :

PRINTED FOR RICHARD PHILLIPS, NO. 71, ST. PAUL'S
CHURCH YARD.

[William Thorne, Red Lion Court, Fleet Street.]

[Entered at Stationers Hall.]

THE
Medical and Physical Journal.

VOL. X.]

JULY 1, 1803.

[NO. LIII.]

Printed for R. PHILLIPS, by W. Thorne, Red Lion Court, Fleet Street, London.

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OBSERVATIONS on SELECT SUBJECTS in SURGERY;  
*communicated by Mr. W. SIMMONS, of Manchester,*

ON A CASE OF ABSCESS OF THE LIVER.

**I**NFLAMMATION of the Liver is not an uncommon distemper, and is frequently brought on by excess in the use of fermented liquors. As in other parts of the body, it is here obedient to the several terminations of inflammation; but the one by abscess is to be deprecated, as little less alarming than the original malady. I know not whether it be sufficiently in evidence at present, that, in the suppurative stage, a difference of result may be expected, as the exciting cause is external or internal, or as the abscess is situated upon the surface or in the substance of the viscus; but as the point must eventually be determined by the preponderance of facts, it may not be useless to record the one following.

A chair-maker, of middle age, was employed for nine months together in boring circular holes in the feet to receive the spindles, by which the fore and hind feet of a chair are fastened. In this occupation, the head of the brace or borer had pressed upon the pit of the stomach; and, at length, produced inflammation and suppuration in that portion of the liver lying under it. Of the early circumstances the man himself gave a particular and distinct account; and subsequently report and opinion of his physician, left no room to hesitate of the nature of the case. The enlargement of the belly was chiefly confined to the right side, though latterly it had spread a good way, and in every part a deep seated fluctuation was distinctly perceptible.

Lest a spontaneous rupture might occur, and the matter escape into the abdominal cavity, it was advised in consultation to make an opening without delay. The parietes did not any where protuberate, and in making it, therefore,

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I proposed to approach the seat of the complaint. With this intention, the incision was begun at the pointed extremity of the cartilago ensiformis, and continued downward in the line of the navel to the extent of four inches. An aperture was next made into the containing cyst, and a blunt pointed bistoury introduced, to enlarge it as quickly as possible to the capacity of the external wound. The matter, neither thin nor discoloured, then streamed out very copiously; not less than a gallon of which was caught in a large wash-hand bason, and at least two quarts more were spilt upon the floor of the operation room. He was greatly relieved by the discharge, but as the small lobe of the liver lay conspicuous at the bottom of the wound, the expectations of recovery were very moderate. Light dressings however were applied, and the lips, brought almost in contact, were kept from receding by means of adhesive plaster; and, besides these, the customary precautions after a capital operation were duly regarded. Whatever apprehensions of danger might be justly formed, the consequent symptoms were at no time alarming, and in two months, the discharge of matter having ceased, the wound was permitted to close. Two years afterwards, I had occasion to know that the cure was permanent; nor, in the site of the incision, was there any disposition to hernia. The exposed portion of the liver granulated in a manner more beautiful than I ever saw in any other part of the body.

#### ON THE INCONTRACTION OF AN ARTERY.

In his late work on the diseases of the knee-joint, Mr. Russell has described a complaint which he has been pleased to call, "an uncommon disease," and Mr. Hey has since published many cases of it under the title of "*Fungus hæmatodes*." Hitherto my own experience has been very limited, for I have seen only two cases; but as those have impressed me with an opinion of the nature of the distemper different from either of the above gentlemen, it may not be altogether useless to relate it. The disease is however less novel than had been imagined, as, in his Remarks on Fractures, Mr. Pott had described it, and assigned a *bursten* artery for the cause. Of those two cases, which I have seen, one only fell under my own management, and in that amputation was performed with success. It occurred in a young gentleman, who ascribed it to an over exertion in jumping, as he was sensible of something giving way at the time in his right leg, and, soon after, it began to tumefy in that part. This happened eighteen months

months before I saw him, during which the swelling had progressively augmented in bulk. At that time, it extended from just below the knee to a little above the ankle; and bulged forward considerably; but, though resisting, neither fluctuation nor pulsation could be distinguished in it. From this account it will appear, that there was a good deal of obscurity about it, which it was my first object to remove. To this end the cavity was laid open by a longitudinal incision, which gave vent to a prodigious collection of a gelatinous substance, and exposed the bottom and sides, of which the interosseous ligament constituted the former; and the inner surface of the tibia and fibula, denuded of periosteum, served for the latter. But nothing like muscle could be found, the whole forming one homogeneous mass. As an opinion had arisen that the disease was an aneurism, the anterior tibial artery was sought for; but the trunk of it was destroyed, leaving only just enough after it had passed through the ligament to apply a ligature. This, and several others, the orifices of which were open, were secured in that manner, and great hopes were then entertained of saving the limb. But, on removing the tourniquet, the effusion of blood from the general surface was so great, as to threaten with immediate danger, which, together with the probability of extensive exfoliations of bone, and of a long and exhausting discharge, rendered it expedient to have recourse forthwith to amputation, which was accordingly performed.

My opinion of this malady at that time, and better information has only served to confirm me in it, that by jumping the anterior tibial artery was ruptured, and never afterwards perfectly closed. Any slight exertion would therefore open it again, and occasion a fresh effusion of blood. Nor is this at all extraordinary, for we know that it is sometimes necessary, long after an amputation performed even in consequence of an accident, to apply ligatures still higher up upon the trunk of the artery to stay a more recent hæmorrhage, and sometimes even to repeat it. In one instance indeed the patient was nearly exhausted by its frequent recurrence, and the propensity to hæmorrhage could only be corrected by a diet of milk and vegetables; and several I have known sink under it. From the blood thus effused, the serous portion and red particles are absorbed, leaving the coagulable lymph behind to form the contents of the sac. But as the growth of the tumour, as in the above case, may be slow, it is probable that the quantity of extravasation is limited at each time,

not only by the degree of impelling force, but contrariwise by the incumbent weight and exterior resistance, causes which in their operation would also gradually dwindle both by a partial absorption and an enlargement of the parietes.

The next symptom recorded by Mr. Russell and Mr. Hey that I shall attempt to explain, is a caries of the adjacent bone or bones, an effect which we know may be produced by pressure, even supposing the extravasated lymph not to possess a dissolvent property. However, from the rapidity of the process in general, I should be disposed to favour this opinion; for, although in my own case the bones were merely bare, in the other that I saw, the boney structure within the sphere of its agency was almost entirely destroyed in about nine months.

The issue of arterial blood, which is observable upon parting the masses of viscosity, has led to an opinion that they have an organized structure, but I think erroneously; for, if we suppose the blood to have been recently effused, without undergoing any change, and only to have found a vent by the separation, how easily is that phenomenon resolved? I certainly saw nothing like organization in either case that fell under my observation; and, from every consideration of the subject, I cannot yield assent to the existence of it, until injections have fully established the fact.

The last symptom of which I shall offer an explanation, is the absence of all pulsation in the tumour. And, if we consider the undilated state of the artery, and the thickness of the substances interposed between it and the hand, it can hardly be expected that its motions should be perceived. Indeed, it is rather probable that the sides of its opened extremities are brought nearly together by the causes before mentioned, which would diminish the force of its action correspondently.

In the advanced stage of this complaint, our only resource is in amputation; and even this may fail, if the whole of the arterial trunk is morbidly altered. But, when the cause is external, the early securing of the artery before much mischief is done to the contiguous parts, may be the means of preserving the limb, and give as effectual security against the recurrence of hæmorrhagy, as the tying of the artery after amputation.

#### ON AN INCARCERATED HERNIA DURING PREGNANCY.

A lady, who had been long tormented both with an umbilical and femoral hernia, the latter of which had been often



often strangulated and reduced; in the year 1792, experienced a fresh descent, which proving intractable to the usual means, my assistance was requested. For two whole days every exertion was made to return it, but without success, so that on the morning of the third, she submitted to the operation. About six inches of the ileum were protruded, and a good deal discoloured; however, soon after the replacement, she grew tolerably easy, and in a little while had a motion, which afforded much relief. Afterwards, the symptoms gradually abated, and the wound uniting by the first intention, she was confined only for a few weeks. The only thing remarkable in the herniary sac was the convoluting upwards of the intestine, in consequence of which the portion first protruded was opposed to the efforts by the taxis, and consequently the reduction could not be accomplished in that way. But, during her recovery, there was reason to believe that she was two months gone with child at the time of the operation; and, seven months from that juncture, I delivered her of a fine healthy girl, after an easy and natural labour.

That during the incarcerated state of the intestine, the almost incessant vomiting, the attempts at reduction in every variety of posture, the continuance of cold applications and even ice to the tumour, the clysmata fumosa, and other means, and lastly, the operation itself, should not have produced abortion, is indeed extraordinary, especially when we consider how trifling is the cause of it in many instances, and, when once formed, how difficult is the habit to be conquered.

#### ON A WOUND OF THE TRACHEA.

While some practitioners have looked upon a wound of the trachea as being of little moment; others have regarded it as certainly mortal. Probably both those opinions are in the extreme; because many recover after such an accident, though it is never to be lightly treated. When the inflammation spreads from the wound down the trachea, it produces an extreme degree of danger, a source of it that has not I think been sufficiently insisted upon, on which account I shall subjoin a case that may furnish an instructive example.

A respectable young woman had nearly divided the trachea with a very sharp knife, in a paroxysm of insanity; and, although neither of the carotids was wounded, she lost a good deal of blood. Assistance being at hand, the borders of the external wound were held in contact by a

couple of sutures, till I could see her a few hours afterwards, when she was perfectly sensible, and her mind was tolerably composed. Her head was now inclined forward upon the chest as far as it conveniently could be, and secured in that position by proper bandages. Another suture was also added, more effectually to close the external wound, and over all was given the additional security of adhesive plasters. No symptom of alarm occurred during the first three days; but, early on the fourth, she was seized with the croup. I saw her in the afternoon, and immediately bled her *ad deliquium*, and as soon as she was a little recovered, half a score leeches were applied to the nape of the neck. The symptoms were nevertheless urgent next morning, and, as the pulse would bear it, I bled her again to the former effect. A large blister likewise was laid between the shoulders after the first bleeding, and another upon the sternum after the second. The bowels also were freely emptied by calomel; and fomentations to the feet, and other auxiliary means, were duly persisted in. However, on the third day from this seizure, there did not appear to be the smallest chance of her recovery; but, on the fourth, she began to expectorate; and thence forward the symptoms gradually subsided, and in three weeks the wound was completely healed.

I never saw a case of croup more distinctly marked than this, and it yielded to a similar method of treatment, except in the use of emetics, which, for reasons too obvious to need mentioning, could not here be given.

Although Bronchotomy is an operation recommended on several occasions, yet I have known no instance of the performance of it on the living subject. In the advanced stage of the croup, where benefit has been expected, in my opinion, no solid advantage can be derived. But as the objections which I have to offer are not new, and are so well set forth in Dr. Friend's History of Physic, Vol. I., p. 203, Ed. 3, I trust it will not prove unacceptable to read the passage in this place. It stands thus: "We see how conversant *Paulus* was in the most difficult operations of surgery; and as he seems to understand the nature of the cases he treats of, so we shall find him no less well acquainted with the manner of curing them. I must observe further, that there are some operations he gives an account of, which are neither described nor recommended by any author now extant before him, one of which is *bronchotomy*, or opening the  
wind-pipe



wind-pipe in a violent *quinsy*. The manner of this process he takes from Antyllus, which, because it is new and exact, give me leave to transcribe here. Our best surgeons have described this operation; Antyllus particularly thus: We think this practice useless, and not to be attempted where all the arteries (I suppose he means all the branches of the *aspera arteria*) and the lungs are affected; but when the inflammation is chiefly about the throat, the chin, and the tonsils which cover the top of the wind-pipe, and the *artery* is unaffected, this experiment is very rational to prevent the danger of suffocation. When we proceed to perform it, we must cut through some part of the wind-pipe, below the larynx, about the third or fourth ring; for to cut quite through would be dangerous. This place is the most commodious, because it is not covered with any flesh, and because it has no vessels near it. Therefore bending the head of the patient backwards, so that the wind-pipe may come more forward to view, we make a transverse section *between two of the rings*, so that in this case not the *cartilage* but the *membrana*, which encloses and unites the cartilages together, is divided. If the operator be a little fearful, he may first divide the skin extended by a hook, then proceeding to the pipe, and separating the vessels if any are in the way, he must make the incision. Thus far Antyllus. Paulus adds, that he (Antyllus) thought upon this way of cutting, by observing, (when it was, I suppose, cut by chance) that the air rushed through with great violence, and that the voice was interrupted. When the danger of suffocation is over, the lips of the wound must be united by *saturæ*, (i. e.) by sewing the *skin* and not the *cartilage*; then proper vulnerary medicines to be applied. If these do not agglutinate, an incarnant must be used. The same method must be pursued with those who cut their throats with a design of murdering themselves."

"The operation we see is very clearly described, and some observations extremely proper are made upon it. C. Aurelianus ridicules this operation as fabulous, and as never practised by any of the ancients, and says it is only a rash invention of Asclepiades. *Arctus* mentions it too, but thinks it not warranted by experience; that the wound would endanger an inflammation, cough, and strangling; and if the danger of being choaked could be avoided by this method, yet the parts would not heal, as being cartilaginous! But *Paulus*, I think, answers these objections; and it is certain that some of the moderns have at-

tempted this practice with success: however, it is reckoned a dangerous undertaking." I shall add only one observation to this long extract, which is, that, if a simple incised wound could produce so violent an inflammation of the trachea, as the case of my patient has evinced, what must be the consequence of keeping a silver canula in the opening for several days together, after the operation of Bronchotomy?

I should now have concluded, but for a remark concerning union by the first intention after an operation contained in the next page but one of the same volume, that had escaped my recollection, although it is not quite relevant to the present enquiry. Still speaking of Paulus, whom Dr. Friend places in the year 620, he further observes: "An operation, never described before, is taking off the breasts in men, when they grow, as they sometimes do, to any immoderate bigness. In this case, a good deal of fat, he says, grows underneath, and resembles a woman's breast; and therefore ought to be removed by the hand of the surgeon. The process runs thus: "A lunar section must be made in the lower part of the breast, and after the fat is taken out the skin is to be sewed together. If it is very prominent, and hangs over as in women, there must be two lunar sections made, meeting one another at their extremities; and when the fat and skin are removed, the wound is to be sewed up; and if any thing be left behind, the operation is to be repeated a third time."

So much for union by the first intention, after a surgical operation, as a modern discovery.

#### ON A CASE OF ULCERATED LEG.

In expressing my sentiments on the utility of the plaster-bandage in the treatment of ulcers, which are contained in a former number of the Medical and Physical Journal, my aim was to furnish the practitioner, whose opportunities of trying it are more limited than my own, with such practical intelligence as would conduct him to its successful employment. I have now to offer a solitary case, in order to impress several points on the reader's attention more strongly than before.

In the month of April last, a middle-aged single woman put herself under my care for ulcers upon her right leg of fourteen years standing, the condition of which may be in part conjectured by knowing that she had never obtained any regular assistance for them, but had contented herself with such applications as herself or her friends could

could suggest. The whole of the limb was nearly covered with ulcers, but the larger ones were situated above the inner and outer angle, and occupied a space almost entirely around it. The lips of those two in particular were callous and inverted, and their surfaces, which were foul, yielded profusely a foetid, sanious discharge. And, in addition to these, a deep-seated, indolent tumefaction pervaded the whole of the parts unulcerated. Her general health also was much impaired by the severity of the pain, the long and copious drain of fluids, and from the hopeless prospect before her; for she had long abandoned all thoughts of relief except from amputation. In this state of the case, the plaster-bandage was applied with care from the toes up to the knee, and over it were secured bolsters of cloths by means of a callico roller. She thought the pain rather increased by the first dressing, which was probably caused by the plasters not being drawn sufficiently tight, as, on persuading her not to meddle, she became easier after the second, and subsequently experienced little pain. From that time too the quality of the discharge began to ameliorate, and the deeply ulcerated excavations shewed a disposition to incarn; the callous borders were gradually flattened, and the general tumefaction subsided with haste. The skinning process then became active, and spread with celerity in the usual order from the circumference towards the centre, except in the inner large ulcer above described, which healed inversely though with not less rapidity, from the centre towards the circumference; and within the short space of a month, the whole was completely cicatrized.

This is the most striking example of the speedy cure of so inveterate an ulcer that I have met with, and it hath convincingly demonstrated to me that the production of new skin is wholly independent on any elongation from the border; for in that that healed from the centre, not less than the breadth of my hand had skinned over in a single night, and the new skin continued to expand until it came in contact with the original skin, with which it then conglutinated.

Let me now take occasion to observe, that since I have employed the adhesive bandage in this species of ulcer, the insertion of an issue towards the completion of the cure has been dispensed with. Nor have I observed any inconvenience to arise from the suppression of the discharge; indeed, it is probable from the sudden alteration  
for

for the better produced by compression, that its condition depends most commonly at least on local causes.

#### ON A CASE OF EARLY CATARACT.

It has been generally understood, among practitioners, that the cataract occurring in early infancy does not admit of an operation before the approach of manhood. So prevalent is this opinion, that few, I believe, have undertaken it at an earlier period. But, if it should appear hereafter that it may be executed with success before so mature an age, as the advantages of a more early education would be thereby obtained, no further argument can be required to invite the performance of it. It is with great pleasure, therefore, that I submit the following case to the public attention.

Thomas Worrall, of Lichfield, a delicate boy, nine years of age, was admitted into the Infirmary on Monday the fourth of April last, for a cataract in each eye, that deprived him of sight. They were first discerned at about six months, and, before the end of the year, both the pupils were obscured. As his general habit did not require any preparation, the cataract in the left eye was depressed on the Saturday following, and, on the third day, he could distinguish objects. Nevertheless, at a subsequent examination, I was mortified to find that the cataract had risen again. But, as the dislodgment of it was complete at the time of the operation, and it was so lacerated that even a portion had escaped before the iris, no further attempt was made, and before the second operation the pupil was become tolerably clear. On that day three weeks the cataract in the right eye was depressed, and with complete success. In both these operations, I employed the needle lately recommended by Mr. Hey, whose commendation of it is here fully justified by the event, for neither inflammation nor pain ensued; and the only medicines my patient took, were an anodyne and an aperient draught after the first operation.

I must candidly confess, however, that it has less power than the spear-pointed needle, and is also less fitted to entangle the capsule when adherent; but these objections were successfully combated in the second operation, by passing the instrument quite through the upper portion of the cataract.

*June, 1803.*



*On the NATURE and CURE of the PUERPERAL FEVER;  
communicated by Dr. MOSSMAN, of Bradford.*

IT has been observed that this fever appears on some of the days of the first fortnight after parturition; and that it is more or less fatal according as it takes an early or late date after that period. It exhibits the general characteristics of every proper fever, and is ushered in by similar phenomena. Its approaches are marked by head-ach, lassitude, rigors, flushings of heat, furred tongue, and thirst. Those symptoms are succeeded by nausea, sometimes bilious vomiting, sometimes diarrhœa, pain of the abdominal region, with a soreness extending to the uterus, and frequently to the loins and thighs. The pulse is from 100 to 150, generally feeble and soft; the skin is often dry; the urine is high-coloured, and passed in scanty portions. The most general period of termination is from the fifth to the eleventh or twelfth day. The causes immediately productive of the disease are said to be seven; and every cause has its advocates. If, however, even a very superficial observation shew those causes to be irreconcilable with the acknowledged features of the disease, it ought at least to impeach their validity, and to suggest the probability that they were separately sought up for the purpose of corresponding with a mode of cure previously settled. It is impossible, upon any other supposition, to conceive how causes so different in their operation, and so repugnant to the appearances, both before and after death, could have been adduced to account for the presence of *Puerperal Fever*.

The seven causes are the following:

*An inflammation of the uterus.*

*An inflammation of the intestines and omentum.*

*A stoppage of the lochia.*

*A translation of the milk.*

*A suppuration of the omentum and pus in the abdomen.*

*Infection; and,*

*Lastly, a state of the air favouring the production of this fever.*

If the first of these causes operated in the production of *puerperal fever*, it is proper to expect that *hysteritis* and this disease should correspond most exactly in their symptoms; in the degree of danger, in the mode of cure, and in the appearances after death. For, if a disease be nothing more than an aggregate of certain symptoms, constituting

constituting a whole, to which nosologists agree to give a name; and if the symptoms of *hysteritis* and *puerperal fever* be uniformly similar, there needs no other evidence to prove that they are the same disease. This doctrine, however, has never been contended for; nor could it be supported by facts. The symptoms of the two diseases are dissimilar: the degree of danger attached to each is very different; and so also are the remedies employed. I believe that *emetics* are more frequently recommended at the commencement of *puerperal fever* than any other remedy; and there is a very general agreement among authors respecting their beneficial operation. If this statement be correct, it militates strongly against *uterine inflammation* being the cause of *puerperal fever*; for if it were, a little reflection on the action of *emetics*, would serve to demonstrate, that, instead of being subversive of febrile phenomena arising from inflammation, it would very seriously aggravate the evil. No man, surely, would choose to give an emetic in cases of *thoracic* or *abdominal inflammation*.

The *bark of the cinchona* too, has been recommended above every other power, as an agent curative of *puerperal fever*. The evidence of its salutary influence is given by men of high consideration; and the authorities are so respectable in point of talent and experience, that it is difficult to put them down. If the *bark*, therefore, has been administered, and with great and good effect, even at the very commencement of *puerperal fever*, it certainly bears very strongly against the doctrine of *active inflammation* being the cause of the disease. I shall not adduce the evidence of opium, or draw any arguments from the successful administration of this remedy. The question is still agitated, whether its immediate operation be of *sedative* or *stimulant* agency. The experimenters take grounds so opposite, that, at present, it would be unfair to lay hold of either of its supposed powers to affect the present discussion. The enquiry is of high interest, and will, I have no doubt, be soon brought to an issue. There is one point, however, which I can urge with much firmness, and which to my mind affords very conclusive evidence indeed, that the appearances, after death, in cases of *hysteritis* and *puerperal fever*, are widely different. *Effusion*, *suppuration*, and *gangrene*, embrace, I imagine, the fatal phenomena of *inflammation*. The last of these is found present in fatal cases of *hysteritis*; but I do not know that dissection has ever shewn one well-authenticated



cated case of *gangrenous uterus* where the patient perished by the *puerperal fever*. If such a case ever could be brought forward, I apprehend it would prove nothing; for there is an infinity of evidence to establish that *puerperal fever* has proved fatal, where dissection has not been able to shew *inflammation*, *gangrene*, or *any other morbid appearance of the uterus*.

The same arguments which have been employed to combat the opinion of *puerperal fever* arising from *uterine inflammation*, are also applicable, I think, to the subversion of the second cause which has been assigned; and in addition, it may be observed, that the pains of *intestinal inflammation* are more violent than those which are complained of in *puerperal fever*; and that *bleeding and blistering* have been found effective remedies in the former, but not in the latter disease.

The third cause, a *stoppage of the lochia*, seems altogether irreconcilable with the facts; for the circumstance of the *lochia* being sometimes absent and sometimes present at the attack, and during the progress of *puerperal fever*, shews their perfect independence of each other. This doctrine wants no additional refutation.

The fourth cause seems to stand on ground equally untenable with that now dismissed. The *milk fever*, (as it is called) appears with features very different from those of the *puerperal fever*. Independent, however, of this dissimilarity, there is one fact which seems decidedly fatal to the doctrine of *puerperal fever* arising from a *translocation of the milk*, which is, that this *fever* has been found to attack those women *who have not*, as well as those *who have*, milk in their breasts.

To the fifth cause, it may be objected, that it is impossible for matter to form in the *omentum* so suddenly as to explain the appearances; that were even this supposition probable, the symptoms of *puerperal* do not in any respect resemble those of *hectic fever*; and what puts the matter beyond all doubt, that there has been no appearance of the formation of pus proved by dissection.

The fallacy of the sixth opinion is sufficiently evident from women being seized with *puerperal fever* in situations where contagion could not be supposed to operate or to exist; and from its not seizing upon women who have their abodes with those labouring under the disease. The poison of this contagion would surely not so speedily operate as to be productive of febrile phenomena on the second day; but if it were so pestilential, would it not  
more

more generally seize upon those exposed to its power? It is true, that there is strong evidence of *puerperal fever* being epidemic in hospitals and other places; but this proves no more, than that causes similarly circumstanced will very often produce similar effects. The anxiety of women at the period of parturition, the increased irritability of the system, the increased action of the absorbents, the secretion of milk, the too frequent additional degree of heat, applied both in the way of food and cloathing, will all, more or less, share in exciting febrile action, without seeking for any principle of contagion, or accounting for the appearances, on a supposition that certain states of the atmosphere are productive of the disease: and I am fully persuaded, that a cool air in a lying-in chamber, will very generally prevent, and its opposite very frequently induce, the phenomena of *puerperal fever*. It is impossible to account on any other principle for the well-known fact, that *puerperal fever* has been chiefly confined to small apartments and small hospitals; and that since the lying-in chambers have been made more airy and more commodious, and the hospitals larger, the disease has seldom, if ever, been epidemic. It is certainly true, that the most injurious atmosphere to lying-in women, is that created by their attendants.

I am now to speak briefly of the mode of cure, and finish the discussion by considering the *puerperal* as a *proper fever* only, and by advising the varied means which may be applicable to combat the varying symptoms of febrile action.

Every author who has seized upon a proximate cause, explanatory of *puerperal fever*, has also laid hold of a correspondent mode of cure.

The instruments which have been chiefly employed are the following:

*Bleeding, emetics, laxatives, opium, diaphoretics, camphor, blisters, the warm bath, and bark.*

*Bleeding.*—If we believe the evidence of authors, this practice has been attended sometimes with beneficial, and sometimes with injurious effects. I am of opinion, however, that the employment of this power, in the commencement of any fever, unless where there is local pain, and the existence of inflammation positively ascertained, is always a hazardous, generally an injurious measure. The management of every proper fever, on its accession, requires much caution and skill; and perhaps none so much as the fever under discussion. It was a doctrine among the  
ancient

ancient Jews, "that in the blood was the life;" and were the same doctrine current now, I think with the ingenious JOHN BELL, that "it would be cruel and unnatural to disturb it." I have certainly observed that the commencement of *puerperal fever* is marked by features more strikingly phlogistic than those we meet with in most proper fevers. I am prepared to expect those appearances even in habits of extreme delicacy of fibre; but yet I think the employment of the lancet a most hazardous experiment; for I have observed, that after the third or fourth day, there is a greater prostration of strength, and a greater tendency to *typhus*, than in any other fever. Were I to follow this observation by enunciating an opinion, it would be this, THAT THE LANCET SHOULD NEVER BE EMPLOYED.

If any affection of the chest be connected with *puerperal fever*, or if there be any local pain, I am persuaded that these symptoms may be safely and speedily obviated by the application of *leeches* and *blisters*. In a subject of so much interest, I should wish to be correct; and I really think I have seen as much mischief occasioned by the loss of a few ounces of blood in the commencement of *puerperal fever*, as has followed the loss of the same quantity from the lungs in the last stage of *phthisis*.

*Emetics*.—How emetics operate in the incipient stage of *puerperal* and other fevers, I do not determine; but a very enlarged experience has, in my mind, placed their beneficial influence beyond a doubt. The *vinum ipecacuanhæ* is the instrument which I have for many years employed; and in numerous instances I have witnessed its powers to be apparently subversive of the phenomena of fever. In those cases where it has failed to produce this effect, it has, I think, generally lessened the febrile symptoms, and diminished the danger. I conceive *ipecacuanha* to be infinitely more safe, and more solutive of fever than *emetic tartar*. In *puerperal fever*, it is well known that the bowels do very generally partake of the irritability of the system; and the tendency of *emetic tartar* to pass off by the bowels is also well known. The extreme degree of sickness too, which *emetic tartar* frequently produces; and the alarming tumefactions of the abdomen which it sometimes occasions, demand, I think, much caution in its use.

*Laxatives* have been recommended, and they have been reprobated. Their warmest advocates wisely advise the mildest of all. The *oleum ricini* and the *sal catharticus amarus* are of this description, and have been administered for

for removing what has been called "the compressing faeces;" for abating the supposed inflammation, and for relieving the distressing head-ach. I am, however, clearly of opinion, that even those weapons, however mild, should be employed by a sparing and by a skilful hand. If they be administered, it should be in the most guarded doses; and their use should never be extended beyond the second or the third day. After those periods (and perhaps at all others in habits of much delicacy) it will be more safe to keep the bowels in a soluble state by means of clysters. It must have occurred to every practitioner to observe, that even small doses of a *cathartic*, in an irritable state of the bowels, have produced such commotion as occasioned much distress, and required potent means to allay.

*Opium* has also been administered in *puerperal fever*; and there is much evidence for and against it. I do not mean now to decide whether it possess *stimulant* or *sedative* powers; I shall only observe, that if it be *stimulant*, this effect is of short duration; for in a few minutes after it has been administered, I know that my patients experience its *composing* or *sedative influence*. I have, perhaps, taken as much *opium* as most men living, and whether I have taken it as an experimenter, or to allay pain (whatever its primary effect may be) I have generally felt its *anodyne* or *soothing* power in the space of a few minutes. In a map of the *materia medica*, I would lay this celestial drug and *digitalis* in the vicinity of each other. In *puerperal fever*, I think, I have administered *opium* with great and good effect. It diminishes the irritability of the system, more especially that of the stomach and bowels. It produces sleep, and excites a gentle perspiration. It lessens the velocity of the pulse; but as the pulse feels stronger, as it is slower, it is not possible to judge of the precise force of the artery without an invention for the purpose.

I have also witnessed the efficacy of *opium* in obviating or in relieving delirium,

*Diaphoretics* have been used, and have been advised by men of high authority. My own experience, however, has taught me to believe, that if they are employed, it should be at the commencement of the fever, and that the selection of the particular instrument employed should be made with great care, and used with great judgment: for if the power employed affect the stomach, or seize on the bowels, it will occasion much mischief, by increasing the irritability of the one, and the debility of the other. Again, if the instrument employed be successful, and if the discharge from



from the skin be profuse, and at the same time not solutive of fever, it may impair that vigour which may be wanted at a more advanced period of the disease.

If the cure be attempted by the skin, towards the termination of the fever, it will, by its debilitating operation, infallibly hasten the fatal crisis.

Finally, from what I have observed, I am well persuaded, that if judicious management ever make *diaphoretic* remedies useful, it must be at the very commencement of *puerperal fever*; and that at a more advanced stage, they ought not, under any pretext, to be employed.

*Camphor* has also been administered for the cure of *puerperal fever*; but, as the general *experience* and *experiments* relative to the operation of *camphor*, in this and in other fevers, have not been able to settle its qualities, I think it ought not, by any means, to be admitted to a share of the treatment of a disease so frequently and so speedily fatal.

*Blisters* have had their friends and their enemies; and men of splendid reputations have spoke of them as a beneficial and an injurious application. This want of agreement seems to arise from an anxiety to effect a correspondence between theory and practice. The fact, I am persuaded, is this, that where *blisters* are indicated by the presence of local pain, their employment will seldom disappoint the practitioner; and I know from experience, that where any violent fixed pain has seized upon the abdomen, no power whatever will so speedy, safely, and effectually relieve it as the application of *blisters*; but I also know, that not only in *this*, but in all *proper fevers*, their employment is mischievous, unless indicated by local disease.

The *warm bath* had, and, I believe, still has its partizans; but practitioners, I think, ought to pause before they advise this measure; for much of its operation must hinge on a variety of circumstances; the degree of heat employed; the state of the patient's pulse previous to immersion; the stage of the fever; the habit of body; the duration of the operation; the degree of pain, tension, &c. &c.

It has been observed, that the *warm bath* produces a calm, and disposes to sleep; but is this the effect of exhaustion? Again, is the application of *warm water* primarily *stimulating*, and eventually debilitating in its operation? Further, has it been proved by experiment that the application of *cold water* is solutive of fever? Is it possible that opposite powers should be productive of similar effects?



Upon the presumption of local inflammation in the region of the uterus or abdomen, is heat, in any form, a judicious application? Do we introduce into the room of the patient cool air? Do we remove the bed curtains, and other furniture preventive of a free circulation? Do we remove the heat of the fire? Do we advise cool drinks and a cool regimen? Is the application of hot water either generally or partially, reconcilable with those maxims of cure, and those directions? Finally, have we observed the distressing paroxysms of *gout* and *rheumatism* very constantly increased by hot fomentations, or the application of heat in any form?

I am anxious to dwell on the mischievous effects which I believe to attach to this practice; for none is more common for nurses to employ, or for medical men to enjoin, than hot and moist application to the region of the *uterus*, when even there is any degree of pain or tension in the parts enclosing that organ. It is true in medicine, as well as in other departments of science, that errors are often found to maintain their ground because of their antiquity; for opinions, whether ill or well founded, are subverted with much difficulty, when they have received the sanction of time.

The last remedy which I shall notice is the *bark of the cinchona*. The *bark* has been employed at every period of the fever, and by some, even at its very commencement. There are few men, perhaps, in the profession, who prescribe more *bark* than I do; but I do certainly believe that the *bark* is never to be administered with advantage, seldom with impunity, either in this, or in any other fever, till a remission of symptoms, or a partial subsidence of febrile action has taken place.

It is well understood by every man who has employed the *bark* in the cure of intermittents, that it is never safely nor beneficially employed, till a compleat solution of the febrile phenomena has taken place. When the *cold* and the *hot stages of ague* have passed over, then, and certainly not till then, is the *bark* to be administered. In *puerperal fever*, independent of the certainty of its increasing the febrile action, such is the irritable state of the stomach and bowels, that if it be not rejected by the former, it will generally pass off by the latter. I know, by experience, however, that there is a period of this, and every continued fever, when the *bark of the cinchona*, judiciously combined and guarded, will exhibit effects strikingly salutary.

I have thus briefly noticed some of the instruments  
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which are thought to hold the first ranks, as curative agents, in the treatment of *puerperal fever*; and I shall conclude this paper by subjoining a few remarks on the same subject.

By the information which I have collected from authors, from my medical friends, and from my own experience, I am strongly impressed that physicians have been led into error by not treating *puerperal* as a *proper fever* only. They have sought to establish specific causes, productive of specific phenomena, and they have exhibited much anxiety to have *puerperal* considered specifically different from every other *fever*. A close attention, however, to *puerperal fever*, will, I think, shew that it claims all the general features in common with proper fever; with the addition of some circumstance connected with, or consequent of parturition. Observation, practice, and dissection are corroborative of this opinion; and I am convinced that medical efforts would be more successfully directed, were they only exerted to assail symptoms, as is done in the management of proper fever.

I have already observed, that the first approach of *puerperal fever*, (even in constitutions of the greatest delicacy) is marked by a diathesis apparently more phlogistic, and by a greater degree of irritability, than what generally occurs in other fevers; I have also observed that there is a more early change of type, and more early tendency to debility, than commonly occurs in other cases; I have also stated, that the stomach and bowels are seized by a great degree of irritability; that there is generally a soreness of the abdomen, and region of the uterus more or less extended, and often accompanied by an inability to pass the urine. These may be denominated peculiarities; but, with the exception of these, a *puerperal fever* appears to me nothing more than a common continued fever, and ought to be similarly treated. Were it a *symptomatic fever*, as has been contended, the affection of the abdomen would precede the fever, which it certainly does not; and the fever would not be so suddenly fatal.

Upon the whole, I assail *puerperal* with the same confidence that I do any proper *fever*; and tied down by no theory, I combat symptoms as they occur. I employ a *cooling regimen*, *emetics*, and *laxative clysters*; I give *nitrous medicines* variously combined, with *acids* and *alkalis*, either in a *neutralized* or *effervescing* state. At a more advanced period, I give the *bark* of the *cinchona*, *always* combined with small doses of *opium*. If ever I employ *blisters*, I do it with a view to remove *local disease*, not to combat

the *general operations* of fever. This is briefly the practice I pursue; but as there is still no settled creed respecting the *proximate cause* and the *cure of Puerperal Fever*, I hope that some future inquiry will be excited respecting a disease so very fatal, and when so, attended with circumstances peculiarly distressing.

I am, &c.

Bradford, May 1, 1803.

GEORGE MOSSMAN.

MEMOIR on the CAUSE of HUNGER and THIRST, by C. L. DUMAS, M. N. I. Professor of Anatomy and Physiology, in the University of Montpellier, and lately communicated to the Medical Society of that Town.

PHYSIOLOGISTS, says the author, have long looked for the proximate cause of hunger, and they have alternately attributed it to mechanical, physical, and chemical causes; to overturn all of which, it is only necessary to oppose the influence of habit, imagination, and will.

The friction of the membranes of the stomach in a state of emptiness; the compression of the nerves occasioned by the sinking in of the muscular fibres; the increased volume of the liver and spleen, owing to the afflux of blood in the splenic and hepatic vessels; the increase in quantity and acrimony of the digestive liquors, such were the explanations given to this sensation. The author observes, that however empty the stomach, its parietes cannot move or produce any friction so as to become painful; and he asks, what resemblance can this motion produce to the constant sensation arising from a want of nourishment? And though this sensation be produced by friction, he asks, how it happens that the quantity and choice of our aliment becomes limited? It should not, he conceives, be directed to the use of such or such a substance, to the exclusion of every other; and hence he concludes, that a physical or mechanical cause can never explain that taste or preference connected with this sensation.\*

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\* We are as little disposed to admit a mechanical or physical explanation of hunger as the author; but we cannot think him happy in the objections he brings against it, in as far as that taste or preference for particular food, as well as the limits of our appetites, depend for the most part on education, experience, and habit.

The same refutations, he thinks, overturn the opinions that hunger arises from a chemical cause, as the acrimony of the humours, &c. Admitting such explanations, we should ask, why we feel the sensation of hunger at particular hours? Why all those causes which give a new direction to our sensibility should suspend it, &c.?

The author thinks that the explanations given of thirst are not more satisfactory. This sensation is increased by all those causes which deprive the blood of its aqueous humours. The accumulation of these fluids in the great cavities, when the lymphatics are unable to re-absorb and throw them again into the mass of blood, is another powerful cause which increases the intensity of this sensation. Dropsical people reckon this among the most tormenting of their symptoms. Inflammatory diseases, but particularly inflammations of the viscera, are attended by thirst. The same circumstance characterises febrile diseases, hæmorrhagies, and all those that seem particularly to affect the vascular system.

The effects of thirst act particularly on this system, which is proved not only by the redness of the lips and tongue, the dryness of the palate, fauces, and throat, but also by the thickening and inflammatory disposition of the blood. Though the sensation of thirst increases rapidly, still it is supportable for a much longer time than that of hunger. The examples of abstinence from drink for a number of days or months are sufficiently numerous. After reflecting on the phenomena of hunger and thirst, I soon perceived, continues the author, the insufficiency of the hypothesis which I have just mentioned; I occupied myself daily in searching for an explanation more satisfactory. I tried to form an opinion free from all conjecture, and which should tally with those facts which I had been at considerable pains to collect; and, lastly, I wished to support my notions by some experiments which should establish their truth.

Hunger and thirst, says the author, suppose certain modifications of the nervous system; but here, as well as in other kinds of painful sensations, they are not always owing to the same cause, nor are they produced by some original alteration; hunger he conceives to relate more to the lymphatic system, thirst to the vascular; one is connected with a penury of nutritious fluids, the other with a superabundance; the first shews a diminution of force, the second an increase; the former is asthenic, the latter sthenic. In hunger, the absorbents act on the sensitive system, The blood-vessels act on this system in thirst. Ali-



ments become necessary to the renewal of the different substances of the body, as well as its forces, and to increase in the fluids the quantity of albuminous and fibrous parts. Drink becomes necessary to moisten the solids, to dilute the fluids, to temper the vital energy, to remedy the too great thickening, &c. of the concrete parts of the blood. The phenomena of hunger, and the great influence this has on the habits and passions, prove that it is a nervous affection immediately dependant on sensibility. Wounds of the brain and ligatures of nerves bring on a loss of appetite. Whatever engages the mind, whether painful or otherwise, suspends the sensation of hunger. The author tells us that these several considerations first suggested to him the idea, that hunger was but a modification of the nervous system; but the nervous system is closely connected with the lymphatic; and he conceives the same proofs are in support of his second notion, that hunger particularly affects the lymphatic system. These considerations he thought sufficiently interesting to merit further inquiry; and the author gives an account of some experiments which tend to throw light on his doctrine.

EXP. 1. A large dog had been deprived of all kind of aliment for eight days, during which time small quantities of opium were administered. At each dose, and for some hours after, the animal ceased to complain.

EXP. 2. A similar dog was made to fast for several days; he became furious; a mixture of opium and camphor was thrown to him, which he devoured immediately, after which he became more calm, which the author availed himself of to give the same mixture in smaller doses; by degrees the animal's hunger was so completely appeased, that he refused nourishment when offered.

EXP. 3. The author gave, in large quantity, oil emollient decoctions, warm water, &c. to a number of dogs, who had not received food for a length of time; these means, though they diminished for a moment the torments of the animals, yet they soon returned with an increase. If instead of these relaxing substances, tonics, spirits, aromatics, or cold water be given, the effect is different; the hunger is appeased, and the power of abstinence prolonged.

EXP. 4. A solution of super-oxygenated muriat of mercury, given in moderate quantity, was found to diminish hunger; and dogs, to whom this substance had been often administered, were observed to lose their appetite. The author



thor concludes from these experiments, that opium, spirits, aromatics, mercurials, &c. not only prevent hunger, but also appease it. The activity of the absorbent system is likewise diminished by the same substances; the same causes, he observes, act in the same way, and produce the same effects on the lymphatic system and on hunger, there must therefore be an intimate connection between the two, and which seems to be further proved by the following experiment.

EXP. 5. Four dogs, of the same size and age, were taken, and deprived for many days of solid food. Three were killed at separate periods, the fourth was permitted to die of hunger. On opening the first, the stomach was found contracted, the viscera displaced, and a quantity of drink, which had been given a short time before his death, was entirely absorbed. The appearances in the second were similar, except that the proper liquors of the stomach, the gastric juice, &c. were not found in the usual quantity, being in a great measure absorbed. In the third, all the gastric and pancreatic juices, all the mucus of the intestines, and even the serous fluid of the peritoneum were absorbed, all the viscera of the abdomen was shrunk up. In the fourth, the appearances seemed to indicate that the absorbents had begun to act on the solids themselves; the inner surface of the intestines seemed to be attacked in many points, the absorbent vessels were seen exposed, and their power of absorption continued a long time after the death of the animal.

These facts, the author adds, unite with the observations of practitioners in shewing the concurring influence of the nervous and lymphatic systems on the sensation of hunger; they also prove the asthenic nature of this affection, and serve to elucidate the causes of hunger. M. Dumas observes, 1st. That opium diminishes appetite but increases thirst. 2d. That spirits rather irritate than appease thirst. 3d. Fever from artificial excitement, as well as fever from local inflammation, were always followed by thirst. 4th. Having appeased the hunger of a dog without permitting him to drink, and after suffering from thirst a long time, which at length became excessive, a saturated solution of nitrate of potash in water was given to him; his thirst became immediately quieted. The same experiment was repeated on two other dogs; to one, a quantity of pure water was given, of which he drank a great quantity, and a considerable time was necessary before his desire ceased; a pint of the solution of nitre in water was sufficient

ent to content the other. Nitrous salts, the author observes, debilitate the vascular system, and diminish its action, and for which reason they are useful in fevers, where the febrile state in general is confined to this system. I found, says M. Dumas, that bleeding often, and in small quantity, alleviated them; and he thinks, as well from observation as from experience, that thirst as well as hunger, is an affection of the nervous system, but owing to a very different cause; and that these two sensations have, with respect to the animal body, a very different object and end. I have endeavoured however, he says, to determine by one other experiment more precisely my ideas on the subject; and in consequence of which, I do not hesitate to conclude that thirst is a nervous sensation arising from the influence of the vascular system, and partaking of the sthenic or inflammatory character.

A number of dogs were deprived of drink; such food only was given as was capable of irritating them; when their sufferings from thirst were at the highest pitch, a large quantity of blood was taken from one of them; thirst was for the moment quieted, but what appeared more important, was, that the blood threw up a thick inflammatory crust. Another dog was killed in the midst of his torments, and the marks of inflammation were evident on most of the viscera; some parts seemed to be threatened by gangrene, and the heart and vessels were full of a thick coagulated blood, as is observed in the neighbourhood of inflamed parts. The author concludes by telling us, that he had undertaken a set of experiments with a view to determine what were the best means of exciting hunger and thirst; but he hesitates to assert that it will be found that hunger is excited by every direct stimulus of the nervous and lymphatic systems, while thirst will be produced by stimulating the vascular. A variety of considerations and objections to our author's conclusions and reasoning will arise in the mind of the intelligent physiologist on perusing this Memoir, and which it is unnecessary to suggest. The experiments, however, are not without interest.

We only think it useful to observe, that M. Dumas is author or rather compiler of a very elaborate System of Physiology, and that, as a professor and practitioner, he enjoys the first character in the Medical School of Montpellier.

*On the CAUSES of IRRITABILITY and EXCITABILITY; by  
M. DE LA MELHERE. Communicated by our Corres-  
pondent at Paris.*

IN the present state of human acquirements, this question is one of the most interesting in Physiology, but it is one of extremely difficult solution; with a view to lessen these difficulties, the author offers some reflections. The errors which we refute as well as those we commit, he observes, lead often to the truth. He begins by laying down certain facts. Irritable parts, he observes, taken out of the body, preserve for a considerable time their motion. The heart of a frog or of a turtle, will beat for an hour after separation from the animal; but even when these motions cease, they may be renewed for some instants by various means. 1st. By heat, the effect of which in reproducing the motions in the parts of animals, induced Goodwin to conclude that caloric was the principle of excitability. 2d. By light, which has the same effect as caloric; it is well known that animals kept long in the dark lose their energy and excitability. 3d. By oxygen, as well as every body which contains it. Humboldt has shewn that the heart of a frog, which had discontinued to beat, was again excited to action by plunging it in superoxygenated muriatic acid. If it be afterwards dipped in a sulphuret of potash its motions cease. Girtanner even pretends that oxygen is the principle of irritability. 4th. By Galvanism. 5th. By electricity. In order to discover, says the author, the causes of these phenomena, let us enquire into the nature of the substances which can act on the animal fibre; such as, 1. Heated bodies and caustics. 2. Moisture and dryness. 3. Galvanism and electricity. 4. The particular structure of the fibre, which seems to contribute.\*

*Of Heat and Causticity.* Animal fibres are very sensible to the impressions of heat; a piece of skin or leather, brought near the fire, contracts and moves with some force.† Caustics act on the animal fibres and produce the same

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\* The author does not include either the elasticity or tone of the animal fibre.

† The author does not take into consideration the same phenomena in vegetables, and between which, as well as their cause, he conceives a very close analogy to exist.

same effects; acids and caustic alkalis crisp and contract the skin; caustics, he says, act by the heat they contain.†

*Of Moisture and Dryness.* Animal matter, says the author, such as the hair, whale-bone, cat-gut, &c. are very sensible to humidity and dryness; this also exists in vegetables. Glutinous, albuminous, and gummy substances are also affected. The inhabitants of damp climates have the fibre soft, and but little tense; the contrary is the case in dry climates. Moisture and dryness should therefore be considered to act on the excitability of animals.

*Of the particular structure of the fibre as the cause of excitability.* It has been supposed that the nerves were made of vesicles; that these circulated a fluid; that when this fluid was abundant, it swelled these vesicles, and shortened, &c. such as is observed in physics; but anatomy has proved nothing of this kind in the structure of nerves. Reil, who paid much attention to this subject, believes the nerves to be made up of a membrane which forms a number of anfractuosities, in which is deposited the medullary substance.

*Of Galvanism and Electricity.* This is a subject, observes the author, likely to throw much light on the properties of muscles. Galvani observed with astonishment, that the muscles of frogs were thrown into strong contractions when they were touched by metallic substances which also were in contact with their nerves. This experiment has been varied in a thousand shapes. Volta constructed a pile made up of disks of different metals with layers of cloth interposed. He found, 1. That these metals were electrified by simple contact. 2. That this electricity was positive in the one, and negative in the other. 3. That this

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† We cannot agree with any part of M. De La Melherie's reasoning on the action of heat or caustic on animal matter; the contortions and motions produced on the application of heat, &c. to the skin and leather are owing either to the sudden evaporation of moisture which they contain, or else to a motion arising from decomposition. Heat, after a certain degree, acts on animal matter as it does on common matter, by separating its component particles; and caustics we believe to act by a chemical decomposition similar to what takes place in a variety of other instances, where the principle of irritability is out of the question. The author, in considering heat and caustics as one cause of excitability, has surely mistaken his ground, unless he attaches to the term *excitability*, a meaning different from its general acceptation. That heat acts on excitability, we know, can and does take place; but that it causes it, is a language neither correct nor admissible.



this power was increased by certain substances, as, for instance, by water impregnated with salt. 4. That water was decomposed, and oxygen and hydrogen were disengaged. 5. That the electric spark might be obtained by its means. 6. That metals were oxydated. 7. That this pile produced the same effects on animals as were observed by Galvani.

Humboldt afterwards shewed, that there may be obtained from the frog, Galvanic contractions without the intervention of any metal; and from which he concluded, that nerves had a galvanism different from muscles; that in the body of animals there was a continual passing of galvanic fluid from nerves to muscles, and vice versa. Aldini made this experiment on a larger scale; he separated the head from the trunk of an animal, laid bare the cervical nerves of one side and the muscles of the trunk of the other, and established the communication by means of a frog which he held in his hand. Violent contractions were the consequence.

La Grave made an experiment which, while it confirmed the opinion of Humboldt, throws further light on the question. He formed a pile of disks, alternately, of the substance of the brain and muscle, as in those made of zinc and copper; commotions were in like manner produced. This experiment proves that the substance of the brain is in a state of electricity different from the muscle; but as nerves are dispersed through every part of a muscle, a kind of natural galvanic pile is formed. Vasali had already observed, that the different fluids of the human body were in different states of electricity, and which varied in health and disease. Geoffroy, speaking of the electric organs of the torpedo, says, that its organs are formed of a great number of aponeurotic tubes ranged parallel to each other round the bronchiæ, and fixed at their base by common ligaments of an hexagonal or pentagonal form. These prisms are filled by a soft transparent substance, which receives a great quantity of nerves; this substance, as well as the nerves, is a conductor of electricity, while the aponeurotic tubes are non-conductors. In the gymnotus this apparatus is towards the tail. In the silurus the electric organ forms under the skin a sac which envelopes the entire fish; these apparatus are pierced by a number of nerves, which come from different parts of the body. It appears warrantable to conclude from this, that in all animals the brain furnishes the nerves, and these again the muscles, with a soft pulp, analogous to what is observed

observed in fish. This substance is susceptible of Galvanic electricity, as is proved by the experiments of Lagrave. Humboldt thinks, that the brain separates the Galvanic fluid. The identity of the electric and Galvanic fluids seem to be sufficiently proved; we must therefore conclude that the brain furnishes the nerves with a nervous pulp containing a great quantity of Galvanic or electric fluid, and that this viscus, so voluminous, filters a particular liquor, which is the nervous, and which also contains a great quantity of Galvanic fluid. When we exercise much, this cerebral pulp loses its Galvanism. A frog, frequently excited, loses its Galvanism, but renews it on resting some time. The reason is, that the nerves and muscles have time to acquire a new quantity of electricity. The means by which these losses are restored, are: 1. Rest; a too long state of rest, observes the author, fatigues, because the electric matter is accumulated in too great quantity. 2. By sleep; this, so much more powerful as the state of rest, is more complete. 3. By moderate heat, which increases the activity of the Galvanic fluid; we know that by heating the cylinder of an electric machine, the effects become more active; in the same way it is that electricity gives energy to the nerves and muscles. 4. Light produces the same effects as heat. 5. By friction, which also promotes Galvanic circulation. The author asks, how is it that Galvanism and electricity produce muscular contraction and excitability? Some physiologists, he remarks, have looked for an explanation of contraction and excitability, by a different combination of animal principles, i. e. hydrogen, oxygen, carbon, azote, phosphorus, &c. Gallini started this opinion, in which he was followed by Gauthier, Vait, Girtanner, &c. Humboldt, who also adopted it, instituted many experiments, with a view to discover the combination which took place during the contraction of fibres. He thinks he can demonstrate that the irritability of animal matter does not depend on the quantity of oxygen which the body contains, but that the azote and hydrogen play at least as important a part, and that the degrees of vitality depend only on the reciprocal balance of chemical affinities. Of all the elements of which animal and vegetable matter is made up, there are certain principles which seem necessary to excite irritability. 1. Oxygen, which enters into different combinations with the acidifiable bases. 2. The acidifiable bases of which the fibre is composed are carbon, azote, hydrogen, phosphorus. The Galvanic fluid favours their combinations, as the electric does that of oxygen and azote

*Mr. Robertson's Case of Suppuration in the Omentum. 2.*

azote to form nitre. Let us suppose a fibre composed of a certain number of particles, such as the acidifiable bases, carbon, azote. The arterial blood carries oxygen; the Galvanic fluid, disengaged in passing from the nerve to the muscle, favours the combination of oxygen with the acidifiable bases, a combination takes place and the fibre is shortened, and for this reason it is that no motion takes place where the nerve or artery is tied.\*

[ To be continued. ]

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*A CASE of SUPPURATION in the OMENTUM, succeeded by a PNEUMONIC INFLAMMATION; by W. ROBERTSON, one of the Surgeons to the Kelso Dispensary.*

**MR. THOMAS D.** aged 47, of an athletic make and full habit of body, by business a farmer; on the 18th of August, 1802, while in the field attending his labourers, was seized with a violent pain above the right ilea, extending up that side to the epigastic region, which continued so severe upwards of an hour, that he had great difficulty in getting home. After he had been some time in the house, the violence of the pain abated.

On the 6th of September he called on me, and stated the above particulars. The origin of his complaint he imputed to cold, caught in consequence of his having changed his flannel drawers, which he had been in the habit of wearing, for cotton ones on that day. He mentioned to me, that though following his ordinary employment, he found himself unwell; and, from that date, he complained of a stiffness attended with some degree of pain in the abdomen, concerning which he wished to take my advice.

At that time I could perceive nothing materially wrong, either in the state of the pulse, or in the part complained of. As he was of a plethoric habit of body, I suggested to him the propriety of his losing a little blood and taking some cooling cathartic medicine, to which he readily agreed. I took about twelve ounces of blood from the arm, upon  
which

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\* M. Humboldt should have explained the cause which produces the sudden separation of the oxygen, and which we suppose he intends should account for the phenomenon of relaxation.

30 *Mr. Robertson's Case of Suppuration in the Omentum.*

which there was no size, and administered two doses of physic, composed of the pulv. jalap. compos. ℥ij. calomel, pt. gr. v. M. each, to be taken at proper intervals; by which, if his complaint was not relieved, to let me know.

I heard nothing of him till the 17th of September, when he called, and told me that he found the stiffness in the abdomen increasing, accompanied with a swelling that gave him great pain whenever he moved himself. Upon a careful examination of the part complained of, I discovered a hard tumour, in size nearly equal to a goose egg, deeply seated a little above the umbilicus in the lower part of the epigastrie region, inclining a little to the right side, which gave pain when pressed. I mentioned to him, that a gentle mercurial course, with a strict adherence to a cooling regimen, was the only means hitherto found useful in discussing these indurated tumours. But as I could not pretend to say what might be the termination of such a swelling, for his own satisfaction, I wished him to take the advice of some other medical person, to which he assented. That gentleman, in addition to what I had prescribed, was of opinion that hot baths of sea water might have a tendency to expedite the discussion. He was also ordered to rub about a scruple of the ung. merc. fort. into the part affected twice a day, to use the baths every day, or every other day, as he found it agree with him, and to take a cup full of salt water every morning to keep his bowels regular. During the use of these prescriptions, he passed an uncommon quantity of urine of a very turbid nature, highly loaded with a lateritious substance. The mercury, in seven days, affected his mouth so much as to bring on such a degree of salivation as obliged him to discontinue it. He went ten times into the bath; but finding himself much weaker, and at times subject to fainting; his complaint still increasing, he returned home, after being absent a fortnight.

I visited him the day following, and found the tumour not only increasing but also occasioning a great deal of pain. He was likewise seized with a nausea, which did not allow any kind of food to remain on the stomach. He was ordered to take the saline effervescent mixture, and a number of leeches were applied over the surface of the tumour, alternated with poultices composed of hemlock, oatmeal, vinegar, and camphorated oil. As no aperient medicine would sit upon his stomach, his bowels were kept open by emollient injections. He was also ordered to live upon a light nourishing diet. Notwithstanding the use of these discutient measures, the tumour still continued to increase



crease in size and hardness. His case now appeared very alarming. Mr. Russell, Surgeon, of Edinburgh, was desired to visit him. At that time the tumour occupied most of the epigastic region, inclining considerably to the right hypochondriac. The tumour, both in situation and point of feeling, had assumed the appearance of a diseased schirrous liver, although it had none of the other concomitant symptoms of that complaint. After a very minute examination, Mr. Russell could not say whether it was of a schirrous nature, or might terminate in a suppuration. The patient was directed to take daily two drachms of Rochel salts dissolved in a cup full of water, and an anodyne at bed time, both of which his stomach rejected. As the tumour was still increasing in size, the hemlock poultices were exchanged for emollient ones, which were frequently renewed and alternated with warm fomentations. At last, an obscure fluctuation was observed, and it became a little prominent about half an inch above the umbilicus, inclining rather to the left side, where an opening was made of more than an inch in length on the 26th of October, by the advice and in presence of Mr. Benjamin Bell, Surgeon in Edinburgh, and Dr. Douglas, Physician, Kelso. From the opening, about a pint and a half of a very foetid matter was discharged. The state of the parts was examined by introducing the finger into the orifice, and, as far as it could reach, the omentum appeared diseased and indurated, with sinuses running in different directions. The wound was dressed and an emollient poultice applied over the whole. During the course of the disease, the pulse never seemed to deviate from its natural state, in proportion to the violence of the disorder. The patient being very much emaciated, was desired to live on a full diet, consisting chiefly of rich soups, and to take a certain quantity of wine daily. Half a drachm of the pulv. cort. peruv. among two ounces of the saline effervescent mixture, with four drops of L. L. to cause it to sit upon his stomach, every two hours was ordered. A considerable quantity of matter was discharged every time the wound was dressed, but a very great degree of hardness still remained.

In the course of a fortnight his recovery was very rapid. From being unable to move himself, in that time he acquired so much strength as to walk across the room unassisted. The discharge soon began to diminish, although every mean was used to keep the wound open, both by tents and the application of warm poultices. The part affected

### 32 *Mr. Robertson's Case of Suppuration in the Omentum.*

ected then began to enlarge, accompanied with pains similar to the former, and assumed the appearance of a fresh suppuration.

On the 22d of November, he was attacked with a violent pain in the left side, about the middle of the false ribs, which struck across his breast, and sometimes to his back, attended with cough, hæmoptoe, and great difficulty of breathing. His pulse being full, he was immediately bled. Sixteen ounces were taken from his arm, which was exceedingly sizzly. He had a cooling cathartic composed of Rochel salts and manna. A large blister was applied to the affected part. The pain shifted higher in his breast. The bleeding was frequently repeated. In six days he lost four pounds four ounces, all sizzly. He had four large blisters applied to the different parts of his chest before the pain and difficulty of breathing were relieved. He was ordered to take daily a drachm of nitre with two of cream of tartar dissolved among a pint and a half of thin gruel; his bowels to be kept open by taking a cup full of an infusion of senna, manna, and tamarinds, every night at bed time. He was allowed for diet nothing but panada, gruels, tea, and vegetables. By the evacuations, he was so much reduced that he could not be moved for eight days, without being threatened with fits of syncope.

After the pains abated, he still continued the use of the nitre and cream of tartar for the space of six weeks, and along with them a pill, consisting of half a grain of calomel every night at bed time. Under this mode of treatment he began to recover gradually, though slowly. He was much distressed with a teasing cough, for which he was ordered the use of ass-milk. By continuing it for a length of time, the cough left him. During this last illness, the former complaint of the abdomen was but little attended to, as his situation in other respects appeared so alarming, that his life was, in a great measure, despaired of. The great degree of hardness that was felt before the attack of the pulmonic affection, began gradually to diminish. The wound was kept open as long as possible; it, however, at last closed; at present there is scarcely any of the hardness remaining.

He now follows his usual employment, appears healthy, and has acquired his former fulness of habit. He has not, however, ventured upon any other diet than broths, milk, and vegetables. Nothing of his complaints now remains, except, at times, a difficulty of breathing. Whether this is occasioned by dyspepsia, or by an enlargement of some of the abdominal viscera, time alone can determine.

A CASE

*A CASE of HERNIA CONGENITA, by Mr. W. ROBERTSON,  
One of the Surgeons to the Kelso Dispensary.*

**JOHN TURNBULL**, æt. 17, of a delicate habit of body, a taylor by trade, had been occasionally subject to a scrotal hernia from his infancy to the age of twelve years, when using any uncommon exertion; but by the application of a bandage properly adapted to the part, it entirely disappeared for nearly the space of five years. On the 18th of September, 1802, being the harvest time, he ate a great quantity of green peas, which disagreed with his stomach, brought on a violent reaching and vomiting; in consequence of which exertion, his complaint returned in a very violent form, attended with much pain in the part. He continued in that state till the 20th of the same month, when the assistance of one of the medical faculty was requested, who bled him freely, and used other means for its reduction, without effect. On the 22d, I was desired to visit him, and found him in great distress, complaining of great pain in the part, a constant reaching and vomiting of every thing he received into his stomach, with a total obstruction in his bowels; his pulse was full and strong. I bled him almost ad deliquium animi, immediately after raised his feet over a person's shoulder that was standing, and caused his body to be a good deal agitated in that state, and afterwards attempted the reduction of the hernia, but without success. He was then ordered to lay constantly with his feet and breech raised higher than his head, and to keep linen rags, doubled three or four times, constantly wet, with a cold saturnine lotion at the part; a position and application which I have seen in several instances attended with happy effects. He was likewise ordered to have an injection of warm water, with soap dissolved in it; and after its operation was over, to have injections of tobacco smoke alternated with one of warm water and laudanum frequently repeated, at the same time to take a smart dose of calomel and jalap, which his stomach rejected; the dose was administered a second time with no better success. I visited him on the 23d, found all applications ordered had failed: He was then put into the warm bath for a quarter of an hour. After coming out of it, the reduction was again attempted without being able to make any alteration in the part, which was now become exceedingly painful. When handled, there was likewise a great degree of pain and tension over the whole abdomen.

(No. 53.)



men. His situation now became very alarming. On this I held a consultation with Dr. Wilson, of this place, and Messrs. Bruce and Jack, surgeons. Having taken his case into consideration, and found that all the means that are generally applied with advantage in similar complaints, had been used in vain, we were unanimously of opinion, that an operation was the only chance which remained to rescue him from death, which seemed to be fast approaching.

The danger of his situation being explained to himself and his friends, an operation was proposed as the only resource left, which he agreed to.

He was laid in a proper position, having previously prepared what was necessary for the occasion.

I began the incision about half an inch above the top of the tumour with a scalpel, and carried it nearly to the bottom of the scrotum, the extent which the rupture occupied. The cellular substance and the vaginal coat were laid open, by raising upon the directory the fibres by parcels, and dividing them with a pair of sharp scissars, which I found a preferable instrument to the probe pointed bistoury commonly used, both for safety and expedition. Having cautiously scratched a hole in the hernial sac, there issued out about six ounces of a sanious coloured fluid; the opening being enlarged, the testicle was exposed to view. In order to prevent it from falling out of the scrotum, and to exclude the air, I was under the necessity of stitching the under part of the incision, which secured the testicle compleatly till the rest of the operation was finished. The sac was then laid open its whole length. The contents consisted of a large portion of the omentum of a livid black colour. The portion of gut was about the size of a walnut, and of the colour of a tamirand stone; though of a very bad appearance, it was thought advisable to reduce them, with an idea that they might recover their colour after being returned into their natural situation.

The protruded parts had acquired such a size by the inflamed state they were in, that it was found impracticable to effect the reduction without enlarging the opening at the ring, which was done with the scissars, directed by the fore finger. After the reduction was accomplished, and the lips of the wound drawn close together by adhesive straps, and other proper dressings applied and secured by the T bandage, he was carried to bed and laid in a proper posture. He was ordered a little wine negus, and an emollient injection, which procured a plentiful evacuation from  
his



his bowels. Upon visiting him two hours afterwards, his pulse was become quite hard and full. He was then bled to the extent of twelve ounces. The blood was sizzly. He was ordered a cooling cathartic, composed of salts, senna, and tamarinds, which operated freely, and gave him great relief. After this, matters seemed to go on pretty well. The wound was dressed on the 26th, looked well, and almost healed by the first intention.

On the 27th, he was seized with violent shooting pains, with an increase of the tension over the whole abdomen, with a constant vomiting of every thing he took into his stomach, and with a total obstruction of his bowels, so that no injection would pass. He became quite restless, and his pulse more full and frequent. He was bled again in the arm; but lest too much blood might be abstracted from the general mass, a great number of leeches was applied over the whole of the abdomen, which was also to be frequently fomented with emollient decoctions. The pain still continued. A large blister was applied, which rose well, but the abdomen still continued to increase in size. The total obstruction of his bowels and vomiting continued the same. His countenance became ghastly, his pulse hectic and feeble; nothing but death was daily expected. Mr. Jack, who lived in the neighbourhood, and visited him daily, when dressing the wound, observed a large tumour pointing at the part where the incision was made for the operation; on this, he introduced a trocar and canula and drew off nearly four pounds of matter. The swelling of the abdomen diminished considerably. He had on the same day, got nine grains of calomel made into two pills, with two grains of the extract of opium, which operated powerfully after the evacuation of the matter. For a long time afterwards, he was troubled with a colloquative diarrhoea. The stools being of a very dark colour, and having a foetid smell, for which he had a few gentle doses of rhubarb with an opiate at bed time. The wound continued to discharge a good deal of matter daily. In the course of the discharge there appeared at the wound a decayed substance, which was laid hold of and pulled out. It proved to be a portion of the omentum, measuring about eight inches in length and two in breadth, of an irregular shape. In some subsequent dressings, two smaller portions came out. He was ordered a nourishing diet, consisting of rich broths and a portion of wine daily. After the diarrhoea left him, he was put upon a course of the decoction of the bark acidulated with the sp. vitriol. dilut.

The hectic fever began to abate, the wound healed up, and he recovered his strength daily, and is now quite healthy and following his employment.

Is it not reasonable to suppose, that in the above case, from the great distension of the abdomen, that the omentum was in a high state of inflammation before the operation was performed, and that by the vigorous prosecution of the antiphlogistic plan, the viscera concerned in the disease were brought into a state of suppuration, and prevented from running into gangrene, and that by these means the life of the patient was saved?

Would not the same termination have taken place, allowing that the diseased portion of the omentum which was included in the sac, had been cut off?

The whole of the matter that was evacuated at different times, was calculated at five pounds. Is it not likely that this great quantity of matter pressing by its weight upon the bowels, was the cause of the vomiting and of the total obstruction of the bowels? It may appear a little surprizing why I performed most of the operation with the scissars, an instrument never mentioned by writers on surgery as a suitable one for that purpose; but whoever tries will find them a very convenient one, as they cut the parcels of fibres raised upon the directory much more readily than the bistoury commonly in use, and they are certainly safer and more expeditious in the hands of those who have not had much practice in this operation.

**OBSERVATIONS on the FEVERS of HOT CLIMATES; communicated by Mr. P. O'BERNE, late Surgeon of his Majesty's Ship *Cerberus*.**

**T**HE more severe in symptoms, and dangerous in effect, any disease is, the more necessary the investigation of and researches after methods of cure must be fully impressive on every mind; it is scarcely necessary to add, that perhaps none comes more strongly under this description than that generally termed Yellow Fever, none therefore more interesting claims your attention.

In the commencement, generally nausea, pain in the head, loins, and hams, succeed; dry surface, increased pulse, but not to be depended on, varying from 80 to 140, chills, anxiety, sighing, prostration of strength; vomiting soon.

soon takes place, and not unfrequently is the first indication of the disease. The vessels of the tunica conjunctiva become turgid, and a yellow tinge of that membrane takes place, frequently extending over the body. Notwithstanding this circumstance gives rise to the name usually given this complaint, it is by no means a constant attendant, and in many totally wanting. Watchfulness and desire of sleep, without being able to effect it; whilst in others, constant dozing, pain and sensation of heat in the stomach, great thirst; vomited matter gradually changes from yellow to dark green, and at length perfect black. Clammy skin; sometimes petechiæ, but unfrequent; stupor, or violent delirium succeed; paroxysms of vomiting become more rapid, and many expire in one of those paroxysms too shocking to describe, whilst others placidly resign exhausted nature.

No disease perhaps exhibits a greater variety of symptoms, and often less to be depended on than this; sometimes it goes on with every favourable appearance, suddenly changes to the worst, and patients, apparently almost in a state of convalescence, expire in an hour or two. This is a melancholy fact.

The symptoms that we may call favorable are, settled state of the stomach, lessened head-ach, eyes lively, formation of pustules over the surface, or that eruption known in tropical climes by the name Prickly Heat, I have ever remarked as almost a certain indication of recovery; bilious flux, copious and high coloured urine, free perspiration, and sound sleep.

The dangerous, and I am sorry to add, most common symptoms, are severe head-ach, frequent vomiting, heat increasing to a burning sensation, extending down the trachea and alimentary canal; matter vomited and fæces becoming dark, frequent sighing, dull or glassy eye, pale and little urine, dark furr on the tongue, muscular and nervous debility, intermittent pulse, clammy feet, cold sweats, stupor or violent delirium, singultus, coma.

That dark matter vomited, termed Black Vomit, it may be necessary to remark, although laid down by most authors as a certain fatal sign, is by no means so, as I have seen many recover after it; it is also said, "that a diarrhoea almost precludes any hopes of recovery." If by diarrhoea is understood a simple (or bilious) flux, I have ever observed it a decided fortunate event; certainly a flux of putrid dark fæces is extremely bad, and yet even this I have many times seen prove salutary.

On dissection, I have universally found the coats of the œsophagus and alimentary canal corroded; rectum frequently separated from the surrounding muscular substance, and stomach and intestines loaded with black fetid matter. Inflammatory appearance of the membranes of the brain I never saw in the true Yellow Fever, the stomach being evidently the chief seat of the disease.

The most material comes next to our view, and it is painful to say often the most dispiriting; for surely nothing can be more so to a medical man, than to find his utmost exertions in vain, and unremitting attention unsuccessful; it is a melancholy reflection, that the utmost assiduity cannot counterbalance, nor in many instances even mitigate the effects of these baneful climes; however, let even this, instead of damping, stimulate us in the most beneficent of human pursuits, that of endeavouring to alleviate the sufferings of our fellow creatures.

Our first and principal attention should be directed to clearing the first passages, and to keep them free during the disease, being of the greatest importance.

Emetics are by many laid entirely aside on the principle of increasing the already irritable state of the stomach. That a great deal of caution and discrimination in their use is extremely necessary, must be allowed; but I am decidedly of opinion much benefit is to be obtained by them. Where nausea or slight vomiting occurs, ipecacuanha is the best; but if the vomiting be more severe, an infusion of chamomile will answer every intention.

Cathartics; calomel combined with pulvis jalapii is perhaps one of the best; the irritating quality of the neutral salts seldom make them advisable.

Blood-letting has been advised by some of the most respectable authorities, I shall therefore only observe, I never saw it used with advantage; on the contrary, always thought it of disservice.

Our next intentions must be directed toward lessening the irritable state of the stomach, supporting the strength, and resisting that tendency to putrescency that exists in this disorder.

Notwithstanding the great variety of opinions that have been, and still are on this subject, calomel will still perhaps be found the most successful medicine hitherto employed, and in general I have but little doubt its want of success in many instances may be attributed to the manner of giving it, or want of attention to the state of the bowels, Calomel, if not given in large quantities quickly repeated,  
and



had better not be given at all; I have used from five to eight grains every two hours, (and sometimes every hour) combined with three grains of the pulvis antimonialis, until a diaphoresis was induced, when the latter was omitted, and the calomel continued until the effect was evident, as metallic taste, fetid breath, or sore mouth. When a gentle salivation is raised, desist in frequency, yet continue so as to keep up the effect of the mercury; the criterion of its success may be determined by its action or non-action. When a speedy and copious salivation comes on, the most happy effects may be looked for; while the contrary prove the reverse. And here again let me observe, that the most minute attention must be paid to keep the bowels free, for which purpose enemas are by far the best.

The kali preparatum, given in a state of effervescence with lemon or lime juice, I have used with great benefit in allaying the heat and lessening the irritable state of the stomach; a solution of magnesia, arabic gum, and mint water, I have found eminently serviceable for the latter purpose.

Blisters, although uncertain, are of great utility both in preventing delirium and lessening vomiting, applied to the region of the stomach.

General warm bath is of the utmost service, or where that cannot be conveniently had, washing all over with warm water.

Of all remedies in use for this disease excepting calomel, perhaps none are of more real service than enemas, and the more simple the better, such as warm water, oil, and vinegar; but on the increased vascular action and heat subsiding, enemas composed of orchis, sago, or portable broth; this last I have found of such uncommon service as makes me wish most strongly to impress the use of it; in many cases where animation seemed nearly exhausted, recovery was the unexpected and welcome effect of this salutary practice.

Opium I have found of little if any service in any stage; this however must be left to circumstances, the acuteness of pain in some instances may require its use, and I never perceived any bad effects caused by it.

Camphor where severe head-ach and depression of spirits occur, I think of much service; and in the latter, vitriolic ether.

Cinchona appears to me evidently of disservice until the patient is in a convalescent state.

Quassia in a cold infusion is a grateful and most useful

medicine during convalescence, and here the cold bath is highly serviceable.

The diet from the first should be nourishing and light. Gruel made from the orchis with burnt bread and Madeira, is in general an acceptable beverage; wine should be used with great caution; also all kinds of acids, which when used sparingly are grateful and serviceable; but if used too freely are of real detriment; the utmost precaution must be taken to prevent the patient's strength being too much lowered, to which many fall victims after the fever being totally removed; and among the modes of prevention, I know of none equal to the enemata of portable broth, which will be found most beneficial. I shall conclude by observing, that in a disease like this, whose progress is so rapid, we require to be actively alive to every alteration, and our treatment equally quick.

*To the Editors of the Medical and Physical Journal.*

GENTLEMEN,

SO many methods having been proposed for preserving the Vaccine Virus, that practitioners appear undetermined which to adopt; and as your valuable publication holds out the best channel for communicating the result of experience in the different modes, I beg leave to offer my testimony in favour of that described by Mr. Dennett, in a former number of your Journal. A similar one was lately offered to notice in the same work, which appears not to possess any superior advantage, and partakes less of the simplicity of the former.

I have at different times received quills from Mr. Dennett, for myself and others, my medical friends, and have found that the virus thus kept, to answer more decidedly than any other which I have seen noticed. As this is a matter of great importance to practitioners, particularly those who practice at a distance from London, I request for it a place in the Medical and Physical Journal.

I am, &c.

*Hambleton, May 12, 1803.*

W. HAINES.

*To the Editors of the Medical and Physical Journal.*

GENTLEMEN,

FROM the earliest period of Vaccine Inoculation, I have paid every attention to it so important a discovery appeared to merit; and experienced at the first commencement (as other practitioners with myself must have done) the difficulty of preserving the virus: of course, every method proposed for this purpose was attended to by me, and now I have no hesitation in giving preference to the mode pointed out by Mr. Dennett in your Journal, which I have adopted for twenty months past. No other plan that I have seen or read of, can be put in competition with this, in my opinion, except that lately proposed by Mr. Ring, to which some objections may be made, as being more complicated. Mr. Ring advises a tooth-pick or ivory lancet, instead of a round pointed quill, as described by Mr. Dennett, and inserts it by puncture rather than by slight incision. But every one must be apprized of the difficulty of keeping the point of the tooth-pick long enough in the puncture for the virus to dissolve, if *quite dry*, when a restless child is to be inoculated, which appears to me the reason the lancet so often fails; but from the pliability of the quill in rubbing it over the incision, this objection is done away. I must beg also to observe, what appears a material objection to the observation of Mr. Ring with regard to his new instrument called the Vaccinator, with which he says, that if well charged, more than *one* person may be inoculated. I believe it would be impossible to adopt this with satisfaction, as, from the first inoculation, some blood must of necessity be left upon the point of the instrument, and few *parents*, under such circumstances, would like to have it employed. But which ever mode gentlemen may prefer, is of little consequence when compared to the certainty of keeping it active by this means, as I understand Mr. Dennett used in February last a single quill charged in June, 1802, which answered perfectly. This must prove of great value to the institutions about to be established, as large quantities may be kept at little trouble and expence.

I have to apologize for troubling you with these remarks, but they have arisen from a conviction of the benefit Medical Gentlemen will derive by attending to the method proposed.

I am, &amp;c.

No. 11, *Vine Street, Piccadilly,*  
May 12, 1803.

J. GAILLARD.

**EXPERIMENTS relative to the ANALYSIS of OPIUM;**  
*by Mr. BUCHHOLZ, Apothecary at Erfurt.*

[ Continued from Vol. ix. p. 403. ]

**EXP. XXIV.** **O**N mixing this spirituous solution with an equal portion of water, a black matter was immediately precipitated, and the solution remained clear; but on adding another part of water, it became turbid; and when the proportion of the water to the spirit of wine was as 8 : 1, a limy and pulverulent matter was separated, while the mixture lost its colour almost entirely.

**EXP. XXV.** Ninety grains of the residuum of opium, from which all soluble matter had been extracted by water and spirit of wine, were infused twice successively with two ounces of vitriolic ether. The residuum being carefully dried, weighed 67 grains.

**EXP. XXVI.** Forty-six grains of resinous particles, obtained from a portion of opium, which I had some time before analysed, were infused with two ounces of alcohol, and boiled for a quarter of an hour, by which means the alcohol became strongly tinged. Having repeated the experiment, I separated 5 grains of a light brown pulverulent matter, besides which the solution of the resin yielded one grain more of the same substance, which treated together with 30 parts of vitriolic ether, proved to be insoluble, and likewise when boiled with 50 parts of distilled water, 100 parts of spirit of wine dissolved not quite two parts of this matter, the residuum receiving a lighter colour, and being soluble with still greater difficulty.

**EXP. XXVII.** This matter was easily soluble in concentrated nitric acid when heated, whereby a similar smell was disengaged, as when animal parts are treated with this acid. Water, however, again separated it. It was likewise easily dissolved in caustic lye; the solution had a dark brown colour, and emitted the smell of animal gluten: it separated itself by the addition of some nitric acid.

**EXP. XXVIII.** A solution of iron rendered the solution of this matter in alcohol somewhat darker, but did not blacken it. From these experiments it seems to result, that this particular matter consisted of a combination of gluten with resina.

**EXP.**



**Exp. XXIX.** The above-mentioned 67 grains (Exp. 25) were treated with 160 gr. of caustic kali, and 4 ounces of distilled water in a boiling heat, during which operation a matter was disengaged, smelling like an animal substance when ready to putrify. The whole, except 10 grains of a lamellous, or fibrous matter, was dissolved. The solution being filtrated, was of a brown colour.

**Exp. XXX.** Having sufficientlyedulcorated the matter which remained on the filtrum, I gradually saturated the kali with muriatic acid, by which means I obtained a brown viscous precipitation, weighing 5 grains when dry. Thrown on living coals, it emitted the smell of horn; and burnt in a crucible, it left a glossy coal, which could be with difficulty calcined, and after which some calcareous earth remained.

**Exp. XXXI.** I evaporated the solution in which the remaining 52 grains were contained, to dryness, by which means I obtained muriat of kali, and the blackish viscous matter, smelling like burnt animal gluten, and being soluble both in water and spirit of wine; whence it appears that the greatest part consisted of animal vegetable matter or gluten.

**Exp. XXXII.** One hundred grains of the residuum of the watery extract, (Exp. 21) were incinerated in a clean crucible, from which a reddish mass remained, weighing about 0,035, which boiled in two ounces of water for a quarter of an hour dissolved, 0,01 excepted. I boiled this grain with 3 drops of concentrated nitric acid, and half a drachm of distilled water, by which it was dissolved. On adding to it a portion of a solution of muriat of barytes, it was troubled, and also by the addition of oxalat of kali, &c. from which it appeared to contain gypsum, aluminous earth, and iron.

**Exp. XXXIII.** The watery solution, containing the 0,025 saline parts was evaporated by a gentle fire, by which 2 grains or 6,02 regular crystals of sulphat of kali were obtained, the rest consisted of sulphat of lime. No free kali could be traced.

**Exp. XXXIV.** Sixty grains of the residuum from the tinctura thebaica were boiled with 16 ounces of very pure vinegar to 8 ounces, by which 10 grains were dissolved. The residuum of 50 grains was again boiled with 20 ounces of vinegar; but though this was continued for above an hour, nothing had been dissolved. It contained the gluten and the Koutshoock matter. I had undertaken this experiment

ment for the purpose of ascertaining the opinion of some chemists, that the residuum remaining after the spirituous and watery extraction, is soluble in vinegar, which however seems not to coincide with these experiments. In order to examine which menstruum is the most proper for the solution of opium, according to the knowledge of this substance acquired by the foregoing experiments, I made the following trials.

Exp. XXXV. Two hundred and fifty grains of opium, cut into small pieces, were digested with 4 ounces of alcohol, and the same quantity of distilled water, for 24 hours, and at last boiled for two hours, whereby the liquor was deeply tinged. I poured the mixture on a filtrum, adding to it a similar mixture of alcohol and water, as long as it run through coloured. I mixed the residuum with one ounce of alcohol and the same quantity of water, and boiled it together for half an hour; the residuum weighed 45 grains, after being edulcorated and dried; whence it appears that all resinous particles are contained in this solution, otherwise the residuum would have amounted to 68 or 69 grains, which was its quantity when I had extracted the opium by water only. It is probable, that the saponaceous and gummous particles contained in the spirituous solution promote the solution of the resin in weak spirits of wine, as it appears from the above described experiments, how difficult it was to extract the resinous particles entirely by alcohol.

Exp. XXXVI. Two hundred and fifty grains of the best opium being pulverised, were digested for 12 hours with 8 ounces of Malaga wine, and afterwards gently seethed for two hours, filtrated, and the residuum edulcorated with the same wine and some water. The experiment was repeated with the residuum and three ounces of Malaga, but the liquor seemed not much to have been impregnated with opium. The rest, which was not soluble, amounted to 54 grains. Both the spirituous as well as the vinous solution had, after some days, deposited two grains of gluten.

#### *Results of this Analysis of Opium.*

1. Opium contains the following constituents, and in the subjoined proportion.

*a* According to the experiments 1, 5, 6, 16, &c. in 500 grains, 178 gr. of extract, both soluble in alcohol and water, or saponaceous extract.

*b* According to the experiments 1, 5, 6, 16, &c. 152 grains of gum, only soluble in water.

*c* Ac-

c. According to the experiments 8, 9, 10, &c. in 500 parts, 45 parts of which are only soluble in alcohol.

d. The eighth part of these 45, seems to be resin, intimately mixed with gluten, according to the experiments 22, 23, 24, 26, &c.

e. Opium contains, according to the experiments 12, 13, 15, 25, in 500 parts, 24 parts of Koutshoock matter.

f. According to the experiments 29, 30, &c. from 50 to 60 grains of vegeto-animal matter, or gluten, in 500 grains, and some ligneous matter.

g. According to the experiments 20, &c. 30, &c. about 2 or 3 per ct. of sulphat and muriat of kali, sulphat of lime, some aluminous earth.

h. According to the experiments 1 and 2, volatile narcotic matter = g.

These constituents, calculated according to 100 parts, will make,

|                      |       |
|----------------------|-------|
| 1 Saponaceous matter | 35,60 |
| 2 Gum — —            | 30,40 |
| 3 Resinous particles | 9,—   |
| 4 Koutshoock matter  | 4,80  |
| 5 Glutinous matter   | 11,40 |
| 6 Ligneous substance | 2,—   |
| 7 Loss — —           | 6,80  |
|                      | <hr/> |
|                      | 100   |
|                      | <hr/> |

2. The saponaceous matter seems to render the solution of the resinous particles of opium much easier even in weak spirit of wine.

3. The best menstruum for opium is a mixture of equal parts of alcohol and water, by which all the soluble particles of opium are extracted and united. Hence it appears, that the prescription of the Edinburgh dispensary for preparing tinctura thebaica is the most proper, and the best calculated for extracting all the active parts of opium.

4. According to experiment 3, it seems probable that the volatile particles which affect the organs of smell, do not contain the principal virtue of opium; but it seems rather to reside in the other, particularly in the resinous particles, the taste of which is very acrid and penetrating.

5. The fear of impairing the virtue of opium by boiling it with different menstrea, is for the most part exaggerated and groundless.

6. Opium contains no essential oil.

7. Astringent.

7. Astringent matter or Gallic acid, does not belong to the constituents of opium.

The results of this examination of opium, although they may seem not quite satisfactory, are certainly entitled to the attention of every chemist and physician.

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*To the Editors of the Medical and Physical Journal.*

GENTLEMEN,

AGREEABLY to your request in No. 51, which, if properly attended to, may prove to be considerably advantageous in forming just opinions respecting Influenza, I send you the following, for insertion in your very useful Journal.

This disease, which has attracted so much notice as the reigning epidemic, and to which the name of Influenza has been given, appeared in Paisley about the beginning of last April, became very general in a few weeks, and was distinctly marked by the characteristic symptoms so well described by several authors. The weather, both before and since that time, has been particularly cold and variable.

By the middle of May this disease was considerably abated in frequency, and at present there are but few afflicted with it. Upon the whole, the Influenza has been very mild, and so far as I can learn, not above two have died of it in this town.

The greatest number who were affected with it could go about their ordinary business, and most of those that were ill and took to bed, recovered in four or five days. Many indeed were longer confined, but it appeared invariably, to be either the consequence of inattention or former disease.

In a daily statement of the cases of fifty-eight patients, who had Influenza pretty severely, taken simply as they occurred, and at a time that the disease was not prevalent, there are twenty-six males and thirty-two females. The whole of these recovered within eight days of the commencement of the disease, excepting three, a man and two boys, who were from ten to fourteen days ill before the feverish symptoms disappeared; but these three were in a diseased state previous to the attack of Influenza.

Among



Among other families which I had occasion to see, when part was under this disease, there were twenty-seven, in which every individual of the families were less or more affected. In these families, nine children only were at the breast, none of them younger than a month, and they all had the disease soon after, not before, the mother. One family, consisting of six, was under the disease for several weeks, and the mother and two daughters, who were first affected, took it a second time while attending the other three. In another family the mother became ill of Influenza and soon recovered; but before the whole had passed through the disease, she again took it, two weeks after her recovery, and was considerably worse than at first.

As proper attention to acid fumigations is not easily procured, without being more frequently with the family than ordinary practice in a town will allow of, I wish not to draw any conclusion from what experiments of that kind I have made. However, if justified in choosing the least of two evils, one of which is unavoidable, we certainly act with propriety when we admit that Influenza is infectious, till clearer facts convince us that it is not. By doing so we the more readily attend to every mean of prevention, and give a chance, at least, of keeping off disease without any bad effect; whereas, by inculcating a contrary opinion, which is very disputable, we may propagate an error that may lead to serious consequences. Any argument brought forward by the opponents to infection seems feeble, when compared to the many instances which could be given to the contrary. That typhus fever comes on in persons who are not exposed to that infection, so far as it is possible to ascertain, can be proved in many cases, and who, from such a circumstance, would doubt that typhus is contagious. The short view of cases of individuals and families stated above, I rather advanced, than others of a similar nature to which I was less attentive, not having marked them down as they occurred. If they tend not to confirm the opinion that Influenza is infectious, they are facts which, in some measure, increase the difficulty of opposing it. As to blood-letting in this disease, which has been treated with so much invective by some authors, it was both necessary and useful in a few cases. For my own part I had no occasion to use the lancet, but would I say from that, that in no case such a thing was necessary, when I know some practitioners in town, of long experience and considerable abilities, who  
were

were compelled from the violence of symptoms, to use the lancet, and had the happiness to see its good effects.

People affected with Influenza, like catarrh, seemed more than usually liable to suffer from cold air; and though not exposed to cold in any manner different to what they were accustomed, yet the being without doors occasionally, was frequently the cause of increased disease, and of course inflammatory symptoms; thus, from predisposition, and other circumstances, was blood-letting rendered necessary. Another cause of increasing these symptoms, which deserves particular attention and severe censure, was the noted cure recommended so highly in the public papers, viz. whisky and oatmeal. It is to be regretted that whisky drinking is so much the pleasure of many; and in consequence of this recommended cure, numbers considered themselves as having got a licence to drink plenty of whisky; of course, there was not only pretended affection, but even when it was real, whisky was drank greedily, till severe illness changed their inclinations, and obliged them to apply for remedies more suited to their complaints.

Considering it not necessary to extend this paper by commenting at large on the mode of cure,

I remain, &c.

Paisley, June 7, 1803.

JOHN RODMAN.

### ORIGINAL LETTERS OF DR. MEAD.

*The Two following Letters of Dr. MEAD, never before published, and written about eighty years ago, may perhaps be worth inserting in the Medical and Physical Journal; if not on account of the importance of the matter they contain, at least as literary curiosities.*

To DR. DEACON, at Manchester.

SIR,

I Received your's concerning Mr. Clayton's case yesterday, and have writ to him, as you desired, by this post. I have assured him there is no danger. You will see my letter. I am by this to acknowledge the favour of your's of the 15th. As to your patient with the fluor albus, I don't know any thing so effectual as an injection of aq. camphorat. batean. lib. j. mell. Ægyptiac. ℥ij. made use of morning

ing and evening. Aq. benedict. comp. batean. is good, as is Bristol water. Pills made of alum melted ʒij. sang. dracon. ʒj. taken ʒj. ter die are serviceable:

*Ormond Street,  
December 24, 1744.*

I am, &c.

R. MEAD.

To DR. DEACON, at Manchester:

DEAR SIR,

I HAVE the favour of your's concerning Mr. Darbyshire's case, which is indeed very bad. I must freely observe to you, that I have always experienced that mercury in no shape whatsoever will agree with cancerous cases, which are always exasperated by it; that is, while the cancerous tumour remains in any part; for when that is cut off, I have known a salivation, if the patient has been put into it as soon as the wound begins to digest, and it has been continued till the part is quite healed, to have done prodigious service, and the humour has never returned again. The mercurius alcalisatus frequently raises a salivation, and I suppose it has done so in the present case the more readily from the acrimony of the humours of the body. It is certain that the actual cautery is rightly applied in a cancer; any common caustic, by reason of the sharp salts in its composition, are not agreeable to the corroding salts in the tumour. What therefore can now be done is, I think, if possible, to stop the salivation; as the mercury took this turn from the acrimony of the juices of the body, so I imagine that it goes on so obstinately from the same cause. I would continue to keep the body lax, by gentle purges; infus. sen. cum mann. &c. every third or fourth day; the intermediate days, I would give aq. hord. et lact. vacc. aa. fʒss. (edulcorat) with fl. sulphur. ʒss. or more; if the stomach will bear it, twice a day. Adstringent gargles must be continued. The diet should be very much upon milky things. If by this means the patient can be brought into that condition as to bear the cautery, it should certainly be applied, and he should then live upon a vegetable and milky diet, and drink freely of a decoction of sars. chine. with milk; and take pulv. milleped. ʒss. twice a day. I shall be glad to hear how you proceed, and am always,

*Ormond Street,  
March 20, 1735-6.*

Your's, &c.

R. MEAD.

(No. 53.)

E

A CASE

*A CASE of MANIA cured; communicated by Mr. HICKIN,  
of W. Hampton, Staffordshire.*

**M**ARY ALLEN, aged about twenty, a few days before the 23d of last February, was attacked with Madness. On the 23d I was requested to see her, and found her as follows: She was raving, and so inconsistently that I could not perceive what was predominant in her mind; her pulse was upwards of 70; menses regular; she would sing, bow, laugh, and cry. Inquiry was made, to endeavour to find the remote cause, but no satisfactory decision could be made. The regimen ordered was bread and water for about the first three weeks, and then, by degrees, a more nourishing diet. The treatment was the antiphlogistic, as,

On February 23, V. sectio ℥j. R. Antim. tart. gr. vj. kali ℥j. aquæ puræ, ʒj. M. ft. haust vesp. sumend. This did not operate.

On the 24th, the following, R. Antim. tart. gr. vj. in ch. ppt. vj. j. 4tis horis sumend. which occasioned no sickness so as to operate. R. Opii. crud. saponis a gr. j. ft. pil. h. s. sumend.

On the 25th, R. Pulv. sal. nitri. ʒij. antim. tart. gr. xij. M. in. ch. vj. j. 4tis horis sumend. R. Pil. ut heri h. s. s.

On the 26th, The powders as yesterday. She had on this day a purging, with lowness of spirits.

On the 27th, R. Cort. cascarill. ʒss. coque in aq. ℥ss. pro min. 10, cola, et capiat. coch. larg. ij. 4tis horis. This evening she begun to mend very much, and every night she had an opiate as above, which from the first time it was employed had a good effect.

On March 1, she was attacked with symptoms of Influenza, for which she took the following: R. Pulv. ipecac. ℥j. antim. tart. gr. vj. M. ft. pulv.; this operated very well. R. Pil. opii h. s. sumend.

March 2, Complains of a violent pain in the head with throbbing. R. Emp. cantharid. capit. applicand; this gave her a good deal of trouble.

A few days after she complained of great lowness, for which two compound galbanum pills were given every four hours. Continues recovering; is taken out a walking, and recovering without any thing farther, save an opiate every night for a few weeks; and is on this day, May 14, 1803, as well as ever she was in her life.



HISTORY of a Case of EPILEPSY, cured by applying a Caustic to the Nerve which accompanies the Vena Saphena; by M. Pontier. Communicated by our Correspondent at Paris.

THE author states, that a young man, twenty-five years of age, of a plethoric habit, came into the hospital to be treated for an epilepsy, the fits of which returned three times a day regularly at six and nine in the morning and at two in the afternoon. After the unsuccessful trials of opium, bark, camphire, valerian and moxas, applied to the head, the author recollected to have read in the *Recueil Periodique* of the Medical Society, an observation of an epilepsy cured by the extirpation of a small tumor from the thumb of the right hand. Struck by this fact, and after close enquiry into the history of the complaint, he learned that the patient had been bled in the right foot, some months before, on account of the epilepsy, which had attacked him two years back; that some time after he had been bled in the left, and in consequence of which the duration of the fits became much longer. The author suspected the case to be sympathetic, and to have proceeded from the imperfect section of the nerve accompanying the vena saphena. The incision of the vein was made transversely, and to the touch a small hardness was perceivable of the size of a barley-corn, situated on the outer side of the vein; for eight months the patient had not experienced a particular sensation of cold, which ran up the right leg, and which, anterior to this period, had always troubled him. This circumstance was of importance to the author, who, an instant previous to the usual fit at two o'clock, applied a ligature above the right knee; the fit continued but five minutes instead of twenty-five, the usual period. The same consequences followed the application at nine o'clock. The following day the fit was suspended by the same means; and when the tourniquet was used, and the bolster made to press on the course of the nerve in question, the fit was found to continue but a minute and a half. The author observed, that on relaxing the tourniquet at the conclusion of the fit, a general trembling came on, which was suspended by tightening anew the instrument. On applying the ligature above the ankles the fits were in like manner suspended. As yet no pressure was made on the extremity; but the author, in order to assure himself that it was in part the cause, placed a ligature on each leg

some time before the period of accession; no fit took place. The patient appearing to have some disposition to sleep, M. Pontier endeavoured to divert him by various means; a disposition to laugh, as if intoxicated, slight tremors of the head, a difficulty in articulating certain words, were appearances which marked the period of the usual attack; but the patient never lost the use of his reason and senses. The same experiments were repeated with the same results the two following days. In the evening, caustic alkali was applied to the cicatrices, with a view to divide completely the nerves; the caustic had produced its effect before the period of the next fit, which did not take place, notwithstanding that no pressure whatever was applied, and from this moment all symptoms disappeared. During the sloughing of the eschar, the patient was ordered to take two drachms of valerian and an equal quantity of bark. This case is concluded by the following reflections of one of the editors of the *Recueil Periodique*. Although wounds of nerves be a very frequent cause of epilepsy, yet in the case in question it would not appear to be owing to the wound inflicted in bleeding, since the disease existed some years before. It appears only that the complaint became aggravated after bleeding. We should be desirous to know if the small tumour, marked in the history of the case, existed before the operation; and whether it can be considered a sufficient cause of epilepsy? 2dly, Whether or not the same mode of treatment was not equally indicated before blood-letting? We find, in the annals of the science, a number of cases of epilepsy, where the fits were suspended by the application of ligatures above the place where the aura epileptica was perceived, and where there was no reason for attributing the disease to the imperfect division, or to a wound of a nerve. It has been found too that this application of ligatures persevered in, has sometimes cured the disease. The application of cauteries to different parts of nerves has also produced a cure. For these reasons, would it not seem more correct to give greater extent to the mode of cure than the author has done, and not confine it exclusively to cases where the disease may be supposed to arise from a partial division of a nerve?

HISTORICAL STATEMENT of the GALVANIC DISCOVERY,  
and of the PUBLICATIONS which have appeared on that  
SUBJECT.

[ Continued from Vol. vii. p. 161. ]

*OBSERVATIONS on the Influence which produces Contraction in the Muscles of Animals, agreeably to Mr. Galvani's Experiments, by Dr. W. C. Wells; see Philosophical Transactions for the Year 1795, part ii. p. 246, translated in Gren's Journal der Physik, vol. iii. No. 4.*

The author endeavours to answer the following questions: 1. Does the incitement of the influence which in Mr. Galvani's experiments, occasions the muscles of animals to contract, either wholly or in part depend upon any peculiar property of living bodies? 2. What are the conditions necessary for the excitement of this influence? 3. Is it electrical? With respect to the first question, the author is inclined to answer it in the negative. Having employed various moist substances, in which there could be no possibility of the existence of life, to constitute with one or more metals, different from that of the coatings of the muscles and nerve, a connecting medium between those coatings, he found that they produced the same effect as his own body. He had accidentally observed, that on covering a muscle and its nerve with two pieces of the same metal, the muscle was immediately thrown into contraction, if he applied the metal which he had used as a connector, and still held in his hand, to the coating of the muscle only, while with the other hand he touched the similar coating of the nerves; a curious circumstance, as it is known that no motion will take place, upon connecting those pieces by means of one or more different metals. A single drop of water was sufficient for the above purpose, though, in general, the greater the quantity of the moisture which was used, the more readily and powerfully were the contractions of the muscle excited. Concerning the second question, he remarks, that, without knowing the previous discovery of Mr. Volta, he found that charcoal is endowed with the property of exciting the Galvanic influence. The fact is, that as far as the contraction of the muscles is a test, whether the influence exists or not, and we have no other, it is never excited, when two metals, or one metal and charcoal are necessary for this purpose, unless the substances touch each other, and also are in contact with some of the fluids. But there is still another requisite for the excite-

ment of the influence, which is a communication, by means of some good conductor of electricity, between the two quantities of fluid, to which the dry exciters are applied, besides that which takes place between the same quantities of fluid, when the dry exciters are brought in contact with each other. Dr. W. likewise discovered that an exciting power may be given to a metal by rubbing it on many substances beside another metal, such as silk, woollen, leather, fish-skin, the palm of the human hand, sealing wax, marble, and wood. He thinks it probable, that the part which has been rubbed, is so far altered in some condition or property as to be affected differently by the fluid exciters from a part which has not been rubbed; in short, that the rubbed part becomes as it were, a different metal. The last question he answers in the affirmative, and thus expresses himself: "The points of difference between any two species of natural bodies, even those which from the similarity of some of their most obvious qualities, have once been thought the same, are found upon accurate examination, greatly to exceed in number those of their agreement. When, therefore, two substances are known to have many properties in common, while their differences are few, and none of these absolutely contradict such a conclusion, we infer with considerable confidence, that they are the same, though we may not be immediately able to explain why their resemblance is not complete.

*Extract of a Letter of Mr. J. Fabbioni in Florence.* In Crell's *Chemischen Annalen*, 1795, vol. ii. pp. 502.

The author is persuaded by the experiments which he made, that several phenomena, ascribed to this electricity, originate from a chemical power, which the dry and cold metals mutually exert, in order to decompose moisture or the *lymphæ animalis*.

*Vorläufige Bekanntmachung der Natur des Metallreizes;* i. e. Preliminary Account of the Nature of the Metallic Stimulus, discovered by Prof. Crève of Mayance. In *Hartenkeil's Medical and Surgical Gazette*, (in German) 1796, vol. i. p. 49.

*Beiträge zu meiner Ankündigung, die Natur des Metallreizes Betreffend;* i. e. Additions to my previous Account, concerning the Nature of the Metallic Stimulus, by Prof. Crève, vol. i. p. 324.

Mr. Crève is of opinion, that on applying metals to animal parts, a chemical process takes place, by means of which the two metals decompose the water, and at the same time



time disengage a portion of caloric, which combines itself with the caloric that is made free during the decomposition of the water. The oxygen unites itself afterwards with the metal and the hydrogen with the caloric, from which last combination arises an electrical matter, which being the product of this process, properly forms the proximate cause of the metallic stimulus.

*Ueber die gereizte Muskelfaser*; i. e. on the irritated Muscular Fibre; from a letter to Prof. Blumenbach, by Mr. Humboldt. In Gren's *Neuem Journal der Physik*, vol. ii. No. 2, p. 115.

From another letter of the same to the same; *ibid.* No. 4. p. 471.

*Versuche uber den Metallreiz, besonders in Hinsicht auf die Verschiedenartige Empfanglichkeit der Thierischen Organe*; i. e. Experiments on the Metallic Stimulus, particularly with respect to the different Sensibility of Animal Organs; from a letter to Prof. Blumenbach, by Mr. Humboldt, *Ibid.* vol. iii. No. 2.

*Versuche Ueber die gereizte Muskel und Nerven Faser, nebst Vermuthungen uber den Chemischen Process des Lebens in der Thier und Pflanzen Welt*; i. e. Experiments on the irritated Muscular and Nervous Fibre, together with Conjectures on the Chemical Process of Life in the Animal and Vegetable World, by Frederic Alexander von Humboldt, tom. i. and ii. Posen and Berlin, for Decker and Rottman.

In stating the labours which this excellent Naturalist has bestowed on the Galvanic discovery, we need only give an account of the last work, in which his former notices are repeated, corrected, and enlarged. It comprises every thing relative to the Galvanic discovery, which was known to the time of its appearance, containing besides a rich store of new discoveries, interesting views, and observations, by which it is justly entitled to the attention and study of naturalists. The author has every where endeavoured to relate his observations and experiments, unprejudiced by the seducing train of hypothesis, and he modestly delineates the theory which he has formed on the nature of the Galvanic phenomena. We shall now proceed to a short analysis of the work itself.

First Part, Sect. I. The author prefers the expressions of *Galvanic stimulus*, to *Galvanise*; *Galvanismus*, as more proper than the denomination of *metallic stimulus*; and animal electricity, for the purpose of denoting the phenomena

mena which Mr. Galvani has discovered in the nervous fibre, inserted in the muscle. The Galvanic agent only acts on the living nature, and is only perceptible in the matter which is endowed with the sensible fibre. It requires the re-action of a living animal fibre, and comprehends what is generally called vital action. No experiments have hitherto been able to make the action, which the Galvanic experiment most probably exerts on dead nature, combined with the excitable substances perceptible to our senses. The experiments which Mr. Humboldt undertook with this view, proved likewise without success. The success of the Galvanic experiments depends as well on the excitability and sensibility of the animal organs, as on the intensity of the stimulus, on which account it is of great importance for a proper examination of the Galvanic laws, to make the experiments on very sensible animals. With this view the author took frogs for his experiments, which were particularly successful. By bathing the nerves of these animals in alkaline solutions and in supersaturated muriatic acid, he was enabled to increase or diminish, at pleasure, the excitability of the fibre, and to resuscitate the languishing sensibility of animals in an artificial manner. As every stimulus debilitates the organs when too frequently applied, and as common acids applied to the nerves diminish the incitability, it was an easy thing for him to bring every animal substance from the highest degree of sensibility down to the lowest debility, direct or indirect. In order to examine the conditions and laws by which the muscular motions are produced in Mr. Galvani's experiments, Mr. H. distinguishes the state of sensibility, when naturally high or artificially increased, and when it is by any means diminished.

Sect. II. When the living irritable as well as sensible fibre is in a state of a naturally high or artificially increased sensibility, the muscular motion is observed to take place under two conditions; 1. if a fresh animal substance; or, 2. if metal or charcoal forms the conductor of the Galvanic fluid between the muscle and the nerve. In this section the first condition is considered; and the author excited muscular contractions by bending the thigh of a frog towards the ischiadic nerve, with which it was connected, while the crural nerve and muscle were touched at the same time by means of a piece of crural nerve, that had been cut out; by this method the animal's parts formed a connection, and conducted the influence from one part of the nerve to another.

Sect.

Sect. III. The second condition, by which, in the state of increased irritability contractions ensue, always requires the concomitant action of metalline or carbonised substances; but the author here distinguishes again two cases, viz. excitation occasioned by one metal or by homogeneous metalline parts, and excitation from heterogeneous metals. Homogeneous metals, causing muscular contractions, are applied to the animal organs in such a manner as to form a chain, or this chain does not take place. The author made several experiments relative to this different disposition of the exciters; and among others, we shall only point out the first experiment, grounded on the last case, where no chain is formed. Mr. H. having armed the crural nerve of a very lively frog with zinc, was proceeding to connect this coating and the crural muscle by means of another zinc wire; but the two metals had hardly been brought in contact with each other, without the zinc wire having touched the muscle or nerve, when most violent contractions ensued. It has been questioned whether homogeneous metals could excite contractions as muscular or as nervous coatings. In order to decide this question, Mr. Humboldt having poured pure quicksilver into a porcelaine saucer, and prepared the thigh of a frog in such a manner, that in a horizontal position of the thigh the crural nerve and a bunch of the muscle hung down, the leg was tied to a glass tube which was kept horizontally suspended over the saucer; and when the nerve touched the surface of the quicksilver, no contraction was perceived; but the muscle, on being brought in contact with the quicksilver, was convulsively contracted.

Sect. IV. Contractions of the muscles ensue if the nerve as well as the muscle are coated with heterogeneous metals, and either immediatly touch each other or through the medium of a moist conducting body; if homogeneous metals are applied to the muscle and nerve, and connected by a heterogeneous metal; if homogeneous metals coat the muscle and nerve, connected by means of two moist substances and one heterogeneous metal; if in the chain between the nerve and muscle several metals alternate with pieces of muscular flesh, and if there is only one homogeneous metal among the rest, &c. When the living organs are in a state of diminished incitability, they require a more violent stimulus, in order to produce muscular contractions.

The Galvanic phenomena, then, appear under two principal

principal conditions, that the heterogeneous coatings of the nerves and muscles touch each other immediately, or by means of exciting intermediate substances; and that homogeneous muscular and nervous stimuli are connected by a heterogeneous metal, the surface of which is to be covered with an evaporating fluid. This last property the author discovered by a singular experiment, which he here relates. He likewise mentions some experiments, according to which, animal parts appear to possess a conducting atmosphere. On placing, instead of the fluid, a piece of the muscle on zinc, lying on the gold plate, with which the nerve was armed, he not only perceived the convulsions on touching the muscular flesh, but on removing it to the distance of  $\frac{1}{4}$  line from the gold plate.

Prof. Grimm, of Liegniz, in Silesia, who from the first discovery of the Galvanic agents, thought of employing it with a medical view, has published the results of his experiments in a medical journal, entitled, *Archives of Practical Medicine for the Provinces of Silesia and South Prussia*, (in German). He observed several disagreeable symptoms to arise from the application of Galvanism too long continued, viz. weariness, diarrhoeas, and catarrhus complaints. He employed Galvanism in dimness of sight, and in difficulty of hearing; in the first complaint without avail, while in the latter it frequently proved successful. He relates one case of obstinate ophthalmia which he succeeded in curing by bringing the patient in connexion with the Galvanic chain, for which purpose he placed the zinc wire on the tongue, letting the patient at the same time touch the uppermost copper-plate with a staff of iron, the hand in which he held it being previously moistened. This case proves the great influence of the Galvanic agents on the organs of sight, though the neighbouring parts are only acted upon. Prof. G. recommends the Galvanic apparatus of Mr. Cruikshank, which has the advantage of keeping its efficacy for several weeks without requiring to be cleaned and rubbed, which is always a very tedious operation.

Dr. Zadig, of Breslau, was so fortunate as perfectly to cure a man of sixty years of age, who was affected with amblyopia by the use of Galvanism continued for about six weeks. He began with ten strata of plates, gradually increasing that number to thirty. He placed the copper wire into a glass bowl with salt water, in which the patient was ordered to immerse his hands, while the doctor touch-  
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ed the upper eye-lid with the zinc wire, which he repeated twice a day for fifteen or twenty minutes.

In the *Annalen der Physik*; i. e. Annals for Natural Philosophy, published by Prof. Gilbert of Halle, Mr. Emhoff of Celle communicates his experiments relative to the medical application of Galvanism on persons affected with difficulty of hearing, which in a great measure seems to arise from a rheumatic cause, as the complaint increases in bad and rainy weather; but these experiments did not answer his expectation. In one case, the application of Galvanism was continued every day for six weeks, without producing any favourable effect, though a weak degree was first employed, and the Galvanic shocks gradually increased, so as to make them very sensible to the patient.—Another patient thought himself relieved for a short time; but though he was galvanised with a pile of 100 strata, he perceived not the least effect from it. The experiments however, which Mr. E. made on four persons who were deaf and dumb proved more satisfactory. In these cases he made use of a pile, consisting of 100 strata of zinc and copper plates with round pieces of felt which he had dipped in very diluted nitric acid; taking twelve parts of water to one part of the acid, which he found of all wet conductors to be the most advantageous. At the two ends of the pile brass wires were adapted, ending in small hooks, to which the brass conductors were fastened, by means of which the Galvanic shocks are carried to the ear. For the purpose of insulating them, they pass through glass tubes; some of them are pointed, while others are provided with a small knob either of lead or of wood, by which means Mr. E. was enabled to increase or diminish the effect of the pile, according to the different indication, because the pointed conductors are the most efficacious, and those which have a wooden knob show the weakest action. Before the conductors are applied, Mr. E. moistens the concha and external parts of the ear with water of ammonia, and introducing one wire into the ear, he touches the other ear with the opposite conductor twice or three times within a second minute. The patient could be exposed to a greater or less degree of Galvanism, as he increased or diminished the number of the strata. The patients on which Mr. E. used the Galvanism in this manner, were, a boy twelve years old, who had lost his hearing in the small-pox in the fourth year of his age; a girl aged eight, born deaf; and two adults; in all which cases the applica-  
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tion proved successful. The boy was within two months so far advanced, that he could hear words spoken near him with a low voice; however, when his attention was engaged he seemed not to regard the loudest voice. He was particularly sensible to sounds which he was not accustomed to hear. He learned in a short time to pronounce the vowels, and by degrees the consonants, and some easy words. The effect of Galvanism was still more striking with the girl, as she acquired after five weeks the full power of her organs of hearing; she heard the lowest voice, turning towards the person who speaks, and she begins to speak and babble as children do. In the adults on whom Mr. E. employed the Galvanism, the cure advanced more slowly; however, after an application continued for six weeks, they were able to distinguish the sound of a bell, of drums, of a flute, &c. which induced Mr. E. to continue the practice, the results of which he has promised to communicate to the public.

Dr. Martens, of Leipzig, has likewise made a series of experiments on the medical application of Galvanism, which he has published in a medical journal, entitled *Paradoxien*, of which he is the editor. In four cases of suppressed gonorrhœa venerea, where the scrotum began considerably to swell, he re-established the running by means of Galvanism, and thus removed the swelling. For this purpose he introduced a silver probe into the urethra, bringing it in connection with the zinc pole of a Galvanic battery, which consisted of 12 strata. To the copper pole he fastened a silver spoon, which he applied to the perinæum, which had been previously moistened with a solution of sal ammoniac. The experiment was repeated only twice within five minutes, and occasioned a painful sensation in the affected part.

In three cases of paralytic diseases, Dr. M. employed the Galvanism with much success.

1. In a paralysis of the upper eye-lid, which he removed in three days, by means of a battery of 12 strata. On the two first experiments no sensible effect could be perceived, but during the third experiment the paralysis suddenly disappeared.

2. In a paralysis of the extensores digitorum, which was removed by the application of Galvanism fifteen times repeated. The battery consisted in this case of 35 strata. He fastened a zinc plate on the metacarpus of the thumb, and a copper plate on the fifth metacarpus, placing under each

each a piece of cloth wetted with a solution of sal ammon. and he brought them alternately in connection with the battery.

3. In an imperfect paralysis of the thigh, which had lasted for above year. He put a blister near the trochanter, and another below the flexion on the anterior part of the thigh, keeping the sores open by means of Galvanism. The patient found himself greatly relieved, but the cure was not completed, when the author published his account.

In a dimness of sight the Galvanism proved likewise efficacious, but without removing the affection entirely.

The faculty of hearing and speaking in a person born deaf and dumb, who could only distinguish some kinds of sound, was likewise much improved by the use of Galvanism; the results however were uncertain, as the patient was prevented from continuing it for a proper time.

In several cases of difficulty of hearing, Galvanism was also employed with success. Dr. M. relates eight such cases, in all which the patients experienced great relief. For moistening the cloth he thinks a solution of sal ammon. to be the most efficacious, but salt water preserves its efficacy much longer. The best composition for that purpose consists in the following mixture, R. Sal commun. unc. j. fell. taur. recent. unc. j. aq. font. unc. iv. tinctur. heliotrop. dr. j.

Dr. Marten's method of applying Galvanism in affections of the auditory organs is the following:

1. If deafness be equally strong in both ears, he conducts the zinc wire into the one, and the copper wire into the other ear, but he changes the application, alternately introducing the zinc wire and copper wire into the ears.

2. If one ear be more affected with deafness, he always conducts the zinc wire into that ear.

3. Should deafness merely reside in one ear, he applies the zinc wire to the affected ear and the copper wire to the sound, moistening the linen in which the zinc wire is wrapped with a solution of sal ammon. whereas the copper wire is moistened only with common water. In this case the patients have scarcely any sensation in the sound ear, while the Galvanic agents is fully perceptible in the affected ear. Or he orders the patient to immerse the hand of the side opposite to the affected ear in a bowl with salt water, into which the wire of the copper pole has been conducted; a method far preferable to the former.

Dr.

Dr. Martens disapproves of the different machines proposed for fastening the conductors in the ear by Drs. Augustin, Grapengiesser, and Bishoff, as being too compound, expensive, and inconvenient. He prefers a machine invented for that purpose by Dr. Tittman of Leipzig, which consists of four different parts, namely a bandage to be tied round the head, a hoop of whalebone, two small wood plates to be applied above the ears, and two small pieces of wood, one inch long and half an inch in breadth. The bandage is about two inches in breadth, and is made of double cloth, which can be buckled round the head. On both sides, above the ears, are fastened two small boards three inches long, one and a half broad, and half an inch thick, longitudinally perforated with thirty holes at the same distance from each other. At the upper margin, two larger holes are made for fastening the hoop that is bent over the head. The above mentioned pieces of wood have each a large hole, through which the conductors pass, and at their upper margin strong iron wire is fastened, pointed and bent in a right angle. This machine is tied round the head above the eyes. The conductors are passed through the holes in the small pieces of wood, which are fastened by means of the iron wire into the holes of the boards, and are to be placed higher up or lower down, as may be found convenient. Another apparatus, still more simple, is proposed by Dr. Martens, of which he gives the following description: Take two round pieces of cork, one inch in diameter and half an inch thick; push through the centre of each a thin silver wire, three inches long; make on each side, at equal distance from the centre, a hole through the narrow part of the round pieces of cork, through which draw silk strings, each two yards long. Thus the two cork pieces may be placed on the ears, by tying the string under the chin. One part of the silver wire, which reaches into the ear, is wrapped in a little linen, while the other, which is on the outside, is bent as a ring or hook, on which the conducting chains are fastened. The linen, sewed round one end of the wire, must be moistened with salt water before it be introduced into the ear. This apparatus is both simple and convenient, and suits to every head.

[ To be continued. ]

## EXPERIMENTS



EXPERIMENTS, which tend to prove that the OXYDS which are formed on the SURFACE of the METALLIC DISKS of the GALVANIC PILE do not impede the EFFECT of its ACTION, as has been supposed; and that it has even the Property of supplying the Place of the Circles of Cloth usually employed in the Pile of VOLTA, and preserves its Action Fifteen or Twenty Days. By LA GRAVE, M. G. S.

VOLTA, Vassali, &c. had supposed that this oxyd destroyed the effect of the pile. It is true that the more the surfaces of the metals are exposed, the sooner the effect is felt, and the greater its force. The author composed piles, the disks of which were polished, and the force of which increased as its height. I have, says the author, been obliged, from the inconvenience which resulted, to confine myself to the use of half the number usually employed. I have, however, formed piles with disks which I had oxydated even to the obliteration of every metallic appearance, and which produced not only a sensation, but which served me in every Galvanic experiment. I differ from the ordinary manner of composing these piles only in the greater number of disks which I used; but what is singular is, that the effect was the reverse of what is in general experienced. The pile, well oxydated, produces its effect immediately, and as immediately loses its power; mercury, on the contrary, only acquired it after five or six hours, and retained it fifteen, twenty, or twenty-five days; whereas the pile, as it is generally constructed, affects only for three or four hours. With these same disks I formed piles without any interposition of cloths, and with the alternate disposition of zinc and copper; the effect was nearly the same. The author thinks that the oxyd supplied the place of the cloth. He concludes by observing, that whether this property arises from the power of the oxyds to retain water, he conceives it a fact well worth consideration, and likely to throw much light on the composition of the Galvanic pile.

To Dr. BRADLEY.

DEAR SIR,

THE defective state of our knowledge in several important points relative to the causes and cure of that interesting disease, which goes under the denomination of  
*Angina*

*Angina Pectoris*, leads me to offer for the Medical and Physical Journal a brief history of a very characteristic case, in expectation that it may tend to call the attention of your readers to the subject, and thus open a field for disquisition and improvement.

I therefore proceed to communicate the case of H— E—, Esq. aged sixty-eight years, of a spare make, pale countenance, the prime of his life passed in an active military department, fond of company, but not habitually prone to intemperance, and never sensible of any arthritic affection. During a number of years, he was liable, at uncertain periods, to stomach sickness, attended with a degree of syncope, from which he was occasionally revived by a recumbent posture; yet, in this early stage, some time elapsed before the debilitating effects of the fit were surmounted. Two years, at least, prior to his death, (which happened *suddenly* about three o'clock, p. m. the 21st of May, 1803,) the faintish disposition gradually increased, and changed into a sense of suffocation. After this change took place, the impediment in respiration became, at each successive attack, more strangulating; and at length was excited by very moderate motion on foot; sometimes, if the motion were sudden, even on the most level surface, but not by exercise in a carriage, nor on horse-back.

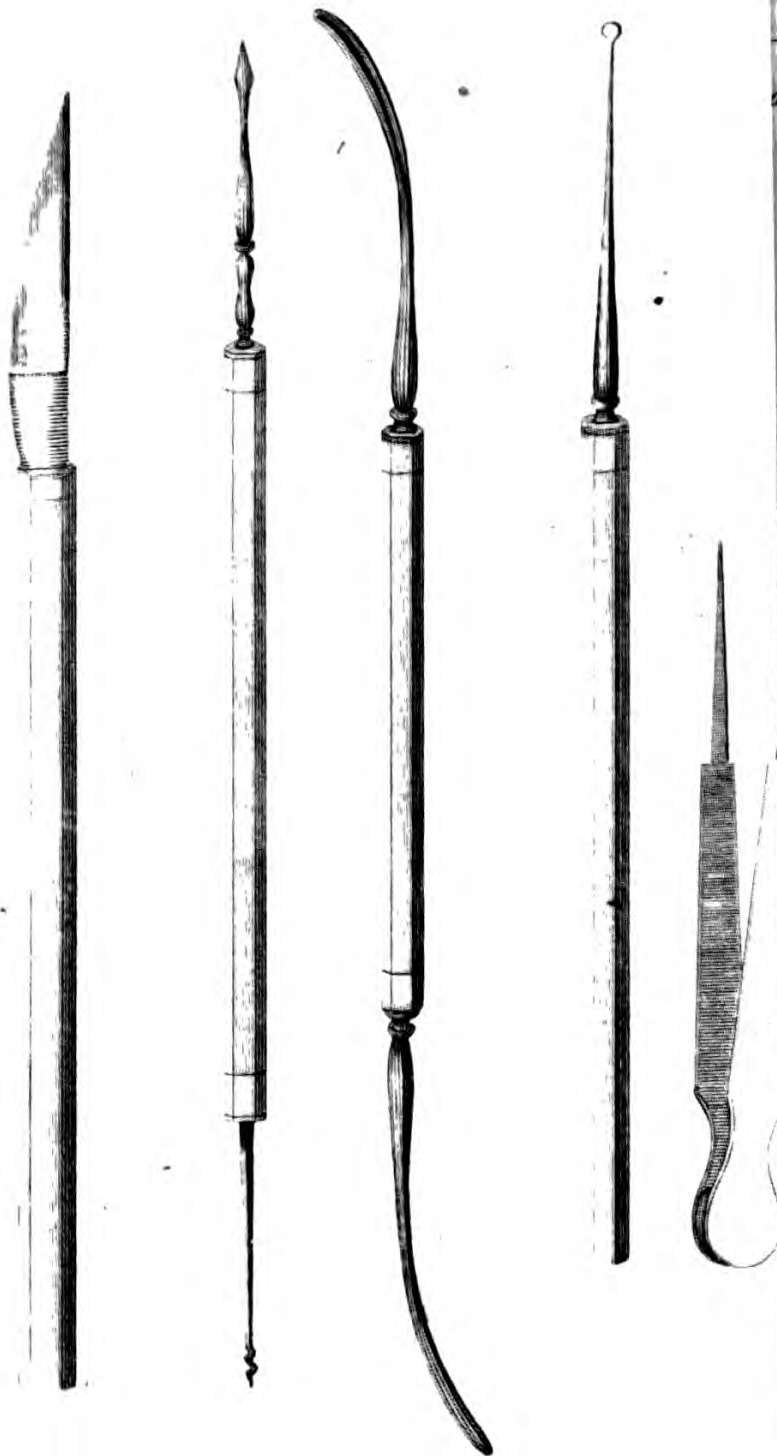
The evening preceding his death, he had walked out easily, and was arrested by a paroxysm, which continued a considerable time, and left a more morbid condition than usual. Between nine and ten o'clock next morning, I was called to visit him, and found him in bed, complaining chiefly of a pain in the centre of the sternum, accompanied with pains affecting both arms, which he referred to the insertions of the deltoid muscles, or those of the coracobrachiales. His pulse was unequal, slow, and much disturbed by remarkable pauses.

Previous to my visit he had taken some laxative pills, prescribed by an eminent physician in Dublin, soon after taking which he grew sick, and whilst I sat by him he vomited, but had not any degree of dyspnoea, nor other visible derangement of the respiratory functions. I proposed a blister to the breast, in which he readily acquiesced, as it was an application that, he said, gave immediate relief, several years ago, when he was seized with an acute pain in any part of the thorax; but the blister had not time to operate, before the fatal termination arrived.

Several months antecedent to my visit, he had been under the direction of the physician above alluded to, and had



*Arneiman's Instrumen*



Page 69  
osa.



had submitted to the prescriptions of certain inferior practitioners, who, as well as I could learn, had advised spirituous aromatic bitters, aloetic laxatives, and *one* issue in the thigh, which was so injudiciously regulated; that it could not be endured longer than two or three weeks. By some of those gentlemen, sulphuric ether was prescribed, to be employed during the paroxysm; but it was used generally with the effect of exciting a discharge from the stomach, and without gaining any curative step.

Three or four months before his death, he had the misfortune to be deprived of a lucrative appointment in the revenue; a misfortune which, doubtless, considering the nature of his malady, conspired to hasten his end. As to the precipitancy of the event, his friends were warned of it; for, on being casually told of his complaints, before I was professionally consulted, I candidly told them, that I was confident his life was not worth an hour's purchase. Some time prior to the catastrophe, he expressed a wish that his body should be opened; but his widow could not bring herself to consent to the operation, and consequently this instructive opportunity was lost.

In order to pursue and promote the object of this communication, it is my intention, as soon as circumstances shall allow, to transmit to you observations touching this case, and on as many publications treating of the same subject, as have come within the reading of,

Yours, &c.

Londonderry, June 11, 1803.

W. PATTERSON.

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Professor ARNEMAN'S INSTRUMENTS *for extracting the*  
CATARACT.

[ With an Engraving. ]

THE extraction of the cataract is undoubtedly an operation which requires the greatest nicety, skilfulness, and steadiness of hands in the operator, as also a construction of the instruments most accurately adapted to the delicacy of that operation. It cannot be denied, that this branch of operative surgery is executed with particular success by several oculists, and other medical men of Germany; and however inferior they may consider themselves to the English surgeons in many parts of surgical operations, they think themselves entitled to claim, if not the superiority,

(No. 53.)

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at least the same merit and dexterity in performing this delicate operation. Amongst the medical gentlemen of that country, who have acquired great celebrity in this respect, Prof. Arneman, of Gottingen, deserves to rank high, as not only the great number of patients who have regained the happiness of sight through his skilful hands and prudent management, are the surest pledges of his abilities, but also several improvements which he has made on the instruments and *modus operandi*, manifestly shew how intimately he is acquainted with the nature of that operation. We feel particular satisfaction in communicating to our readers an abstract of a chapter from Prof. Arneman's treatise on the diseases of the eye, which make the second volume of his useful *System of Surgery*, a judicious compendium of that art, not long ago published at Gottingen.

"When we consider, the author says, the various forms and the great number of instruments invented for the operation of the cataract, and particularly for the incision of the cornea, we may be led to think either that the figure and structure of the cornea is differently formed in the individuals of different nations, or, this being improbable, that this part of an operation, which requires so much nicety and skilful management of the hand must have often been performed in a very rude manner, and we may thus account for the ill success with which this operation is so frequently attended. On comparing the knives invented at the first period, when the extraction of the cataract was established by Daviel; the narrow instruments of La Faye, Palucci, Sharp, Warner, with the broad lancet of Mr. Wathen in our present times; on reviewing the bicuspid knives of Poyet and Siegwart; the knives of Boranger and Casanata; the serpentine knife of Tellier; the long and pointed knife of Siegerist; the small pen-knife of Muller; the knives of Wentzel, Richter, Lobstein, Bell, Mursinna, and others; the long knife of Barth and Beer; and the triangular pointed knife of Santerelli; it is hardly possible to imagine how so small a part, having only a few lines in circumference, as the surface of the cornea, could have admitted of such a variety of inventions, without their proving for the most part prejudicial to the operation.

"It is obvious to remark, that a proper and convenient form, as well also as the size of the instrument, must in a great measure influence the good or ill success of the operation. An instrument which is too narrow will make an incision in the cornea not sufficient for the crystalline lens

lens to pass through, without its being broken to pieces, or without the mucous coat being stript off and thus remaining in the eye, which renders it necessary to enlarge the incision, whereby the sight of the patient may be injured either by the scar of the wound, or by a cataracta secundaria. Another objection may be urged against the broad instruments, which by making the incision too wide at once, suffer the cataract to pass out too suddenly, whence it not unfrequently happens, that by its being protruded with some violence by the contraction of the bulb of the eye, a prolapsus of the vitreous humour is produced, and in this manner the interior parts of the eye become more liable to inflammation. The instruments formed in the shape of a lancet have the inconvenience of making an irregular incision; the exit of the instrument, when used for cutting the cornea, not being situated exactly opposite in the same line where it had entered the cornea, which will make the opening of the cornea appear in an inclined direction. The exterior angle of the cornea suffers besides a greater pressure from the knife; and we may frequently observe, that the cornea, from the incision not being quite regular, nor equally wide in every dimension, will be greatly injured, and not be brought to heal by simple union, but begin to ulcerate in a more or less degree; a circumstance by which an opacity is often occasioned, to the greatest distress and disadvantage of the patient as well as of the operator."

Induced by these considerations, and guided by his own experience, Prof. Arneman has found that knife to be best calculated for the incision of the cornea, which is engraved in the annexed plate, fig 1; and he is inclined to ascribe, in some measure, to this improvement of the knife, the success with which his operations were subsequently attended.

#### DESCRIPTION OF THE PLATE.

Fig. 1. Represents the knife of Prof. A. for the incision of the cornea, made by the justly celebrated Mr. Savigny, of London, after a pattern sent to him from Gottingen. The back of the knife is exactly in a straight line; its point is narrow, sharp, and gradually increasing in breadth; it is convex on both sides. It passes through the cornea with great ease, and never permits the aqueous humour to run out, before it has made its way through the camera anterior of the eye, and the incision becomes regularly semicircular. The blade of the knife measures, at its broadest part, about three lines, which is justly adapted to let the lens pass through easily. The handle is octagonal, and a little flattened or compressed.

Fig. 2. A broad needle, shaped like a lancet, which may be used for couching the cataract. Prof. A. however, sometimes employs this instrument

strument for opening the capsule of the lens. To the inferior part of the handle is adapted a small screw, somewhat resembling a cork-screw. This instrument was occasionally invented by Prof. Arneman in a case of operation, where the crystalline lens adhered pretty strongly to the iris with almost its whole circumference. This instrument however being screwed into the middle of the cataract, it was easily detached; and being gently moved in all directions, it came away with great ease. With this instrument the lens is easily extracted, together with the capsule; but if the cataract is rather dissolved and of a pulpy consistency, it is difficult, if not impossible to fix the screw. This inconvenience, however, may in a great measure be remedied by the screw being made double.

Fig. 3. Represents at the upper part a small spoon like that of Daviel. It will be found of great use for taking away mucous particles and filaments, also small detached pieces of the cataract, &c. At the lower end Mr. A. has adapted a similar instrument without a canula, flat and smooth on both sides. It proves very serviceable for lifting up the part of the cornea which is cut, and it is likewise of great use in assisting the passage of the cataract, if it is generally pressed on the inferior part of the bulb of the eye, as this cannot be done so conveniently and nicely with the finger.

Fig. 4. Represents a small, semi-circular hook, which Prof. A. makes use of for the purpose of taking out the cataract, a method which may be recommended as a very useful improvement. After having made the incision of the cornea, Mr. A. without opening the capsula of the lens, applies this small hook through the pupil, with the point turned outwards. Turning the instrument in the pupil, he fixes the point of the hook from below in the centre of the cataract; by which means, without doing the least injury to the eye, either by pressure or irritation, the cataract being pulled out gently and generally along with the capsula. By this method the eye is guarded against a cataracta secundaria, formed by the opacity of the capsula.

Fig. 5 and 6. Two pair of nippers or small pincers for extracting filaments, for which purpose the pointed one seems to be particularly calculated.

Fig. 7. A broad hook for lifting up the upper eye-lid during the operation.

Fig. 8. A curved and concave bladed pair of scissors. The figure will not give a clear idea of this instrument without being explained by a description. The instrument is merely represented with a curved blade, but it is very essential that the blade be made concave. Prof. Arneman has invented this instrument for the operation of the cataracta secundaria. It is generally agreed, that the cataracta secundaria is beyond the limits of the art; but in some cases, this gentleman has succeeded in removing this disagreeable complaint. The secondary cataract is often caused by the capsula lenticis remaining in the eye and becoming opaque; sometimes some mucous matter, detached from the cataract, occasions this defect. It however more frequently originates from the extravasation of lymph, by which the iris is obstructed, in consequence of an inflammation of the interior parts of the eye, produced in rheumatic or gouty habits, and by any injury sustained during the operation. In this case, after having opened the cornea a second time, he makes a circular incision in the iris with the above scissors, and in this manner the patient's sight is restored.

Fig. 9. A pair of straight scissors for different purposes, particularly if the cataract adheres to filaments, which are to be cut through. For the operation itself, they are of no immediate use, in which Prof. A. condemns, on the whole, all sorts of scissors as useless and prejudicial.

Prof. A. has communicated in his *Treatise on the Diseases of the Eye*, several interesting and new methods of treatment, which we shall lay before our readers at some future period.



## DISEASE of one of the BURSÆ MUCOSÆ.

[ With an Engraving. ]

**I**N the course of last winter, while engaged in dissecting the bursæ mucosæ of the human body, I discovered two new bursæ on the knee, and one on the elbow joint.

A description of these sacs will, I hope, be not uninteresting, particularly as I have since found the former of them to be frequently the seat of a disease, which in its early stage might be mistaken for one of the symptoms of white swelling of this joint, and which in its advanced stage has, I suspect, been generally considered as an encysted tumour.

An incision made through the integuments from the upper edge of the patella to the knob of the tibia, discloses two bursæ mucosæ; the superior of these sacs is seated on the upper part of this patella, the inferior does not reach so low down as the lower joint of the bone. These sacs are separated from each other by a common transverse partition, in which I have not found any hole of communication. The parietes and glairy contents of these sacs very strongly resemble those of the other bursæ mucosæ; so that we cannot doubt but that they are of the same nature with the other bursæ, although they differ in their situation as not being interposed between tendons, or between tendon and bone.

These bursæ on the patella are equally, and in my mind, more liable than other bursæ to an accumulation of their natural fluid, causing a disease productive of much distress to the patient. A knowledge of this disease will assist us in discriminating the various diseases of this joint, and may rescue the patient, in many instances, from that severity of treatment which is generally adopted in incipient white swellings. As this accumulation presents very different appearances in its incipient and in its advanced stages, I shall speak of each stage separately.

*In the incipient stage*, a tumour, the size of a walnut, is to be seen on the fore part of the knee, below the middle height of the patella. By a slight attention it is ascertained that this tumour is seated above, and not under the ligamentum patellæ. This tumour gives to the finger neither a sense of fluctuation nor of elasticity, it readily yields to the finger, and indeed more readily than I recollect any other tumor to yield; the sensation to the finger is as if the tumour changed its place. On removing the finger no pit-

ting remains, the tumour instantly regaining its former appearance. The tumour in this stage is subject to an occasional increase and decrease; by what local or constitutional circumstances these changes are induced, I have not been able to ascertain. The patient is free from pain except when he attempts to bend the knee much, or to kneel, and this posture is very distressing to him.

I cannot undertake to say how long the disease may remain in this state; I have seen some cases where it had continued for eighteen or twenty months.

This stage of the disease much resembles a symptom frequently attending white swelling of the knee; the symptom I allude to, is a swelling which appears between the lower point of the patella and knob of the tibia, and which is seated in the bursa that lies *under* that ligament. By attending to the situation of these two tumours we can discriminate with certainty. For the cure of this accumulation in the superficial bursa, (at this stage) I have tried frictions with various stimulating liniments, but cannot say that my patients derived material or permanent benefit from the practice. I have also advised pressure by means of sheet-lead and a tight bandage; this practice, in one case, caused a rupture of the bursa, an effusion of its contents into the surrounding cellular and ligamentous substance, and I believe effected a perfect cure, at least the patient did not return.

All the patients whom I have seen labouring under this stage of the disease, have been among the working class, and a very large majority have been servants of the female sex. Although this disease does not endanger life, nor (when its nature is known) threaten the loss of the joint, or even induce constant pain, yet as it prevents these poor people from earning a subsistence in, perhaps, the only mode of which they are capable, it must on this account alone attract the attention of the humane practitioner. We trust therefore that the exertions of humanity and science will soon prove successful in discovering an effectual cure for this wretched class of patients.

I have met with not a few instances of what I term the second stage of this disease, or the state of extreme accumulation of synovial fluid in these bursæ, and from them I deduce the following characters of this disease.

A globular tumour larger than a hen's egg, is seen on the fore part of the knee; integuments covering the tumour at first are not discoloured, but in the latter periods of the disease these become red and inflamed. The patient suffers  
more

more or less uneasiness in kneeling, and some are altogether incapable of this posture. The tumour undergoes occasional increases and decreases of size. The causes of these changes I am yet unacquainted with. An obscure fluctuation can be felt. The patella is almost concealed by the tumour; upon a close examination, however, the upper edge of this bone will be felt, and will be found to enjoy its usual mobility. When the patella is moved by the fingers, the tumour does not seem to be moved equally with it. The inflammation of the integuments is attended with a good deal of pain, and generally terminates by an ulceration; this communicating with the cavity of the sac, allows a large quantity of glairy fluid to escape; and a large dense slough is in a few days cast off; after which the glairy discharge daily decreases, and the part completely heals; more frequently, however, a small discharge continues to ooze through the orifice, now become callous. In one instance I saw the inflammation of the integuments dispersed by the application of *aq. lithargyri acetati*, although it had been so far advanced as to make me suspect an ulceration and opening of the sac.

When the ulceration of the integuments and bursting of the sac is about to take place, the integuments will be found most thin at the very apex of the tumour.

This stage of the disease has been, as I suspect, generally considered and treated as an encysted tumour. If the foregoing description accurately mark the disease, we shall at least enjoy the satisfaction of treating a disease, whose seat we know to be limited, (to these bursæ) and whose inflammation probably will not spread to the cavity of the joint; an apprehension which, I doubt not, has induced the practitioner frequently to leave this disease to its natural cure, the spontaneous bursting of the sac. The patient will thus be more speedily relieved from his disease, and the practitioner will administer that relief with perfect security.

In this advanced stage of the disease we cannot hope to effect a removal of the tumour by any topical or constitutional remedies; although we may sometimes succeed in resolving the inflammation of the skin, and thus for the time prevent the bursting of the sac.

The only mode of treatment which I have seen successfully used was, making a small incision into the tumor. In the last case where this treatment had been used, the incision was made, not into the apex, but in the inferior (or most depending) part; and I remarked, that after the third

day from the incision, the glairy fluid could not be pressed out by applying the fingers in the vicinity of the incision, while it flowed in large quantity if the pressure were applied to the apex of the tumour.

From this circumstance I have been induced to think that the tumour may with more advantage be opened by an incision made into its apex; for thus we shall obtain an uninterrupted drain for the fluid, and we also hope that the lining membrane of the cavity will more readily and more speedily be affected by inflammation, and thus the cavity be completely obliterated.

Query, Would it not be advisable to attempt the cure of this stage by the same means as are used for the cure of Hydrocele, by injection? We are not to apprehend a higher degree of inflammation from this treatment, than would attend an incision; and even though a higher degree of inflammation should follow, we shall not be under apprehension that the cavity of the joint will be engaged in it. Besides, we have reason to hope, that the inflammation excited by the injection will be sufficient, with the compression of a roller, to cause an accretion of the sides, and an obliteration of the cavity of the sac.

Having discovered these bursæ on the patella, I was led by analogy to suspect the existence of similar sacs on that part of the ulna where it is covered only by the common integuments. By making a longitudinal incision through the integuments of this part, I readily discovered a bursa, the capacity of which is such as would contain a body larger than a filbert nut.

I have seen only one instance of disease in this bursa. The patient laboured under venereal pains of his limbs; and in the site of this bursa, on one arm, was a tumour the size of a pigeon's egg, and which felt as if filled with a soft fatty substance. This tumour yielded with his other venereal symptoms to the use of mercury.

From the situation of these bursæ, on bones covered only by the common integuments, we may infer, that the use of these sacs is more extensive than has been hitherto supposed, as they seem to protect the skin from the effect of pressure against the bone.

*Dublin, May 12th. 1803.*

X.

P.S. The drawing exhibits two views of the alteration induced in the form of the joint by the second stage of this disease. The drawing was taken from a cast in plaister of Paris.

To



*To the Editors of the Medical and Physical Journal.*

GENTLEMEN,

**P**ARTICULAR circumstances having induced me to make a very extensive enquiry concerning the progress and nature of the Influenza, I have before me a great mass of opinions and facts, with permission to make them public. Your Journal would, I think, do infinitely more justice to my correspondents than a separate publication, and if you can spare them and me room, I will place the returns to my queries in order, and add a commentary. The whole will make three communications sufficiently long, of which the first may appear in your next number.\*

Clifton,  
June 17, 1803.

I am, &amp;c.

THOMAS BEDDOES.

*To the Editors of the Medical and Physical Journal.*

GENTLEMEN,

**I** Beg leave to state to you a few Observations that have occurred to me, upon a subject of great importance to the Medical Faculty at this momentous period.

For the necessary defence of these kingdoms in the present situation of public affairs, it seems that a new Income Tax is to be adopted, and an additional military force is to be raised. I am happy on many accounts to see, that a large sum of money is to be produced within the year, instead of resorting to the funding system for our supplies; but unless medical receipts be calculated with great tenderness, the contributions from them will be proportionably greater than from the other classes in society. The stability of medical practice is peculiarly uncertain, and the establishments of the Faculty are necessarily considerable; consequently, it seems extremely hard to rate their incomes equally with such as are more durable, and do  
not

\* The Editors much approve of Dr. Beddoes's proposed mode of publishing his communications on the late Epidemic, and they will certainly accommodate him in the best manner in their power, if the manuscript arrives in time.

## 74 *Report of Surgical Cases in the Finsbury Dispensary.*

not require servants, horses, or carriages for their production. Again, in the proposed plan for national defence, I think it will be reasonable to excuse the military services of every medical practitioner who agrees to contribute his professional assistance whenever the enemy lands upon the coasts of these kingdoms; or when the country is in *imminent danger* of being invaded. I will not enlarge upon either of these topics, because I presume that the propriety and force of them must be acknowledged by every one; and I think, if they were properly represented to Government, some relief would be afforded to us. I therefore recommend that a meeting of Physicians, Surgeons, and Apothecaries should be immediately called, and some plan of harmony and co-operation entered into, in order to place the Faculty upon an equal footing with the other classes of society. I am, &c.

June 20, 1803.

MEDICUS.

### MONTHLY REPORTS.

*Cases admitted under the Care of the Surgeon of the Finsbury Dispensary, St. John's Square, Clerkenwell, from May 10, to June 10, 1803.*

|                  |           |                    |         |
|------------------|-----------|--------------------|---------|
| Ophthalmia       | - - - - 1 | Spinæ Incurvatæ    | - - - 3 |
| Abscessus Artuum | - - - 4   | Hernia Incarcerata | - - - 1 |
| ——— Psoas        | - - - 1   | Dyseccæa           | - - - 1 |
| Mastodynia       | - - - 3   | Rachitis           | - - - 1 |
| Ulcera Artuum    | - - - 11  | Varix              | - - - 1 |
| Vulnera          | - - - 4   | Tinea              | - - - 1 |
| Contusiones      | - - - 9   | Psora              | - - - 5 |
| Lues             | - - - 4   |                    |         |
| Gonorrhœa        | - - - 2   | Total              | - 53    |
| Scrophula        | - - - 1   |                    |         |

In a former Number of the Medical and Physical Journal, I related a case, and offered a few observations respecting the disease of Hydrocephalus; since that time several cases of the same nature have presented themselves to my knowledge, two of which were attended with or rather succeeded by circumstances of a rather peculiar aspect, but similar to each other, though in patients of a very different age. The first case was in a youth of seven-

*Report of Surgical Cases in the Finsbury Dispensary. 75*

teen, who had every well-marked and authentic symptom of the disease Hydrocephalus, and which were extremely severe: they yielded however, after a short time, by the free use of drastic purgatives, vesication of the scalp, and slight mercurial friction. The peculiarity of the case did not occur till convalescence had far advanced; when, being considered as free from danger, he was suddenly afflicted with perfect dumbness, in which state he remained several weeks, apparently in good health, but unable to express his wants or his sensations, except by writing: he was in a state of extreme mental uneasiness from the consciousness of his situation, and was continually expressing a wish, by writing, that some person would cut his tongue, pointing at the same time to the frænum of the tongue, and endeavoured himself to obtain any sharp instrument for that purpose, more with a wish to satisfy his desire than with any expectation of advantage. A person made a slight wound with a pair of scissars in the frænum, when immediately, to the astonishment of all present, he exclaimed with great joy, that he was well, and from that time he spoke as usual.

I shall make no remarks on this case, as the way in which such a circumstance could act is to me quite unintelligible.

The other case was in a child of three years old, who was afflicted with Hydrocephalus, which yielded to blisters on the head: Strong cathartics of elaterium, calomel, and gumboge, and the cinchona with iron towards the last. As he became convalescent, he likewise lost the power of utterance, which defect continued several weeks; but from which he recovered, not by any agency of an unaccountable operation, but by the rational application of electricity, which produced its good effects in a few repetitions.

In this latter case, the circumstance which I had remarked on a former occasion, viz. the necessity for very violent doses of cathartics in this disease, was peculiarly manifest; as the bowels of this child could not be acted upon by a less quantity for each dose than of elaterium, gr. ij; calomel and gumboge, aa. gr. v,

*No. 68, Hatton Street.*

**J. RICARDS,**

*Account*

*Account of Diseases in an Eastern District of London, from  
May 20, to June 20, 1803.*

|                         |    |                         |    |
|-------------------------|----|-------------------------|----|
| ACUTE DISEASES.         |    | Diarrhœa - - - - -      | 3  |
| Typhus Mitior - - -     | 6  | Obstipatio - - - - -    | 5  |
| Scarlatina Anginosa - - | 4  | Dysuria - - - - -       | 2  |
| Ophthalmia - - - - -    | 2  | Hypochondriasis - - -   | 4  |
| Acute Rheumatism - - -  | 6  | Hysteria - - - - -      | 3  |
| CHRONIC DISEASES.       |    | Fluor Albus - - - - -   | 7  |
| Cough - - - - -         | 7  | Rheumatismus Chronicus  | 10 |
| Dyspnœa - - - - -       | 4  | PUERPERAL DISEASES.     |    |
| Cough & Dyspnœa - - -   | 9  | Menorrhagia Lochialis - | 4  |
| Phthisis Pulmonalis - - | 4  | Enuresis - - - - -      | 1  |
| Hydrothorax - - - - -   | 3  | Peritonitis - - - - -   | 3  |
| Ascites - - - - -       | 2  | Mastodynia - - - - -    | 6  |
| Anasarca - - - - -      | 4  | INFANTILE DISEASES.     |    |
| Cephalalgia - - - - -   | 7  | Convulsio - - - - -     | 2  |
| Gastrodynia - - - - -   | 10 | Vermes - - - - -        | 4  |
| Dyspepsia - - - - -     | 6  | Ophthalmia - - - - -    | 3  |
| Enterodynia - - - - -   | 3  | Aphthæ - - - - -        | 4  |
| Procidentia Ani - - -   | 2  | Herpes - - - - -        | 7  |
| Hæmorrhoids - - - - -   | 4  |                         |    |

The late epidemic seems now to have entirely subsided, and the general state of health to have much improved. There have, however, been a few instances of typhus, but it has appeared under a mild form, and has generally terminated favourably.

Scarlatina anginosa has prevailed amongst children, though the symptoms have not been very severe. The tonsils were slightly swelled and inflamed, and deglutition was attended with some difficulty. In a little time an efflorescence appeared on the skin, and general symptoms of fever prevailed. The disease appearing in this mild form, very soon gave way to the usual treatment.

The disease, in every instance at present referred to, was followed by general anasarcous swellings; these, however, disappeared in a few days, and left the patients in perfect health.



**CRITICAL ANALYSIS**  
OF THE  
**RECENT PUBLICATIONS**  
ON THE  
**DIFFERENT BRANCHES OF PHYSIC, SURGERY,**  
**AND MEDICAL PHILOSOPHY.**

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*The Natural History of the Human Teeth, including a particular Elucidation of the Changes which take Place during the second Dentition, and describing the proper Mode of Treatment to prevent Irregularities of the Teeth. To which is added, an Account of the Diseases which affect Children during the first Dentition. Illustrated with Thirteen Copper-plates. By JOSEPH FOX, Member of the Royal College of Surgeons, London; and of the Society of Medicine, Paris. Quarto, pp. 113. London, 1803.*

THE author of this truly useful, accurate, and judicious work, after stating the great and increasing attention now paid to the teeth in country towns as well as the metropolis; the great increase of this branch of surgical practice, and consequently the necessity of practitioners duly qualifying themselves, observes, "A knowledge of the changes which the teeth undergo, and the circumstances which attend the progress of the second dentition, is highly necessary, as no safe or successful practice can be expected without a correct acquaintance with the anatomy and natural history of those parts.

"Mr. Hunter's work is the best book upon this subject in our language; but although he speaks of the second dentition, and of the irregularity of the teeth, it is only in general terms; neither has he given an exact or precise description of the proper treatment, so as to lead any person to undertake with confidence the right management of the teeth during this period.

"The extensive acquaintance I have had (says Mr. F.) with medical men, has given me an opportunity of discovering how useful and important they would deem a clear and practical work upon the different stages of dentition. Being possessed of a series of preparations, exhibiting the teeth under all their changes, and having been honoured with such a share of practice as to enable me to speak with confidence, I have ventured to present to the public those observations which I have been able to make, accompanied with engravings accurately illustrating the subject."

The author then proceeds to treat, in a concise and practical manner, 1. Of the Formation of the temporary Set of Teeth. 2. Of the permanent Set. 3. Of the Manner in which the Teeth are formed,

formed. 4. Of the Shedding of the Teeth. 5. Of the Irregularity of the Teeth. 6. Of the Means of preventing it. 7. Of the Means of curing or remedying Irregularity. 8. Of supernumerary Teeth. 9. Of the Decay of the temporary Teeth. 10. Of the Diseases which attend Dentition. 11. The Analysis of the Teeth, by Mr. Pepys.

The book is beautifully printed, and the plates are particularly fine, and well chosen to illustrate the subject.

Every reader of this valuable work, we believe, will confess that the author has omitted nothing that can be of practical utility, nor inserted any thing that is not highly interesting to the physiologist as well as the practitioner.

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*An Account of the Discovery of the Power of Mineral Acid Vapours, to destroy Contagion. By JOHN JOHNSTONE, M.D. 8vo. pp. 38. London, 1803.*

THE object of this pamphlet is to assert the priority of discovery in favour of the late Dr. James Johnstone, senior, of Worcester.

Dr. J. after a few observations on the use of acids internally in fevers, which have been recommended from the earliest times, proceeds to state the dates and facts respecting fumigation.

"In 1802, the Report of the Committee of the House of Commons, on Dr. C. Smyth's petition, states a sentence of Dr. Lind; 'That a certain method of destroying infection in places from whence persons cannot be removed, is a desideratum not yet obtained in physic. Many things had been proposed and tried, but without effect.'

"Nearly fifty years before the framing of this Report of the Committee of the House of Commons, a country physician had acquired eminence by the discovery of a certain method of destroying infection, which could be used, with perfect convenience, in the apartments of the sick. In 1758, Dr. James Johnstone published his 'Historical Dissertation concerning the malignant epidemical Fever of 1756, with some account of the malignant diseases prevailing since the year 1752, in Kidderminster.' In that dissertation, adopting the theory of the day, he proposes to keep the air free from putrefaction, by the steams of vinegar; or, as a more effectual method, 'the marine acid may be raised very easily, by putting a certain quantity of common salt into a vessel, kept heated upon a chaffing dish of coals; if to this a small quantity of oil of vitriol is, from time to time, added, the air will be filled with a thick white acid steam.' It is fortunate for the fame of Dr. Johnstone, that this discovery was published at the time. He had used the mineral acid vapour to correct the contagion of putrid fever in his earliest practice. The advantage derived from it became so well known in Kidderminster, that the manufacturers, during the prevalence of fevers in that town, spontaneously placed the fuming vessels in their shops; and Dr. J. continued to use the muriatic vapour in his extensive

tensive practice, to the last hour of his life; yet all this would have availed little, had it remained a mere matter of prescription. It would have been neglected or undervalued, and perhaps the practice and discovery altogether denied. I shall not dwell on these possibilities. It was published in 1758, as having been practised in 1756; and the book attracted so much notice, that the whole edition was quickly sold.

“ But it falls to my lot to discharge an important duty to science, and to the memory of my father. It is denied, that the muriatic vapour can be used with convenience in the apartments of the sick; and some men affect to doubt, whether it be of equal efficacy with the nitric acid vapour, which has been lately (near fifty years after the muriatic was used for the same purpose) called a discovery. On both these points I shall appeal to a few simple facts.

“ It would be useless to enter upon such a detail of cases as I could collect from the books of my father, consisting merely of names and prescriptions, without any regular statement of symptoms, or of the particular operation of medicines. Such a detail would only prove that the muriatic vapour was used subsequent to the year 1756, of which any proof is unnecessary, since the publication of the *Dissertation on Fevers*.

“ Mr. Cranc, the present eminent and respectable surgeon in Kidderminster, is prepared to give the fullest testimony, that the muriatic acid vapour was so commonly used, when he first settled in business, more than thirty years ago; that the manufacturers placed it spontaneously in their shops, when fever was apprehended; and that, in malignant cases, it was always ordered by my father. He remembers Mr. Cooper and Mr. Symonds, two old and eminent surgeons of Kidderminster, who were employed with my father in his earliest practice, to have frequently mentioned the discovery of the muriatic vapour, and the use of it, in the fever of 1756; and its continual use, when occasion called for it, from that period.

“ Dr. Johnstone's method of using muriatic acid vapour was as follows:—Put one pound of common salt into an earthen vessel, and pour over it, from time to time, a small quantity of vitriolic acid, till the whole salt is moistened. If the air is foul, and peculiarly offensive, the vessel may be heated, to extricate a larger quantity of vapour; but, in a common way, the addition of the acid to the salt will answer, without applying heat, in rooms from fifteen to twenty feet square.

“ Dr. Smyth's formula is:—Put half an ounce of vitriolic acid into a crucible, or glass, or china cup; warm this over a lamp, or in heated sand, adding to it, from time to time, some nitre. These vessels should be placed at the distance of twenty or thirty feet from each other, according to the height of the ceiling, or virulence of the contagion.

“ If, in Dr. Smyth's way, only such a quantity of nitre be added, from time to time, to  $\frac{1}{2}$  an ounce of heated vitriolic acid, as shall be decomposed

decomposed gradually in the space of 15 square feet, no wonder that the vapour should be productive of little inconvenience, for it must be in so diluted a state as to be scarcely perceptible. In the same space, as much common salt as can be decomposed by two ounces of vitriolic acid may be borne without any cough, or interruption of respiration, if the immediate stream of rising undiluted vapour be avoided, i. e. four times as much. According to Dr. Smyth's directions, an apparatus, and the application of heat, are required, which are always troublesome in a sick room.

" Dr. Johnstone's whole apparatus is an earthen dish filled with salt, which may be placed in a corner, and requires no attention.

" The muriatic vapour is always attended by a visible cloudiness of the air of the apartment, a quantity of humidity being precipitated as it rises.

" The nitric vapour is more transparent and invisible, and in one instance suffocation had nearly taken place in a very large room, from its over accumulation. I do not deny that muriatic vapour may also suffocate, or excite cough, but it does not occasion these symptoms in a greater degree than the nitric. Nor do I deny that the nitric vapour may be used with efficacy and convenience to correct contagion. But I aver that the muriatic is equally efficacious, and may be used, at least, with equal convenience; that it is equally mild, and equally safe, in like quantities.

" The following facts will prove this assertion:"

Dr. J. then adduces a number facts and experiments to demonstrate the truth of his conclusions, and which appear to us highly satisfactory.

About a month ago, we received an anonymous communication from Staffordshire, in which the discovery of acid fumigation is given to the late Dr. James Johnstone, senior, of Worcester; and a case is detailed where it was successfully employed in arresting the contagion of the scarlet fever and sore throat.

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*On the Influenza, as it prevailed in Bristol and its Vicinity, during Part of February, March, and Part of April, 1803. By JOHN NOTT, M. D. Octavo, pp. 25. Bristol, 1803.*

" THE history of epidemics," says Dr. N. "is perhaps the most curious and interesting of all researches in medicine and philosophy; no diseases are involved in more obscurity; none have received less light from investigation; and, could we satisfactorily trace their origin, none would give us greater insight into natural causes; but such discussion does not belong to these pages."

After mentioning the similar epidemics recorded by authors from 1510 to this time, Dr. N. proceeds to consider the *remote causes*, and thinks them ascribable to some peculiarities in the constitution of the air, which have hitherto eluded all medical research.

" The *predisposing* causes must rest with the persons attacked by it: those, who from an irritable state of the Schneiderian membrane,



brane, or from extreme tenderness and susceptibility of the lungs, are most liable to the common catarrhal cold, have been most readily affected.

"The *proximate* causes, I presume, are those morbidic miasmata, of whatever nature they may be primarily, which float in the air, and, being inhaled by the mouth and nostrils, excite the disease.

"How far the halitus, and contact of those infected with it, can be immediate causes, involves the question of contagion, which has been much controverted; it has found, for and against it, many and zealous partisans; I am not competent to decide upon it; but I have strong reasons to entertain doubts of the disorder being contagious.

"I have seen two or three persons of a numerous family attacked with this influenza; and after a fortnight, perhaps, they have completely recovered. Another fortnight has elapsed, and others, who have sat at meals at the same table, been constantly in the same society with those first infected, have then fallen ill; the first infected not partaking of the complaint a second time. Surely this is very unlike contagion. If contagious, when any individual of a society had the disease, it is most likely the rest of the same society would have caught the infection one after another; and those first infected would have had it a second time, on the rest falling ill, who might, in the first instance, by accident, have escaped; for it does not seem a law of the disease to attack but once: many have relapsed, who, to all appearance, were got perfectly well.

"Again, I have known whole families, considerable in number, affected with it, masters and servants, on one and the same morning, or evening perhaps; to suppose that each caught it from the other, argues a rapidity of infection, that no poison hitherto known, I fancy, ever yet occasioned. But these persons were living in the same atmosphere, under the same circumstances, most likely on the same diet, and from similar habits acquiring, possibly, similar dispositions towards susceptibility. This may account for such a sudden general attack.

"Numerous instances also have happened within every person's knowledge, of married couples, one of whom has contracted the complaint, while the other has continued exempt during the whole period of its prevalence; without the idea of separate beds once occurring, or being adopted as a prevention.

"Nor does any marked boundary seem to restrain its predominance. Surely the width of the British Channel, and the adjoining extents of land on either coast, were sufficient to prevent contagion passing between London and Paris; at both which places it raged with violence at the same exact period. Indeed, in former influenzas prevailing here, foreign countries have never failed to be affected by them, in some quarter or other, though not so immediately at the same juncture.

"The great uncertainty, and sometimes rarity of its propagation

in public seminaries (which must be considered as forming a very excellent test) might, from the reports of well-informed and observant practitioners, incline us to an opinion of the malady not being contagious.

“Moreover, remote villages, and solitary houses, we learn from good authority, have been infected with it, at the very precise time it has appeared among large cities, where it would naturally make a more seeming rapid progress, from the predisposing causes prevailing more in them, and the general constitution of the animal frame being more weak and susceptible.

“My belief then is, till further investigation shall correct my judgment, that this influenza is epidemic only, not contagious.”

On the treatment at the commencement, Dr. N. has made an observation which we believe is peculiar to himself.

“As this complaint is particularly sudden in its attack, so does it seem to admit of very sudden suspension. A full dose of tincture of opium, that is, perhaps thirty drops, taken at bed-time, has seemingly cured the patient for the whole of the next day; more especially, I have remarked, if any way suffering from its subsequent effects as a narcotic; but the succeeding day it has returned with redoubled violence, as though determined to have its course. From 30 to 40 drops of the following compound tincture, viz. tincture of fox-glove, tincture of opium, of each two parts, tincture of squill one part, mixed, taken once in six hours, would alike cause a suspension temporary only.

“To remedy this disorder, the same intentions of CURE as we observe in the common catarrhal cold were all that, I believe, our medical practitioners adopted. To equalise perspiration throughout the system, and for a time to keep it increased, seeing that all the other natural functions of the body were duly regulated, appeared the main object. In the influenza of 1782, some writers on the subject told us, that the disease passed off in proportion as a tendency to perspiration was observable; this shows how Nature would effect a cure of her own accord, and how nearly therefore we ought to imitate her in our intentions.”

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*Cases of the successful Practice of Vesicae Lotura for the Cure of diseased Bladders. Part I. Second Edition, 8vo. pp. 47. Part II. with a Plate of the Apparatus: And also, Cases of diseased Affection from Phymosis, with a new Mode of operating, and Plate of the Instrument for performing it. By JESSE FOOT, Esq. Octavo, pp. 92. London, 1803.*

THESE pamphlets contain thirteen cases of diseases of the bladder, attended with great distress to the patients, cured, or greatly relieved, by injecting the bladder with proper fluids. To these the author has added six cases where the dysuria, and affections of the bladder and kidneys, proceeded from phymosis, or too small a perforation of the glans penis.

This

This work merits the attention of Surgeons, and is likely to lead to considerable improvements in the manner of treating diseases of the urinary organs.

*Medical Directions for the Use of Navigators and Settlers in Hot Climates.* By THO. M. WINTERBOTTOM, M. D. Physician to the Colony at Sierra Leone. 1803, pp. 144. 8vo.

AN intelligent medical man, who has resided four years at Sierra Leone, must be familiar with most of the diseases and accidents of tropical climates, with which Europeans are likely to be affected. The Author of this useful little work, introduces it to public notice in the following simple and unassuming manner.

"The medical directions contained in the following pages were originally written at Freetown on the coast of Africa; for the use of such trading vessels in the service of the Sierra Leone Company as were unprovided with surgeons.

"Having been favourably received, and applied; on many occasions, with a beneficial effect, they are now presented to the public under an enlarged form, with the hope that they may become more extensively useful to Europeans, whose pursuits, in hot climates, often lead them into situations where medical assistance cannot be obtained.

"The directions are purposely written in a plain, familiar manner: in order to render them more intelligible, and more easily applicable to practice, a few cases have been added of persons labouring under some of the diseases described. Technical terms have been carefully avoided, and no expressions are used; but such as, it is presumed, must be well understood by the generality of readers.

"The methods of cure recommended, are for the most part such as the author found successful during his residence at Sierra Leone, where, for nearly four years, the health of more than fourteen hundred persons was entrusted to his care."

The first observation which the author makes is rather too general. He says, "Europeans upon their first entrance into a tropical country are too apt to have their minds impressed with ideas of danger from the climate. The great increase of heat is the first inconvenience they experience, and in general, that which they most dread, &c." It is true, that the risk to health incurred by a change from cold or temperate to tropical climates, is a matter of common observation, and is a great source of anxiety to the friends of those whose duties or pursuits lead them thither: but has not melancholy experience shewn, in numerous instances, this apprehension is but too well founded? The fault of Europeans, at least of Englishmen, in such circumstances, is too blind a confidence in the vigour of their constitution, and an obstinate rejection of those precautions which the experience even of the natives of tropical climates (the best judges in these instances) has uniformly shewn to be requisite. If the utmost difficulty is found in prevailing upon

the Englishman, first entering into tropical climates, to moderate his intemperate practices, to give up some of his European habits, to use the precautionary measures of due clothing, avoiding damps and the like, it can hardly be maintained that he is likely to err from excess of apprehension of disease.

Some very proper directions for diet and general management of health immediately follow: they are such as have been inculcated by Lind, Pringle, Huxham, and many others; but we do not recollect having ever seen them drawn up with more good sense and unaffected plainness. The author is a great advocate for flannel clothing. He says, "The clothing ought to be light, but sufficiently warm to guard against sudden changes from heat to cold. Cotton and flannel are the best articles for dress. Short jackets, with trowsers reaching to the ancles, and fastened by strings or buttons, are most convenient; where stockings are not worn, socks should be used in their stead: the practice of going without shoes is highly improper. Hats with high crowns, or with a handkerchief put in them, are of great service in protecting the head from a hot sun. The use of flannel next the skin cannot be too strongly recommended; for although the first wearing of it may produce some trifling inconveniences, such as, an itching in the skin, and an increased eruption of the prickly heat, yet these seldom last longer than a few days. By constant use, the wearing of flannel becomes remarkably pleasant, and to it many persons are indebted for the preservation of their health and lives in very hot climates. Being defended with flannel, they have suffered no inconvenience, even when exposed to the tropical rains for whole days and nights in open boats, or in the woods; while others, neglecting to use the same precaution, were presently after seized with fevers. During the rainy season, the air often feels raw and chilly; and the changes from heat to cold are more sudden than at other times: but although the good effects of flannel are then more apparent, it is nevertheless extremely beneficial in the dry season also; after violent perspiration, a linen or cotton shirt becomes wet and always cold to the back, which never happens when flannel is worn. Any considerable alteration of the temperature of the air requires a proportionate change in the dress. Those especially who are exposed to the night air should put on additional clothing. In the rainy season, woollen cloaths will be found both comfortable and necessary. It is a very frequent custom with those who have resided long in Africa, to wear only a shirt and trowsers, and in this dress to expose themselves at night when the land breeze blows; or at other times to sit in a current of air: but, however agreeable the present gratification may be, it is always followed by a feverish dry skin, owing to a stoppage of perspiration, and very often proves a cause of violent diseases; so that it is a practice by no means to be imitated by new settlers."

The inconveniences and accidents of ship-board are next considered; such as sea-sickness, and the best means of guarding against,  
or



or shortening the period of that distressing event; scurvy, and other circumstances of importance.

The author next proceeds to describe the disorders that occurred at Sierra Leone, and which occur in all similar climates. The first and most important class of diseases is fever; its course is known by fatal experience to be dreadfully rapid in these climates, and hence its first obscure symptoms should be watched with anxious care. The author divides the fever of hot climates into the two species of remittent, or what is usually termed emphatically *the fever*; and intermittent, or ague. For the present purpose this distinction may be sufficient. Ague is first described: its symptoms must be familiar to all our readers; we shall therefore only mention the circumstances that apply peculiarly to hot climates. Here the author remarks: "Much mischief has arisen in consequence of an opinion which is too generally entertained, that whenever a cold fit takes place, no danger is to be apprehended; and the patient's friends are confirmed in this opinion, as they observe that after lying down a few hours while the fit is upon him, he has frequently a keen appetite as soon as it is over, and can return to his work as usual. The fits likewise, after several returns, seem to become milder; and sometimes wholly cease for a few days, a week, or a month, and then return only for a short time: this deceives the patient, who thinks the disease is gradually going off, while, on the contrary, it grows more inveterate, and is undermining his constitution. It cannot be too often repeated, that we ought never to neglect, nor think slightly of an ague: by not attending to this maxim, many Europeans on the coast of Africa have been irretrievably injured; for experience sufficiently proves, that the consequences of a neglected or mismanaged ague are, in tropical climates, more fatal than even the effects of a continued fever."

The cure is to be effected by the bark. A simple case of ague is added in illustration; an useful plan, which the author pursues throughout.

He then proceeds to describe the remittent fever, a more dangerous complaint than the former, and the most fatal disease affecting Europeans on the coast of Africa. The following are its symptoms: "The manner in which the fever comes on is different in different people; it frequently appears as a common cold, producing slight head-ache, chilliness, and wandering pains over the body; but is so slight that the patient scarcely thinks himself unwell. With these deceitful symptoms it continues three or four days, until the great weakness of the patient, or some sudden change in the disease, raises an alarm. It is thus, probably, that many persons are said to be carried off by fevers within forty-eight hours: whereas, had the time been reckoned from the first sensation of illness, it would have been six or seven days, or more.

"The patient sometimes feels uneasy for a day or two before any febrile symptoms take place; there is a heat and heaviness of the eye-lids, so that he can scarcely keep them open; or a burning heat

in the palms of the hands and soles of the feet; he feels the skin dry, rough, and uncomfortable; complains of a loss of appetite and bad taste of the mouth; and has a sensation of anxiety, or universal oppression, not easy to be described. The previous sensations, however, are so numerous and varied, that almost every person who has had the disease, is conscious of its future attacks by a set of feelings peculiar to himself. There is sometimes a dark sallow complexion, with a heavy dull eye, and a want of activity, which continue for a day or two, and point out the approach of fever to a by-stander, though the patient makes no complaint himself.

"The fever usually commences with shiverings, not very severe, and sometimes scarcely noticed by the patient. The shivering is succeeded by the symptoms which occur in the hot fit of an ague; but the restlessness and anxiety are in fever generally greater; the pain of the head also is more distressing, and seems often as if produced by a sharp instrument fixed over the eyes: at other times there is a sense of tightness over the forehead, as if the head were bound round with a cord. There is a burning heat in the skin, though to the patient it feels rather cool, which is apt to mislead; but if the hand at this time be applied over the forehead, the heat will be found very great. The patient tosses about, and seeks ease in every part of the bed: sometimes however he lies upon his back, inwardly moaning, without making any specific complaint. In this case, if the hand be applied over the stomach so as to press it gently, the uneasiness is in general increased. There is seldom much delirium, but the patient seems confused, and gives very quick answers to the questions put to him: if he fall into a sleep it is for the most part uneasy, and interrupted by frequent startings.

"When these symptoms have continued with more or less severity for a few hours, a sweat breaks out, first about the neck and breast, sometimes, though seldom, spreading over the whole body: this sweat is more likely to be diffused over the body after the first fit than after any of the succeeding ones. The relief which follows it after the first fit is sometimes so great that the patient thinks himself well, though the head-ache does not go off so entirely as in the ague; and his strength remains greatly depressed. This relief of the symptoms, or remission, lasts only six or eight hours, when another fit comes on, generally a much more severe one. The second paroxysm being seldom preceded by a cold stage, seems to consist only of a hot fit, more especially as the sweating stage, which should follow it, does not appear with any regularity at the second or third return of the paroxysm. In short, all the symptoms become more violent, and the remission less perceptible every succeeding fit. The fever goes on in this manner until the patient's strength is entirely exhausted: a fatal termination seldom happens before the fifth or sixth day, but takes place generally about the eleventh or twelfth day, if the complaint has been neglected in the beginning."

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The plan of cure laid down is judicious, and agrees in many particulars with that of the most respectable authorities. The author next describes the symptoms of the yellow fever, principally by way of diagnosis from the last mentioned. It does not appear whether he writes in this case from experience, though the example of the too celebrated Boulam fever, shews that the virulence of this disease is not confined to America or the West Indies.

"The yellow fever," he observes, "mostly affects persons just arrived from Europe, or from the northern parts of America; particularly those of a robust, full habit of body, who appear in the highest health. It is most prevalent during the hottest months of the year, and is often a consequence of too violent or too long continued exercise in the sun. It is more frequent on the sea-coast, and in a heated dry sandy soil, than in the interior parts of the country: and in mountainous situations it rarely occurs. The remittent fever, on the contrary, appears chiefly in low swampy situations, in uncultivated places, and stagnant air; and it chiefly attacks such as have resided some time in the West Indies, especially when weakened by previous illness, or of a delicate, relaxed habit of body. The yellow fever attacks very unexpectedly, and with very great violence, while the patient thinks himself in the most vigorous state of health." He then enumerates the symptoms, which we shall not transcribe, as they agree with the description given by Rush and other authorities. Dysentery does not seem to be very frequent at Sierra Leone. Cholera Morbus, being chiefly occasioned by sudden transition from heat to cold, appears not to be unfrequent here; it is described with great clearness. We were rather surprized to find that Tetanus had not been known at this colony; and the Author adds, we doubt whether quite correctly, that "it appears to be scarcely known upon the coast of Africa." It is however well described. Insolation, or the *Coup de Soleil*, is equally unknown in Sierra Leone: but there occurs frequent fulness and throbbing of the temples to Europeans who expose themselves much to the sun.

Several other diseases of the most usual occurrence, both in hot climates and in general among sailors, are added, such as rheumatism, rupture, small-pox, lues, ulcers, wounds, &c. The description is such as can be readily understood; and the mode of practice, generally, can be easily followed. A short Appendix is added, containing a select list of medicines for the coast of Africa, with plain directions for their use. The list of medicines we shall give: the quantity of each is stated to be sufficient for twenty men for one year.

Powder of Peruvian bark, ℥ x. Powder of Angustura bark, ℥ iv. Powder of Colombo, ℥ j. Powder of Rhubarb, ℥ x. Powder of Ipecacuanha, ℥ j. Tartar emetic, ℥ ii. Antimonial wine, ℥ viii. Opium, ℥ ss. Laudanum, ℥ j. Calomel, ℥ xii. Sweet spirit of nitre, ℥ j. Oil of mint, ℥ iij. Huxham's tincture of bark, ℥ xii. Spirit of lavender, ℥ j. Epsom salts, ℥ x.

Camphor, ℥ xii. Gentian root, ℥ vi. Cream of tartar, ℥ iv, Castor oil, ℥ vi. Gum Arabic, ℥ iii. Bilious or purging pills, No. 340. Magnesia, ℥ ij. Salt of tartar, ℥ j. Diluted vitriolic acid, ℥ j. Diluted nitrous acid, ℥ ss. Cerate, ℥ iij. Simple ointment, ℥ iii. Red precipitate, ℥ vi. Blue vitriol, ℥ ij. Blister plaster, ℥ iii. Powder of Spanish flies, ℥ iv. Extract of lead, ℥ ij. Sugar of lead, ℥ j. Spirit of hartshorn, ℥ ij. Flowers of sulphur, ℥ x. Sticking plaster spread on cloth. Tow, lint, rags, &c.

Stores for the Sick. Barley, ℥ xij. Sago, ℥ x. Tapioca, ℥ x. Portable soup, ℥ vi. Vinegar, ℥ viij. Concrete acid of lemon, ℥ ij.

To the above articles should be added, sugar, tea, coffee, molasses, onions.

The general execution of this little work is very respectable, the style is plain, unaffected, and so free from technical terms as to be readily understood by captains of ships, or any intelligent persons not of the profession. The impression of the whole is certainly to lessen the supposed danger to Europeans from tropical climates, a circumstance which at least, will give a favourable idea of the healthiness of Sierra Leone, in which settlement the Author's observations seem principally to have been made.

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*Illustrations of some of the Injuries to which the Lower Limbs are exposed.* By CHARLES BRANDON TRYE, Member of the late Corporation of Surgeons in London, and Surgeon to the Gloucester Infirmary. pp. 37, 4to, with plates,

THE chief circumstance which gave rise to the publication of this work, the author states to be the rare opportunity which fell in his way of dissecting two cases, one of dislocation of the femur, the other of fracture of its articulating neck, within a short time after the accidents; an opportunity which certainly does not often happen, since these misfortunes are not of themselves attended with much risk to life. Besides, the author, in his situation as surgeon to a very respectable Infirmary, must have been in the habit of observing many cases of dislocation of the limbs, and the present work shews that he has bestowed much attention on this important subject.

The three first plates represent the dislocation of the femur, which was upwards and outwards, the articulating head of the bone being driven under the glutæus major, and by dissection was found to have formed, during the interval of twenty-two days between the accident and the death of the patient, a new ligamentous attachment to the remains of the ligamentum teres. On account of other injuries no attempt was made to reduce the dislocation. The fifth, sixth, and seventh plates are dissections of a case of fracture of the neck of the thigh bone, one of the most uniformly hopeless cases in surgery that ever occurs. The patient, an aged female, died of a bowel complaint six weeks after the accident. On examination, the capsular ligament was found entire and sound, the fractured parts

were



were united, but not firmly, by a great luxuriance of callus, the neck of the bone was twisted, the great trochanter being thrown backwards so as to advance the neck of the bone, and to force the little trochanter very near to the head of the bone. The author adds his testimony to that of several other eminent surgeons in the opinion, that no relief can be obtained in the calamitous accident of fracture of the neck of the femur, by splints or any restraining bandage; and, he adds, that he "cannot recollect an adult patient, who did not halt for ever, after fracturing the neck of the thigh bone.

Some good remarks upon dislocations are given, and two cases are added, which are instructive in the mode of reduction. These we shall quote. "In a strong muscular man, whose thigh had been dislocated upwards and outwards, after fruitlessly trying other methods, the following process succeeded. He was laid prone upon a bed, a sheet was passed between his thighs, and held firmly by two assistants. I then knelt upon the pelvis in order to keep it steady, and resist its being raised up when the extension should be made. Three men then pulled at a towel fastened round the thigh above the knee, and drew it in such a direction as to carry the thigh upwards, that is, in relation to the trunk, backwards. I then rested my two hands on the head of the bone, and pushed it downwards and forwards with all my strength, and after a short exertion of our powers in this manner, I directed a gentleman who held the leg to twist the toes suddenly outwards, upon which the head rushed into the acetabulum with a loud noise.

"I tried the same and a variety of other methods in a very muscular middle-aged woman, unsuccessfully, within six hours after her accident. She took half a drachm of Dover's powder at bed time, the succeeding night and the next morning used the warm bath, and was well sweated for two hours before the intended time of repeating the taxis. She was laid upon the bed on the sound side. I then pressed my left hand against the head of the bone, one of my knees against its body, a little higher than the middle, and with the other hand, I drew her knee outwards. The leg was supported by an assistant, the knee bent to the right angle. Three persons made steady the pelvis, by holding a sheet passed between the thighs, and three others made the extension. In this manner our strength was exerted for some time, and I plainly felt the head of the bone move, but the reduction was not completed. We renewed our attempts in the same manner, except that a gentleman, who became one of the extenders, placed his foot firmly against the arch of the pubis (properly defended) and thereby both increased his power of extension, and at the same time rendered the pelvis more steady and fixed. The force being continued for some time, and my hands and knee being applied in the manner already described, I directed the assistant who supported the bent leg, suddenly to carry the internal ankle towards the other leg and to twist the toes outwards, and then the head slipped into the acetabulum."

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The author adds some judicious observations on the reduction of the humerus, in which he recommends, above all other methods, for the surgeon to place a flattish ball or pad in the axilla, and over that a towel, which he ties over his own shoulders, and this must be so short that the operator must stoop considerably when it is fixed over his shoulder and the patient's axilla. The use of this contrivance is to apply to the head of the dislocated bone, the force of the surgeon exerted in raising his body, and to allow of his hands to be employed in directing the humerus and steadying the scapula. This is in fact the old fashioned implement of the kitchen towel and roller, which is known to every surgeon and bone-setter. The author notices the common objection to elevating the head of the bone on the supposition of the resistance opposed by the neck of the scapula, and thinks that the objection is not well founded, if the elevation be correctly made.

Some useful inferences may be drawn from these cases, of the importance of the operator himself taking as great a share in the manual part of the reduction as he well can, and rendering the efforts of the assistants as it were subordinate to his own. A full use should be made of the great purchase which the posture of kneeling or the resistance of the feet gives to a man in these circumstances. Persons who empirically practice bone-setting in the country, with no anatomical knowledge, nor any other advantage than a strong arm, and a kind of rough ingenuity in employing to the best effect their manual powers, though they often do irreparable mischief by their unregulated violence, frequently acquire great, and probably deserved reputation in this branch of surgery. Those, therefore, who have professional skill, should not hesitate to avail themselves of those methods, however rough and unsightly they may appear, which experience shews to possess great power, and which their anatomical knowledge enables them to regulate with safety.

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*An Inquiry into the Efficacy of Oxygen in the Cure of Syphilis. To which are subjoined, a few general Observations on its Application in various other Disorders. By C. PLATT, Surgeon to the New Finsbury Dispensary, and Member of the Royal College of Surgeons, London. 8vo pp. 100. 1803.*

As every Author must be supposed to understand his own views and motives, in publishing at least, as well as any other person, we consider it fair, in general, to give every one an opportunity of stating them in his own way. Mr. P. thus modestly introduces his pamphlet.

“ The liberty I take to claim the indulgence of the public on a subject that hath been so ably discussed, may, perhaps, be considered rather arrogant, if not superfluous. In the prosecution of this design, however, I had in contemplation two objects; the one, to ascertain, by reference to practical experiments, the antidotal power of oxygen in syphilitic complaints; and the other, should my success not be commensurate with my expectation, to investigate

gate the cause of such contrariety of sentiment among practitioners, who had the same object in view.

"About the termination of the fifteenth century, it is conjectured, the syphilitic disease was introduced into Europe from some of the new-discovered American islands. From that period to the present, much as we are indebted to the united abilities of so many intelligent writers who have favoured the world with their sentiments on this subject, still it is to be lamented, that a multiplicity of perplexing cases daily occurring, resist the common and generally adopted mode of treatment. Whether the want of more powerful remedies, or a more judicious administration of those already known, be the cause of this failure, is a difficulty often experienced, but not yet satisfactorily explained.

"No one, I am persuaded, will deny the advantage of frequently collecting the scattered though imperfect ideas that chance, or the labour and ingenuity of individuals, may have produced; and by occasionally forming a summary of these, it would be lamentable indeed, if some useful hint could not be derived, or some practical information inculcated.

"Our attention hath of late been very commendably excited by an ingenious mode of exhibiting oxygenous substances, as a remedy in eradicating syphilitic complaints. These saline substances unquestionably possess great activity, and are capable of producing some important changes in the animal economy; but whether the extent of the testimony already promulgated in their favour, entitles them to rank as specifics, so strenuously contended for by their advocates, can only be determined by an impartial investigation. Candour and truth compel me to observe, that the result of some experiments, carefully conducted, do not incline me to draw so favourable a conclusion. Having, from a variety of sources, acquired a strong opinion in favour of the antisiphilitic quality of the oxygenous substances, I neglected no opportunity that occurred, in the pursuit of so important a subject; and with what success, will be better determined after a perusal of the subsequent sheets."

The Author devotes the first twenty pages to a description of the principal symptoms of Lues, and a discussion of the much agitated question respecting the identity of the *VIRUS* in all the varieties of the disease. He considers the *VIRUS* the same in all; and imputes the variety of infection or symptoms, to the varied state or predisposition of the patient. Mr. P. next presents his Readers with a selection of cases, in which the oxygenated substances were employed without success.

This pamphlet appears to us to be written by a gentleman anxious to improve the scientific part of Surgery; and we are of opinion that it will be read by practitioners with approbation.

*Useful Hints to those who are afflicted with Ruptures; and on the Empirical Practices of the present Day.* By T. SHELDRAKE. 8vo. pp. 160. London, 1803.

EVERY attempt to alleviate human sufferings deserves attention; and although personal interest may be suspected of dictating some of the reasoning, yet the attempt should not, merely on that account, be entirely discouraged. Mr. S. thus explains his designs:

"The following observations were composed for the information of those persons, whose knowledge of ruptures was limited to the fact that they themselves were afflicted with the disease. Such may generally be divided into two classes, viz: those to whom the disease is an object of terror, and those who think it is of no consequence. The former torment themselves with needless apprehensions, and embitter their lives with perpetual anxiety to avoid evils that are created by their own imaginations; while the latter frequently betray themselves into imminent danger by their imprudent negligence.

"To re-assure the one, to caution the other, and to point out to both the only course that will place them in safety from the effects of this disease, are the objects which, it is hoped, may possibly be effected by this publication. It contains what may be called a popular account of the disease; i. e. such an account as professional men will allow to be true, and patients may understand, without possessing that information which professional men have on the subject.

"Besides investigating, in a general way, the principles on which trusses are applied to produce their effects, I have attempted to ascertain, to what kind of ruptures peculiar species of trusses may be best applied. This attempt must, from the nature of the subject, be imperfect; but, I trust, so much has been said as will demonstrate that no one kind of truss can be applicable to all ruptures indiscriminately; and this demonstration will prove the absurd pretensions and mischievous tendency of trusting on this subject to that description of persons, who having acquired the knack of making trusses in some particular manner, apply those trusses, indiscriminately, to every patient who comes in their way.

"Works like this generally fall into the hands of those who do not apply regularly for professional advice. To make it useful to this description of readers, I have inserted such information as can, without impropriety, be given in writing, with respect to the patient's management of himself, and the application of the truss. Much advice of this kind must be varied, according to circumstances, and adapted to individual cases; yet, as a kind of general system, if such a term may be used, I hope that what is contained on that head in the following pages will not be found entirely useless. In short, though it is possible that, from the various objects it embraces, few will take the trouble to read the whole, yet I am not without hopes that, whether the patient's object is to obtain



obtain a just account of the various trusses that may be offered to his notice, or a rational idea of the principles on which trusses should be applied, to afford the best chance of being useful, he may find the following little work not entirely beneath his notice; and, on this account, though not without knowing it has many defects, and believing it may have many more than I actually know of, I cheerfully leave it to its fate."

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## MEDICAL AND PHYSICAL INTELLIGENCE.

[ FOREIGN AND DOMESTIC. ]

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THE VACCINE INOCULATION is fully established throughout all the British Presidences in India. Dr. JENNER has been informed, that at Madras, the children of every European in that settlement have been already inoculated. From Bengal he also learns, that the Hindoos receive it with the greatest ardor, from the veneration these people pay to the cow, as well as for the security they find in it from the Small-pox.

Dr. JENNER has also received a very curious and interesting piece of intelligence from Dr. SACCO, of Milan, whose elegant work on Vaccine Inoculation is well known. Dr. Sacco was among those who not only doubted the validity of Dr. Jenner's opinion of the origin of the Cow-pox, but imagined he was in possession of facts sufficient to overthrow it completely. However, a singular circumstance happened, to convince the Doctor of the fallacy of his former observations. One of his coach-horses had the common malady of the heel; his coachman attended to the sore, and, in consequence, exhibited several pustules upon his hands, with all the characteristic marks of those derived from the cow. It was deemed too late to take matter from them for Inoculation; but soon after this, a similar case occurred on the fingers of the coachman of another gentleman in Milan. From these pustules Dr. Sacco inoculated nine children and a cow. Three of the children were infected, and had the disease exactly in the same way as if it had been communicated from the cow. With matter taken from these children, other inoculations were performed; and at the time this account was transmitted, it had reproduced itself correctly a fourth time. Dr. Sacco also adds, that he has inoculated six other children with the matter of grease, and on two of them it produced pustules with all the genuine characters of the Vaccine. He intends giving a coloured plate of the disease in the foot of the horse.

M. BASSE gives the following as the best method of preparing muriatic æther with the simple acid:—Melt marine-salt in a crucible, and keep it in fusion an hour, or till the whole of the water of crystallization be dissipated; put twenty ounces of this salt into a tubulated retort, adapt to it a curved tube, and plunge the tube to the bottom of a bottle with two necks, into which have been poured ten ounces of alkohol prepared by mixing, in a retort, three parts of highly rectified spirit of wine with one of potash, melted and pulverised whilst hot, and distilled till it is diminished one-half. When the whole is well luted, pour into the retort, in very small quantities at a time, ten ounces of highly concentrated sulphuric acid. After each introduction of acid, close the tube carefully, and put in no more acid till the salt has ceased bubbling. The cork of the other neck of the bottle must be taken out from time to time, to suffer the air condensed above the alkohol to escape. After the acid is introduced, place the retort on a sand-bath, and heat it gradually, till all the muriatic acid be expelled. During this part of the operation, care must be taken frequently to cool the bottle containing the alkohol, by wrapping a wet cloth round it. The alkohol thus charged with acid, is then put into a retort, and distilled to one-half; shake the distilled liquid with alkaline-ley, to carry off the acid, decant the æther which is found on the surface, and keep it in bottles well corked. From the above-mentioned quantities two ounces and a half of æther are usually obtained.

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Mr. BUCHHOLZ, of Erfurt, has made a series of experiments, in order to ascertain the existence of cobaltic acid, or whether the metal of cobalt is really capable of being changed into an acid by its combination with oxygen, as has been asserted by Signor Brugnatelli, on whose authority the cobaltic acid was adopted. The results of these interesting experiments, which proved to be a negative of this doctrine, are the following:

1. Cobalt is not to be changed into the state of an acid, by treating it with any kind of nitric acid, or according to any known method.

2. It is likewise not to be effected, according to Mr. Scheele's method, by means of muriatic and nitric acid; the former having a greater affinity to oxygen than cobalt.

3. The supposed cobaltic acid of Signor Brugnatelli is most probably nothing but a disguised arsenic acid, or a combination of arsenic acid with ammonia and some oxyd of cobalt; at least such a composition produced the same phenomena, which Brugnatelli considers as characteristics of his cobaltic acid.

4. On treating cobalt, or oxyd of cobalt, which is entirely free from arsenic, with nitric acid and ammonia, no such combination can be obtained, possessed of the characteristics ascribed by the Italian chemist to his cobaltic acid.

5. These

5. These experiments may serve to prove how necessary it is to refer any new discovery of this kind to the test of repeated experiments, before it is admitted as certain.

Mr. TROMSDORFF gives the following method for obtaining metallic cobalt perfectly pure. "Mix a pound of best saffire with four ounces of nitrat of potash, and two ounces of pulverized charcoal, and throw the mixture in small portions into a red-hot crucible; repeat the same operation three times: at the third time leave the matter exposed to a white heat; remove it rapidly, and add four ounces of black flux: place the crucible in the furnace, and let it remain perfectly red-hot for an hour; when cold, separate the reduced part of the cobalt, which, in consequence of the treatment to which it has been subjected, has lost great part of its arsenic and iron; it must then be mixed with thrice its weight of nitrat of potash, and the mixture deflagrated in small portions in a red-hot crucible. By this last operation the iron is completely oxydated, the arsenic is converted into acid, and taken into combination by the potash. By levigation with warm water, all the saline parts are carried off, and the oxyd of cobalt is separated by the filtre. The oxyd is to be dissolved in a suitable nitric acid, and the solution filtered."

Cit. DELUNEL has contradicted the opinion of those, who think the distilled waters of inodorous plants useless in medicine, and not differing from common distilled water; and he relates two instances, in order to prove his assertion. The distilled water of borage, (*Lorago officinalis*) on being evaporated, obtained an orange colour, and the residuum had a peculiar smell, like that of artichokes. In another experiment, the residuum became of a straw yellow colour, and it was precipitated by ammonia. On suffering the water to stand for about a month in a bottle that was well shut, a strong smell of hepatic gas was perceived on opening the bottle; whence he thinks it may be used as a mineral water. The water of *solanum nigrum*, L. or common night shade, emitted the smell of opium, but disappeared on the evaporation being continued. The red extract contained a considerable portion of nitrat of kali,

Mr. SCHRADER, Apothecary at Berlin, has made the interesting discovery, that the Prussic acid is contained in the aqua laurocerasi, and the distilled water of the flowers of the peach-tree, as likewise in the infusion of bitter almonds. He was led to this discovery by observing, that the Prussic acid has the quality common with those distilled waters and infusions, of killing animals; and that the Prussic acid, as well as the abovementioned water, possesses the smell of bitter almonds. This discovery is likely to be very advantageous to medicine as well as to the arts; and the author thinks it probable, that what is hitherto called the narcotic principle

ciple may be nothing but the Prussic acid; and in order to prove this conjecture, he intends making experiments with opium, hyosciamus, belladonna, and the other narcotics.

The new metal which has been announced to the public, under the name of *palladium*, is found to be a composition of two parts of platina and one of mercury.

Mr. W. HENRY has published a third edition of his excellent Epitome of Chemistry, revised and considerably enlarged.

Dr. PERCIVAL, of Manchester, has in the press, and nearly ready for delivery, a work which will comprehend a General System of Medical Ethics. The outline was sketched several years ago, and constitutes the code of regulations by which the Faculty of the Manchester Infirmary agreed to regulate their official conduct, and their intercourse with each other. But the extended work will be addressed to the Medical Profession at large; and will include also the duties of such of its members as are unconnected with public establishments of charity.—The aphoristic form has been chosen, as the best calculated to define with precision those principles of urbanity and rectitude which should govern the conduct of the members of the medical profession to their patients and to each other. Copious Notes and Illustrations will form an Appendix, and will complete the plan of the undertaking.

Mr. DEWAR has a work in the press, which will be published in a few weeks, entitled, "Observations on Diarrhœa and Dysentery, as these Diseases appeared in the British Army, during the Campaign in Egypt in 1801. To which are prefixed, A Description of the Climate of Egypt, and a Sketch of the Medical History of the Campaign."

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### TO CORRESPONDENTS.

The Editors will thank Mr. Smith for the description of his improvement of the Trephine; they are in possession of the Drawing.

Mr. Marson's Hints are worthy of the public attention, but the style is too diffusive in its present form.

Dr. Adams's and Mr. Luscombe's Communications are received.

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### ERRATA.

Vol. ix. Page 427, line 12, read 3 vifs. vice 3 ifs.

432, 19 from bottom, read Hurworth, vice Husworth.

433, 6 ditto, read Vol. ix. vice iv.

Vol. x. Page 52, running Title, for *Apoplexy*, read *Epilepsy*.



THE  
Medical and Physical Journal.

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VOL. X.]      AUGUST 1, 1803.      [NO. LIV.

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*Printed for R. PHILLIPS, by W. Thorne, Red Lion Court, Fleet Street, London.*

*To the Editors of the Medical and Physical Journal.*

GENTLEMEN,

WITH this you have the first part of my promised Collection. It is perhaps only necessary to premise, that my Queries chiefly related to the propagation of the Influenza; to its affinity with common catarrh, pneumonia or low fever; and to the time and manner of its appearance and disappearance.

I should not find it easy to reduce my materials to strict order, even if they were to receive no addition; but I have aimed at some kind of arrangement, by placing those Communications first, which are decided in one way, on the grand question of Contagion; next, the sceptical; and lastly, those which express, more or less positively, an opinion contrary to the first. I fear you will think my packet too bulky for one of your numbers; and yet the two next will probably be larger.

*Clifton, July 4, 1803.*

THOMAS BEDDOES.

1. Mr. HANSARD, Bristol, April 12, 1803.

I remember seeing patients in the disease called Influenza of the year 1775; but have seen nothing in the present Epidemic that comes exactly up to the character of the disease of the above year; that was, I believe, generally admitted to be contagious; this, I think, cannot be.

A fine boy, six years old, was seized with symptoms of Influenza; his disorder continued twelve days, after which he recovered. A younger sister and elder brother to the above boy slept every night in the same bed with him, yet both escaped the disease. A stout healthy man, twenty-eight years old, was seized with symptoms of strongly marked Influenza; he continued ill fourteen days; the

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plan laid down for his recovery was wholly neglected, and a very bad one adopted by his friends: he died. His wife slept every night in the same bed with him, yet she escaped the disease. A similar case with the first I have stated, occurred in my own family, and we are eight in number.

I think the influenza distinguishable from common catarrh.

A few instances have occurred so very complex in their symptoms, that I could not decide to what class they belonged; but generally gave way to the antiphlogistic plan.

There was, on various occasions, an alarming and sudden depression, not often met with in common catarrh, so much so, that even cordials and antiseptics seemed as indispensably necessary as in low and putrid fever.

On the 2d of March I saw the first case, and on the 4th of April the last.

2. Mr. ROLFE, Bristol Dispensary, April 11, 1803.

The disease in question I have, from the first considered as epidemic; and on referring to the admission book of the Bristol Dispensary, I find I have admitted from the commencement of the present year to this time, 721 patients, out of which have been 153 well marked cases of catarrh, which are entered accordingly; also from 50 to 60 more, I am now well satisfied, had the same disease, which was entered under the names of peripneumonia notha, tussis, &c. from its partaking of its different variations with which it has been attended.\*

Notwithstanding that whole families have been attacked with this disease, I have had no reason to imagine it arose from the sick person, as, in several instances where some part of the family have been kept from the sick person entirely, they have been equally affected; and in no instance have I found the nurses, or those more immediately exposed to its influence, the more generally affected. My own maid-servant was attacked with the complaint, and was confined for several days; and though I have eight in family, (and whilst she was ill nine) yet no one was affected by it but herself.

I will not allow myself competent to judge practically of the influenza, it having raged just before I was in practice.

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\* From this number of well-marked cases, 127 are cured, 28 relieved and on the books, and 6 died. Those who died, with the exception of one sucking child, were all predisposed to habitual pulmonic affection.

tice. The present epidemic I consider as catarrh, under which I have generally entered it.

As far as I am able to judge of influenza theoretically, I suppose them both the same.

The first well-marked case I observed after it appeared as epidemic was Feb. 18; and the last, which is now on the books, is April 8.

3. Mr. LEE, Bristol, April 7, 1803.

I might have been enabled to speak decisively; but confidence in my ability to judge, hath not kept pace with the opportunities afforded me; and from what I have observed, I am more willing to say that the prevailing disease hath not been contagious, than able to prove such an opinion to be right.

The very partial existence of the disease in families consisting of nine, thirteen, and fifteen persons; one, two, or at most three of whom became affected with the prevailing disease. When the possibility of its being contagious was first mentioned to me by a lady, who with her husband and nine children, servants, &c. resided in the same house, I confidently resisted the proposed separation of the member of the family then affected, from the rest; and in that family one more only hath been attacked with the disease. As I do not read news-papers, I did not at the time I so offered my opinion, know that an awe-striking trumpet from on high was vibrating on the public ear; but since so much discussion hath taken place, I have endeavoured to observe more precisely; and, only, am not more confident in my first opinion, from seeing that men, far above my powers to estimate, either in abilities or acquisitions, differ so essentially upon points by me at least taken upon the most blind and unmistrusting confidence, as proved and undoubted.

I do not think the prevailing disease; that is, such cases of disease, very similar in their type and yielding to the same treatment as have occurred in my limited practice, betwixt the latter end of February and March, deserving of any such specific name as influenza. I think the same disease would occur on the same previous and subsequent state of the atmosphere, with respect to heat, cold, or winds occurring; and I have a perfect recollection of a similar affection being very general in the spring of the year 1798. The disease was unbaptized that year; but flippant Paris hath chattered about La Grippe, and too imitative England must gabble about Influenza. One of  
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the most grave French historians have remarked, that in Paris much is ever done by a name, however given, obtained, or preserved: in England we may remark, much hath been attempted, and some of us may feel that something hath been done by a name.

Where I hesitated as to, or denied the existence of, influenza, I did not seek for differences or distinctions betwixt that and catarrh. To call diseases names, or to break or fritter their various hues into shades, may be safely abandoned to artist-godfathers and godmothers, in that way so that they be not often abusive, or often too nice; and whether the prevailing disease be called catarrh properly or not, I am not, nor care to be at present, Nosologist enough to determine; this is the *arcanum imperii*, the lid of which it would be presumptuous even to meditate to lift up, much less would it be allowed me to peep into.—But if compelled to be decisive, I would not name the disease either catarrh or influenza.

On various occasions there certainly was greater and more sudden depression than is almost ever seen in common catarrh; and the disorder appeared, at various times, in almost all the gradations from pneumonia to low fever. To whom is it unknown, that in the gradations of fever, anxiety and depression assist essentially to form the diagnosis? at least, so I have been taught; and this is one of the few teachings that experience hath yet confirmed.

On the 25th of February I was consulted by my friend the Rev. Mr. Shaw, and who, instead of resorting to little things to try what they would do, as the foolish phrase is, availed himself immediately with the happiest effect of a good dose of the acetated ammonia in solution; two days and the contents of two phials put an end to his disease and inconvenience. The 27th ult. was the last case, but that had been standing nearly a fortnight, and is yet uncured.

I hope the limitations your queries confine me to observe, may not prevent me saying in this place, that the plan of treatment proposed by yourself hath been generally useful, as I verily believe; and in my own practice successful, without exception, in the progress and termination of fifty-five cases.

You will readily believe that what I have thought freely, I could not mean to express offensively; but unaccustomed and unwilling without consideration *jurare verbis magistri*, I have given you my sentiments such as they are; and no other you could require.

4. Mr.



4. **MR. SIMPSON**, Bristol, April 6, 1803.

Robert Simpson does not consider the present prevalent disease, called the Influenza, to be at all communicative from one person to another. Considerable observation in families and persons, have led him to conclude it not contagious. Much hurry of business prevents R. S. from entering further into the other queries.

5. **MR. GRIFFITH**, Bristol.

From the observations I have made on the Influenza I am of opinion that it is not contagious.

My reasons for thinking the Influenza not contagious; are, that, in many instances, I have observed it did not attack those persons who from particular circumstances were not exposed to the common atmosphere, while individuals of the same family, who were in the habit of being out in the air, were attacked with the disease.

2dly. Although a free communication was kept up with persons labouring under the disease, and those who were not subject to exposure in the air, the latter had not the slightest appearance of it.

I think the influenza differs from a common catarrh in some particular symptoms, i. e. the pain in the limbs, which has more or less attended it, and the loss of strength and depression of the animal spirits.

On the first appearance of the influenza, I considered it as a catarrh brought on by the vicissitudes of the weather, but at the same time observed that it was attended with some unusual symptoms.

On many occasions there was greater and more sudden depression than is usually seen in common catarrh; the disease sometimes put on the appearance of pneumonia; in the course of two or three days the inflammatory symptoms considerably abated, and not unfrequently left the patient in a state resembling that of low fever.

The first case of influenza which I observed to differ from a common catarrh, was on the 2d of March, and the last case was on the 16th of April.

6. **MR. SHORT**, Bristol, July 5, 1803.

From every observation, I have been induced to consider the influenza as not contagious.

From several cases of this disease where only one person in a family of seven have been affected (although no seclusion had been observed by way of caution), and in

houses consisting of eleven inhabitants, where two have been seized only. I have also attended in cases where the husband has been affected with the influenza, whilst the wife has escaped, although a constant attendant, and as it may be said, breathing the same air; and, vice versa, where the wife has had the disease and the husband not; and should suppose these instances have not been rare.

I have generally found the febrile symptoms in catarrh less violent, likewise more gradual and slow in their effects than influenza.

Perhaps, had not influenza been an epidemical or prevalent disease, one might have been led to suppose these attacks in some instances a species of catarrh, more rapid in its progress from the season of the year; as we generally find inflammatory diseases more acute and violent at this season of the year, than in the other parts of it.

In all cases of influenza, which came under my attention, the symptoms were more rapid and violent than I had ever witnessed in common catarrh; but in respect to that variety of the disease, I cannot say I had remarked it.

On the 12th of March, I was called to visit the first patient, and have not witnessed any fresh attack of this disease since 30 ultimo.

#### 7. MR. SOUTHALL, Bristol.

From the observations I have been enabled to make in my own practice, together with the information I have obtained, both by medical and common inquiry, I am of opinion the influenza is not contagious.

Notwithstanding in my own house my wife was most violently attacked with the influenza, together with my two children, a young lady and three servants, I and a gentleman who assists me have escaped; in addition to which, I have attended several severely afflicted, and observed no precaution whatever. These observations extend still farther; where I have attended, in repeated instances, one, two, three, or more in a family have been seized with it, and the rest have escaped; particularly at a female boarding school, where I saw only one who had the influenza, and that to an alarming degree.

I think the influenza distinguishable from a common catarrh, inasmuch as the symptoms are, in general, more violent, painful, and distressing; and also that several attend the first that do not, but in rare instances, accompany the latter; that is to say, a most excruciating pain in the head, so as to draw from the person the expression,  
that

that "*it must surely be splitting in two*;" excessive dejection of spirits, extreme pain in the back and extremities, accompanied with rigor and fever, more than is felt in catarrh.

The diseases are so distinguishable, that I believe the first case I had I remember to have declared it, in my opinion, to be the influenza, and that too before I even knew from medical men or others, that such a disease had taken place; and this declaration resulted from the violence of the symptoms, together with a recollection of the influenza when, prior to this, it was so universal. Under my subsequent observations, I have uniformly found it so distinct from a common catarrh as, in my own mind, in no single instance, to have confounded one with the other.

As I have before remarked, the depression has been excessive, and such as I never have felt or have known others feel in common catarrh; indeed, had not the attack been so sudden, and accompanied with such symptoms as attend the influenza, I should have been led from that circumstance, in some instances, to have suspected approaching derangement of intellect. As to pneumonia, I did not remark any decided tendency to it but in one case, where I was nearly tempted to employ the lancet; but upon delay and more consideration, declined it, and the patient perfectly recovered by nearly the common treatment. With respect to the gradations from pneumonia to low fever, they have not come under my view, because when the inflammatory symptoms have been conquered, no farther medical treatment seemed absolutely necessary.

I saw the first case on March the 7th; and the last, on April the 3d.

8. Mr. SMITH, Bideford, June 29, 1803.

Queries by Dr. BEDDOES.

1. When did the influenza appear and disappear with you?
2. Was its date different in remote places within your reach?
3. After being general, did it occur for some time in single instances?
4. Did it ever seem to pass from person to person?
5. If so, is it likely that clothes or fomites conveyed it in any case?

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Answers

## Answers by W. SMITH.

1. The first well-marked case was the 30th of March, 1803; the last, the first week in May.

2. I was informed (I did not see it) that it prevailed very generally at Hartland, fourteen miles W. of Biddeford, and at Clovelly, ten miles N. W. of Biddeford, at least a fortnight sooner.

3. The disease was peculiarly mild in this town; if it might ever have been said to be general, its symptoms were too slight to require medical attention, excepting in solitary instances.

4. As far as I could discover, never; on the contrary, when several in one house were affected, it seemed as if the power of the disease produced the diseased excitement at the same time; nor could I discover that contact, clothes, or sleeping in the same beds or rooms, increased the number of the sick.

5. Answered as above.

The first family I attended was a potter's, four miles east of Biddeford, situated upon a peninsula formed by the conflux of the two rivers Tane and Torridge. The house is solitary, nor could I discover that its inhabitants had suffered any communication with others from whom the disease might be derived within forty-eight hours. The whole house felt its influence.

Biddeford and its environs are peculiarly happy in resisting the influence of prevailing epidemics; the experience of nineteen years has strongly illustrated this fact: whilst particularly the autumnal epidemics are making severe ravages within three or four miles of us, we have only a few solitary instances. What is remarkable, before the influenza had run half its career, the scarlatina anginosa became very frequent among our children, and, contrary to the above assertion, became the most general epidemic I have ever seen in this town; it remained also some time after it, but is now gone.

The duration of the influenza was from three to five days, excepting only when symptoms of pneumonia were excited, and the lungs previously diseased. I found antimonials in any stage, and almost in any dose, always exasperated the symptoms, inducing diarrhoea, vomiting, &c. and never producing the desired determination to the skin.

9. Mr.



9. Mr. DAVIES, Bishop's Castle, May 31, 1803.

The influenza began in this town about the middle of March, and continued full a month. In the neighbourhood, it began full a fortnight later, and is not quite over yet.

It usually attacked with pain in the limbs, pain or giddiness in the head, sickness with vomiting of bile, cough, fever, the tongue becoming from white to a yellow brown, and a very early and great debility, many people for a week or fortnight previous to the above symptoms being much more disposed to perspire upon using exercise than usual; the above symptoms generally continued from five days to a fortnight, but the cough and affection of the head frequently longer. Emetics, antimonials, and aperitives, with sometimes a blister to the breast, was my plan of treatment. I lost only one old lady of 78, but who had been paralytic for a year past; and I do not think there were above two or three more died in this neighbourhood.

It attacked families in so irregular a manner, that I could not trace its progress to be immediately from one person to another. It sometimes attacked two or three children in the same house within twenty-four hours of each other, but adults at more distant times; many families escaped, some one or two in a house, whilst it went quite through sometimes large families. My idea was, that it was not communicated from one person to another.

10. Mr. JAMES, Wrington, Somersetshire, June 22, 1803.

The influenza, which has been very prevalent here as elsewhere, made its appearance about the 14th of March, and seemed at its greatest height about the 21st, during the northerly winds. Many of my patients attributed their illness to being exposed to those winds, and four in particular in the night time on Broadfield Down and the Mendip Hills. The disease continued till the latter end of June, and appeared to me not to spread from person to person, but to be a catarrhal affection depending upon a particular state of the atmosphere.

11. Mr. TICKELL, Bath, April 13, 1803.

I judge from my own observation, that this epidemic is by no means propagated by contagious miasma from one person to another, but that it originated and was occasioned by a peculiar constitution of the air, unfathomable  
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to human foresight, and impossible to be prevented by any precautions.

In seminaries for young people of both sexes, no attention having been paid to keep the sick from the healthy; great numbers escaped, notwithstanding a constant intercourse with each other; even where two have slept in the same bed, and one had the disease violently, the other did not receive the least degree of infection; and though in some houses the influenza has indiscriminately seized the whole family, many instances have occurred where one or two persons have had the disease severely, and the others have altogether escaped.

No two diseases, certainly, are more decidedly marked and easily distinguishable from each other, than influenza and catarrh; but it is to be observed, that now, as well as in the former epidemic, which bore the same name, in the year 1782, common catarrh then, as well as now, very generally prevailed, and THAT complaint was easily removed by general remedies.

I scarcely remember any instance where, by proper attention, it was not easy to distinguish the prevailing epidemic from common catarrh.

When the disease was acute, as it happened in a variety of instances, though seldom fatal except in old or elderly people, I observed that the attack was sudden, without any previous indisposition; that there was a sense of great internal debility; an uncommon degree of oppression at the præcordia; an intolerable and excruciating pain in the fore part of the head, greatly aggravated by cough; loathing of all animal food, and also particularly of bread; great prostration of strength, and almost incessant cough, with difficulty of breathing; a copious and most abundant expectoration, sometimes, but not often, mixed with a small portion of blood; attended with delirium at night, and at various times, with the gradations above-mentioned.—Having myself experienced the symptoms of this disease, in its most formidable shape, I can speak more decidedly on the subject. It is also to be remarked, that a state of great debility continued long after the removal of all symptoms of disease. The state of the pulse corresponded with the degree of debility induced in the system, and for the most part was quick, low, and small. Blood-letting was rarely admissible; and when directed, was rather with a view of diminishing the action of the vessels, by which the blood was propelled with an undue impetus on the brain, than to relieve any pneumonic symptoms.

Aperients

Aperient medicines always afforded considerable relief. The urine was generally very high, sometimes flame coloured, and often with a very deep tinge, but without sediment, even in the decline of the fever. Sweat appeared to me to be the critical discharge, which relieved the patient in a great degree, and terminated the disease.

As far as I recollect, the first patient I visited in this disease was on the 17th of February, and the last seized with it on the 5th of April.

12. Dr. HUGHES, Hereford, June 30, 1803.

In most of the cases, which fell under my notice, of the influenza, it appeared to me to differ from common catarrh, in being attended with a much greater degree of general languor and debility, and in not having so copious a secretion of mucus from the nose and fauces as usually happens in catarrh. The invasion of the disease was also frequently much more sudden, and not often marked by any particular rigor or other febrile symptom.

It appeared to prevail in an equal degree in the country as in the town at the same time, except that low marshy situations seemed to favour its progress and preserve its continuance longer than those on higher ground.

The disease made its appearance early in January, and was at its height, in and about Hereford, towards the middle of February, from which time it appeared gradually to decline.

As far as my observation goes, I am inclined to think it was not contagious; at some places which lay high, the disease scarcely made its appearance, though a constant and daily intercourse was kept up with different infected places. At Ross, I apprehend from inquiry, very few persons were seized with it.

One strong characteristic of the disease, was its frequent recurrence, after a remission and in many cases total cessation of the symptoms. Adults were chiefly the objects of its attack.

13. Mr. JONES, Montgomery, June 21, 1803.

The influenza began about the 14th of March, and ceased towards the latter end of April, a few *indistinct* cases appearing somewhat later.

The first cases I saw, were eastward of the town of Pool, about half way between that place and Shrewsbury; the disease did not become general in the town of Pool till about

about a week afterwards, and did not make its appearance at any considerable distance westward of that town till some days later. I have been informed by some intelligent persons in the neighbourhood of Llanidloes, a small town about thirty miles west of Pool, that the disorder made its appearance there about a fortnight later than in Pool, and was considerably milder in its symptoms.

My observation does not by any means confirm the notion of its being infectious or contagious. I have seen it under some of its worst forms affect a part of a family in crowded cottages, whilst others of the family escaped it altogether; nay, I have seen sick and well sleep together in the same bed frequently, and the latter remain free from disorder.

The above observations relate to Pool, where I resided at the times above mentioned; I think the neighbourhood of Montgomery felt less of the effects of the disorder than that of Pool. I have not seen or heard of a fatal instance any where near either place; the most threatening cases I saw, were some in which there came on symptoms of violent inflammation of the trachea, but which yielded to blood-letting and blisters; two or three cases I saw terminate in regular tertian intermittent. My patients bled well; it was however only in cases where inflammation rendered it necessary that I had recourse to it. Convalescents recovered their strength in general very slowly. The progress of the disorder from east to west was so remarkably distinct as not to escape common observation.

14. Dr. METFORD, Taunton, April 12, 1803.

I do not think influenza to be contagious.

I have never been able to trace it by infection in a single instance. Though many in a family have had the complaint, it has not attacked those in particular who have attended on a sick person, but invariably those who have been the most exposed to the sudden changes of the atmosphere. (Six men were at work together in a field in this neighbourhood, all of whom were, on the following day, attacked by the influenza.)

The influenza has been attended and followed by greater prostration of strength than generally attends or follows common catarrh. May not this be imputed to the peculiar state of the atmosphere? Few people with whom I have conversed, though labouring under no immediate disease,  
but



but have complained of more than usual relaxation and languor.

I think many instances could not be accurately distinguished from common catarrh, except by the unusual prostration of strength.

The influenza has certainly been attended with greater and more sudden depression than is almost ever seen in common catarrh. A few instances have been attended with apthæ in the throat in the advanced stages of the disorder.

The inhabitants of the country not being in the custom of recurring to the advice of a physician so early as in cities, seldom indeed till the advanced state of the disorder, or considerable danger be suspected, renders it impossible for me to speak with accuracy to dates. I have seen many instances of the peripneumonia notha during the last three months. I believe I am right in stating the greatest number of patients to have occurred between the 20th of March and the 6th of April.

15. Dr. ROBINSON, Newcastle, Staffordshire, June 20, 1803.

From the few observations I have made upon the nature of the late epidemic catarrh, or influenza, I am inclined to favour the opinion that it was not contagious, but owing to a peculiar state of atmosphere, aided by the different predisposing and exciting causes of the disease. If the influenza had been contagious, would so many in the district attacked have been affected at one and the same time? or, would it have made so gradual a progress through the country as it appears to have done? In a contagious disorder, the offending matter, as in small-pox, measles, typhus, &c. generally exists for some days in the system, before it produces its specific disease; whereas, when more than one in a family has been attacked by the influenza, they have been affected nearly at the same time, at least not more than a few hours intervening; and, in many instances, not more than one or two in pretty numerous families were affected, though the healthy and sick associated promiscuously together as usual. I, for one, associated with two or three families while labouring under the disorder, and without communicating it to any of those families; I think too, it appeared to be more prevalent in airy and high situations than in the low, and to prevail also more amongst people who were much out in the air, especially

cially the night air, than amongst those who were more confined within doors.

The disorder, except where it had been neglected, or in old people, has with us been tolerably mild, and in very few instances fatal. It has varied however, in violence, from that of a mild catarrh to a very severe affection of the lungs, attended with proportional fever, cough, head-ach, &c.—In the more severe cases, the sense of languor, debility, and prostration of strength, were greater and more speedily induced, than I have ever recollected to have seen in any other disease; indeed, it was from these latter symptoms only that in the more mild cases you could distinguish this epidemic from a common catarrh. In some instances, when the disorder had been neglected at its commencement, it ran into a typhoid form, and required the same treatment; but if called in within a few hours after its first attack, the administering a brisk calomel cathartic generally checked its progress, insomuch that not any thing more was afterwards required. An emetic was attended with nearly the same advantage, but did not so effectually check the progress of the disorder as a calomel purge. When the disease was fully formed, I principally relied upon the antiphlogistic regimen, with spts. of Mindererus combined with antimonial wine, and with mucilage of g. arabic, tinct. of opium, or elixir paregoric, to alleviate the cough. The local affection of the head and breast were relieved by the application of blisters. In no instance did I venture upon venesection; and in the few instances where I heard it had been had recourse to, it aggravated rather than relieved the complaint. In some persons predisposed to phthisis and affections of the liver, it induced these complaints with a fatal termination in those affected with the former.

16. Dr. DIXON, Whitehaven, June 17, 1803.

1. Such is the similarity in the appearance of the symptoms which occur in catarrh and influenza, that under particular circumstances, it must be extremely difficult to distinguish them. It may however be observed, that the almost universal prevalence of the latter, its frequently assuming the form of a general fever, with more or less of an inflammatory determination to the head, and at the same time, a perfect freedom from any pulmonic disease, constitute the principal difference. In our late epidemic, the effects of the mode of treatment readily discovered the nature of the disease; febrifuge medicines and plentiful dilution

lution relieved and recovered the patient, but oleaginous pectorals sensibly aggravated the symptoms.

2. The influenza was first noticed in the month of March. Applications were made for relief at the Dispensary upon the 1st. but it did not engage the attention of private practitioners before the 13th. It was most generally prevalent from the 15th of April to the 1st of May, and did not subside gradually, but almost totally disappeared on or about the 30th.

It began and ended in the adjacent country; in towns or large villages its progress was more rapid. The elevated northern situations in this neighbourhood, remote from each other, first suffered the disease; and soon after it very generally prevailed in Whitehaven. The villages to the south of this town last experienced its influence.

3. From the causes and symptoms of the influenza, the situations it first occupied, and other concomitant circumstances, I am disposed to consider it as a purely inflammatory disease; which has rarely, if ever, been communicated by contagion.

i. Its origin in this country can be ascribed to no other cause than a sudden transition of the atmosphere, from a remarkable degree of heat and moisture to a cold, dry, and windy state.

ii. It first appeared, and at the same time, in lofty or exposed northern situations, and these considerably distant from each other.

iii. It has been observed that the appearance of purely inflammatory diseases, in this country, is almost invariably preceded, or accompanied, by winds from the north, or north-east, and that persons exposed to these winds are most liable to suffer such diseases. Their origin, therefore, has with justice been imputed to the prevalence of northerly winds. And as during the continuance of the influenza, the wind was generally from the north, this circumstance is a strong confirmation of my opinion, that the disease was of a purely inflammatory nature.

iv. The mode of its appearance was very uncertain. Sometimes it would instantly attack the whole of a family; at others, in irregular succession; but from its progress we could not suspect its contagious power. Frequently only one was affected, and the rest of the family, though constantly attending the patient, escaped the disease.

v. What forms a striking contrast between the influenza and contagious diseases, no predisposition was required for its excitement; and it might have been supposed, that if it were

were really of an infectious nature, it would certainly have been communicated to a healthy person, sleeping during the whole course of the disease with one who suffered it in the highest degree; whereas the contrary has happened in several instances.

vi. The symptoms which constituted the disease were, in every respect, inflammatory, affecting chiefly the head and lungs.

vii. The duration of the disease rarely exceeded four days.

viii. No tendency to malignant putrescency ever took place.

17. *Mr. RICE, of East Looe, June 28, 1803.*

The influenza began here about the middle of March, and ceased nearly the middle of May.

It appeared first in the country and went westward.

Single instances occur, even now, in this neighbourhood, (June 28, 1803.)

Several were attacked in one family, at one and the same time.

It appeared to be atmospheric.

The symptoms in general, were of the low nervous kind, attended with cough and diarrhœa; a few instances occurred truly inflammatory.

18. *Dr. HARRIES, Haverford West, June 27, 1803.*

The first person I saw, or heard of being attacked with the influenza, was a labourer about 36 years of age; it was about the 27th of February. He was attacked the day before I saw him, with shiverings and the usual symptoms of pyrexia, accompanied with cough and a fixed pain in the left side; I found him in this state, with a hot skin, frequent pulse, much pain on inspiration, and considerable thirst. As he had been exposed to vicissitudes of heat and cold on the day of attack, and as there were symptoms of local affection, I directed him to be bled, a saline purgative to be administered; and a blister, after a second bleeding, if the blood exhibited a buffy coat, to be applied to the pained part. The appearance of the blood strongly indicated the propriety of the measure, but the man was worse the following day, and the day after; his pulse was as frequent, but it had rather a fluttering feel; his tongue became dry and furred; he was delirious at times, rested ill at night, and the pain in his side was nearly as bad as ever; this was much relieved by a couple of leeches applied



plied to the part. He was allowed wine and water, and opiates at night; under which plan, together with the use of the spiritus vitrioli dulcis, as recommended by Dr. Carmichael Smith, in Duncan's Medical Commentaries some years ago, he was in about nine or ten days free from every symptom of fever, but continued very weak for some time after. In this instance, debility came on very rapidly; and the disease had not been noticed before in the town, nor did it occur to me, at the time, to be the Influenza; but I soon heard, that to the northward, from St. David to Fishguard, several families were attacked by it; and I saw some myself in the complaint, in most respects similar in its symptoms to a common catarrh, accompanied with marks of local affection, in others exempt from these. In a few weeks after this, it was general through this town and county. In some families the whole were attacked with it; while in others, in the same street, one or two individuals only suffered; the remainder continuing exempt. The period of duration might perhaps be limited to six weeks, but I think in some instances it appeared a month later. The last under my observation, and only case where it proved fatal, was that of an elderly gentleman; he died about the beginning (the 11th) of May. It prevailed here at the same time we first heard of its being in Bristol and its neighbourhood.

It did appear, in single instances, after ceasing to be general. It did not appear to me to pass from one person to another. In this family, one only out of seven persons was ill, while in the opposite house, most, if not every individual one after the other, some at the same time, felt its effects: this was also the case in other houses. The disease seemed generally accompanied with phlogistic diathesis, and many in the country were bled apparently with advantage; but I did not think it advisable after the instance first mentioned, particularly as where topical affection seemed to prevail it was removed by other means. I found advantage from emetics, but what I chiefly employed was James's powder, which was very effectual.

19. Mr. JONES, Pembroke, June 27, 1803.

From every inquiry I have made, and from what has fallen under my own immediate observation, the epidemic so prevalent through the kingdom, first appeared in this neighbourhood from the last week in March to about the middle or latter end of April; though I had before that time some accidental patients which were attacked with  
(No, 54.) I catarrhal

catarrhal fevers, some of short, others of long duration, from about the latter end of January. Those I supposed at the time to be of that genera of fevers which usually appears in this neighbourhood at that season of the year; but, which I am since convinced, was of the same species with that now denominated the Influenza. When it became general here, its progress was so rapid through families, that it scarcely gave time for any infectious effluvia to be communicated, as in the course of two or three weeks there were scarcely one in fifty who escaped more or less an attack. It seemed more fatal to infants under four years, and elderly people who before laboured under any other chronical disorder. They that died were carried off from the fourth to the ninth day, the disorder seeming to attain a degree of crisis on or about the latter day, at which time the general system seemed to shew a strong disposition to putridity. When the epidemic ceased to be general, it occurred frequently in single instances, and that through the greater part of the month of May, even now I witness attacks which manifest a strong tendency towards those of the month of April. One or two instances have occurred, which led me to suppose that the disorder might have been in some degree contagious; as, when a person that had been disordered was shortly removed into a family a little distant from the town, and where no part of the family before had betrayed the least symptom of disorder, it in three or four days broke out. Whether this was to be imputed to contagion or a predisposition in the atmosphere of that neighbourhood, before the removal of the disordered person, is what I cannot give any opinion upon; nor, in any instance but these, can I suppose that the infection had been communicated by contact or in clothes.

20. *Mr. CREASER, Bath.*

I am not in possession of a sufficient number of data to form a conclusive inference, as my surgical practice is much more extensive than my medical; yet I have seen many cases of influenza. In general, I think that those branches or members of a family which were in the most frequent habits of communication and contact, suffered most; I yet know an instance where, in the case of two sisters sleeping together, one did not receive the disease from the other, although other parts of the family received it. In the decision concerning contagion, more stress should

should certainly be laid on positive, than on negative facts.

I think in the general variety, the influenza had but little in common with catarrh. The inflammation of the Schneiderian membrane, and that of the mucous membrane of the bronchiæ were much more frequently absent than present, and when existing did not form the prominent feature as in common catarrh. Symptoms attended which are rarely or never co-existent with catarrh. The usual primary symptoms of typhus and synochus, especially a sudden accession of head ach, with chilliness and prostration of strength, were the first indications. By conversation with some of the most eminent of the London practitioners, I learned, that pains of the articulations, particularly of the ancles and shoulders, were excessive;\* sore throat was a common part of the disease. The disorder has often been protracted to the common term of fever, viz. the second or third week.

I have before mentioned the depression of strength and other symptoms as essentially differing in this complaint from the ordinary concomitants of catarrh; yet it is certain, that catarrh, or any other local inflammation, will in some habits, produce febrile symptoms of the typhoid kind. When pneumonia appeared in the influenza, it was connected with a different constitutional affection from that of pure pneumonia.

I saw the first well-marked case at the latter end of February, and the last on the 4th of April.

21. Dr. SAINSBURY, Corsham, April 12, 1803.

It is doubtful with me if the present influenza can be attributed to the contagion that arises from one diseased human body pervading and generating it in another.

At a boarding school in this neighbourhood, containing nearly sixty young gentlemen, about fifteen of them had the disease (well marked cases) three weeks since, and the others, notwithstanding some of them were bed-fellows, did not take it.

I believe the influenza is distinguishable from a common catarrh, as, (in many cases) the febrile symptoms commonly run higher, and the depression of strength is more sudden, and much greater.

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\* A lady of fashion, to my knowledge, made a figurative delineation of the disease, in which demons were displayed pinching particular joints.

In some instances the catarrhal symptoms were very slight; but in most cases the languor and debility were considerable, and in some very great, much more than is usually observed in common catarrh.

In one instance the patient, after being first attacked with pneumonia, gradually sunk into typhus, and died. This person had, the week before he was attacked, undergone a surgical operation, and was in a very debilitated state.

The first case of well marked influenza that came under my care was (I believe) about the 27th or 28th of February; and the last, on Sunday the 10th of April; but the disease is still prevailing.

## 22. Dr. BLAKE, Taunton.

From the few observations I have been able to make, I cannot think the influenza is strictly a contagious disease; and it can only prove so, in my opinion, when (like other febrile disorders) it runs on in peculiar constitutions towards a fatal termination, by producing those symptoms of the greatest debility, known by the name of symptoms of putrescency.

Observations that were general only at first tended to form this opinion; but some particular cases have also had great weight in confirming that opinion.

An old lady, confined to her house by age, and not in any accountable way exposed to contagion, had an attack of influenza, whilst none others of the family had any symptoms of the disease. And some instances have come within my knowledge, in which one of two persons, who slept together in the same bed, and who were almost constantly together during the day, has escaped, whilst the other was suffering from the complaint.

I do not think that any peculiar diagnostic symptoms can be laid down, so as satisfactorily to distinguish the influenza from catarrh.

In various instances, the symptoms seemed to run into each other by almost insensible degrees. In mild cases, therefore, I should call this disease by the former name, and in more violent ones give it the prevailing name of the latter.

I have, at different periods, seen cases, in which great depression has attended an attack of common catarrh; but that affection has without doubt lately shewn itself in a very remarkable manner in the influenza. I have also seen cases, in which the other morbid symptoms of influenza have



have prevailed to a considerable degree, without any very evident state of depression. It appears to me very difficult, in general practice, to affix the bounds of certain disorders, the symptoms of which are so nicely discriminated, and laid down with so much apparent accuracy by nosological writers: and I am very much inclined to think that this disorder may, at various times, have appeared in almost all the gradations from pneumonia to low fever.

The supposition of the influenza being a contagious disease, does not appear to me *of itself* sufficient to account for its rapid and extensive spread; nor do I think an adequate cause can well be assigned, unless it be attributed, in a very especial manner, to some peculiar changes and unknown states of the atmosphere.

### 23. A PHYSICIAN, who does not give his Name.

Whether epidemic catarrhs are contagious or not, has been a subject of controversy from the earliest accounts we have of them, and from no observations on the present epidemic have I been enabled to decide the question. Pyrexia, with an unusual degree of languor, lassitude, and general debility in the animal functions, accompanied with head-ach, great confusion of thought, arising often suddenly to delirium, or drowsiness and stupor, appear to be the characteristics of the prevailing disease. Catarrhal or pneumonic symptoms generally attend, or inflammation of some other secreting surface; but I have met several cases without them, and it is not uncommon for the fever to remain after they have vanished. In a few instances, on the second or third day, an eruption like measles has come out. When the disease first appeared in the end of February, the catarrhal symptoms were more frequent and severe; at present the febrile, particularly the affection of the head, are most prevalent and distressing. When the catarrhal affection attends, the disease has been more tedious; when fever alone, it generally runs its course in a few days, frequently leaving lassitude and depression behind for some time. On fresh exposure to cold the cough is readily renewed and also the fever, which in three cases I have observed to assume an intermittent form.

I have met single instances both with and without catarrhal symptoms.

The prevailing epidemic appears to be distinguishable from catarrh, by the suddenness and severity of its attack, by its occurring without exposure to the remote causes of

catarrh, by the type of the fever, by its continuing after the catarrhal affection is gone, and particularly by its sometimes running its whole course without them. I therefore consider the present disease to be a fever of a peculiar kind, the remote causes of which are highly diffusive; that the catarrhal symptoms are no more essential to it than inflammation of the peritonæum, intestines, or any other secreting surface, but that its being combined with the diseases of the season produced them.

Antimonials, laxatives, and afterwards opium, with blistering, when local inflammation attended, I have found universally successful.

24. *Copy of a Letter to Mr. DEWAR, Surgeons-Assistant, of the 30th Regiment, from Mr. BROWN, Surgeon, of Sunderland.*

I would have sent you the information you request, on the subject of influenza, before this time, but could make out nothing satisfactory from the regimental books, as the weekly and monthly returns of the two divisions are so blended together; that it is impossible, at this distance of time, to separate and unravel them. The following is as accurate a statement as can be collected from the hospital and adjutant's books; but it is necessary to premise, that the disease was often so slight, that many of the women and children, as well as of the soldiers, were not confined by it, and of course thought medical assistance superfluous.

The disease appeared about the 21st of February, and entirely subsided by the 23d of March; exactly the period of one lunar revolution. The fine weather introduced along with the new moon, on the last mentioned day, probably produced this salutary change.

The state of the division of the regiment at Sunderland, at the commencement of the epidemic, was nearly as follows.

|                                                                        |     |
|------------------------------------------------------------------------|-----|
| Total strengths, including serjeants, drum-                            |     |
| mers, rank and file                                                    | 200 |
| Of those who served abroad                                             | 150 |
| Of recruits, joined since landing                                      | 50  |
| Of the old soldiers who took the disease                               | 6   |
| Of the recruits ditto                                                  | 16  |
| Out of 20 women who were abroad with the regiment, 5 had the epidemic. |     |
| Out of 21 children who were abroad, 6 had the epidemic.                |     |

Out

Out of 17 women joined since the return of the regiment, 3 had the epidemic.

Out of 17 children joined, or born, since the return of the regiment, 4 had the epidemic.

For the reasons above mentioned, the number of women and children who had the disease, and even of the soldiers, is far from accurate, as I have only put down those who came under my own observation.

The disease was milder in the barracks than in town; but I only heard of one among the inhabitants who died of it.

The old soldiers had the disease in a slighter degree than the recruits; two or three of the women had it very severely.

All the patients were much relieved by emetics, which produced in all of them copious discharges of bile, and by continuing their operation downwards, or directing it towards the skin, a cure was in most cases obtained.

In one patient the disease was followed by jaundice.

In most of the cases which occurred to me, the catarrhal symptoms were only secondary, and subsided as the bowels were emptied. Slight inflammation of the fauces, accompanied one or two cases. In two instances, where the cough was protracted after the other symptoms had disappeared, the patients were cured by the Peruvian bark. Although the disease, in general, when introduced, went through a whole family, there was only one man in the hospital seized with the epidemic, yet no care was taken to separate the cases admitted with it from the rest of the patients. The men who took the disease in the barracks, were remarked not to belong to one company, or room, in greater numbers than to another, and had often no communication with persons previously affected.

If these remarks can be of any use to Dr. Clark or Dr. Beddoes, they are much at their service; but I am afraid they will go little way to settle the dispute, whether the disease is propagated by human contagion or aerial impregnation.

May 20, 1803.

25. *Copy of a Letter from Mr. DEWAR, Surgeon's Assistant, of the 30th Regiment, to Dr. CLARK, of Newcastle.*

It was longer than I expected before I received an answer from Mr. Brown, the surgeon of our regiment, otherwise

I should have sent you the statement you wanted much sooner.

*TABULAR Account of the late Epidemic Influenza in Tynemouth Barracks, on a Detachment of the 30th or Cambridgeshire Regiment of Foot.*

| DESCRIPTION of PERSONS.                                                                                                              | Numbers who had the Epidemic. | Number who escaped the epidemic | Total. |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|---------------------------------|--------|
| Serjeants, drummers, and privates, in the barracks, during the prevalence of the epidemic, who had been in foreign service - - - - - | 3                             | 92                              | 95     |
| Ditto in ditto, during ditto, who had joined since the landing of the regiment from the Mediterranean - - - - -                      | 2                             | 14                              | 16     |
| Women in the barracks, who have been abroad - - - - -                                                                                | 2                             | 8                               | 10     |
| Ditto joined since the landing - - - - -                                                                                             | 5                             | 10                              | 15     |
| Children who came with the regiment from abroad - - - - -                                                                            | 2                             | 8                               | 10     |
| Ditto born, or joined, since the landing                                                                                             | 2                             | 3                               | 5      |
| Officers who have been in foreign service                                                                                            | 1                             | 3                               | 4      |
| Ditto, who had joined since the landing                                                                                              | 0                             | 1                               | 1      |
| Total                                                                                                                                | 17                            | 139                             | 156    |

The disease was in the barracks of Sunderland exactly one month before it appeared in those of Tynemouth. Mr. Brown remarked to me that, at that time, it prevailed chiefly among the young recruits. This circumstance did not take place in such a striking proportion at Tynemouth. The only patient of mine who suffered much debility, and was confined to bed a number of days, was an old soldier. This was the only patient whose eyes and skin were tinged yellow.

What I have chiefly to remark is, that, from the loose accounts I received of its general prevalence among the inhabitants of North Shields and Tynemouth, where it sometimes pervaded a whole family, it appears to have been comparatively much less general among our soldiers. This circumstance could not have proceeded from the want of exposure



exposure to infection, as they had constant intercourse with the people of the neighbourhood, several of them daily frequenting the drinking houses; and those patients who were seized with the epidemic in the barracks were not separated from their companions, especially the women.

The symptoms were much more severe in the women than in the men, excepting in that one man whom I have mentioned.

One query I would start from the statement I have given, and I should wish to see it answered by statements from other regiments. Have soldiers in general, especially old soldiers, been less susceptible than others of this disease? or, has this circumstance been remarked more in some regiments than in others?

Persons who habitually associate together, and are subjected to the same regulations and stile of discipline, certainly receive a train of impressions in common, which may modify the susceptibility of the system, while we will in vain endeavour to particularize the causes. This idea struck me very forcibly in one instance in Egypt. The 24th regiment, which arrived with some others near the close of the campaign, was employed before Alexandria, along with some other regiments, where they were, in every respect, exposed to the same external causes of disease. But that regiment suffered from ophthalmia to a degree unexampled in any other. That disease threatened to render the regiment next to useless, and a considerable number of the men permanently lost their sight, from the traces left by the violence of the inflammation. Within the compass of my knowledge, this was in other regiments a comparatively rare occurrence. All this led me to conclude, that diseases may run in regiments, and in ships, independently of those ascertainable circumstances of external situation that affect the health.

On inquiry of the surgeon of the Lapwing frigate, which has lain for some months in the harbour of N. Shields, I was told that not one man belonging to it had had the epidemic. The surgeon described to me three cases of pulmonary inflammation at that time under his care; but so far as I could judge, they had no appearance of having originated from the Influenza.

You will easily perceive how the circumstances mentioned in Mr. Brown's letter, as limiting the accuracy of his statement, apply to mine.

Perhaps, Dr. Beddoes may think it worth while to request statements from as many surgeons of regiments and  
of

of ships as he can have access to, in order to ascertain the degree in which soldiers and sailors have been susceptible of the disease.

*Tynemouth, May 24, 1803.*

26. **Dr. MAGENNIS, Royal Hospital, Plymouth,**  
June 22, 1803.

In conversation with our friend, Mr. Allen, he spoke of your laudable intention of amassing such a body of evidence as would in all probability determine the real nature of the late general catarrhal affection; that is, whether the disease was to be deemed contagious or otherwise. I then mentioned to him the only fact which came to my knowledge, that could at all disturb the opinion I had formed of its non-infectious nature. The circumstance alluded to, occurred in a gentleman's family with whom I am on terms of intimacy, and was as follows. The man servant was first attacked with severe catarrhal symptoms; the complaint continuing to increase in violence, and being a married man, it was judged necessary that he should go home to be nursed by his wife: the cook was then seized, and likewise obliged to quit her service; the woman who succeeded the cook, as a temporary substitute, was in less than forty-eight hours also attacked with similar symptoms, and shortly after the gentleman's daughter. In the mean time the man servant recovered, and returned to duty; but he had not been many days in the house when he was again seized, from which he recovered very slowly, and has continued ever since in a very debilitated state, notwithstanding the use of the most powerful tonics.

It must be confessed that these facts strongly support the contagious nature of the disease; but they are isolated facts as far as my own experience extends, while the tenour of my practice warrants me in drawing a directly contrary inference: but at the same time it must in justice be observed, that, that practice has been, with respect to influenza, extremely limited.

That the influenza travelled from east westerly must be admitted, as the disease existed in its full force many weeks in London, previous to its appearance in the milder climate of the west of England; and it was extremely prevalent in and about Exeter before its influence was at all felt at Plymouth and its environs; where, all of a sudden, it became general throughout the three towns of Plymouth, Plymouth Dock, and Stonehouse, extending in every direction

rection to the adjoining country, and so on to the Land's End; the disorder arriving at its acme in a few days from its first appearance.

Does not this sudden and general appearance of the disease militate against the idea of any specific contagion? Are there any well authenticated historical records of contagion, however malignant and destructive, having spread with such celerity? Are its effects as contagion, admitting it such, commensurate to its rapidity and universality? And ought it not rather to be imputed to a peculiar state of the atmosphere? This peculiar constitution of the air in great measure, superinduced by frequent alternating changes from heat to cold, from frost to rain, joined to the unusual prevalence of easterly winds during the winter and commencement of the spring: I say, in great measure, as there is probably a certain something, quality or substance, indefinable, because hitherto it has eluded, and will perhaps for ever elude, the most vigorous efforts of human industry, independent of the usually observed physical properties of air, its various changes and modifications, periodically superadded to the atmosphere of certain portions of the globe, rapidly diffusible, but limited in its extent, course, and duration.

It is however a certain truth, that the ships of war fitted out and manned in the river Thames, had their crews very generally affected with influenza, especially the *Albion* and *Thunderer*; both ships having lost a great many hands by that disease. On the *Albion's* arrival at Plymouth, eight of her men were sent under my care to the Royal Hospital in the most deplorable condition: two died a few hours after admission; but the others recovered, contrary to all expectation. The surgeon, deceived by the severity of the cough, dyspnœa, and stricture on the chest, was at first induced to employ the lancet freely; but he soon perceived that all those who were blooded, sunk speedily after the operation. Two died the day before the ship arrived here, although the disease had existed only six or seven days altogether on board. The complaint continued to spread to an alarming degree for many days after the ship anchored at Cawsand Bay, and proved fatal to several. The *Thunderer* was equally affected, and about the same period, early in April. I must observe, that nothing like contagion was propagated to the other patients in the ward (being ten in number besides two female nurses) into which the *Albion's* people were put, although these men were in the last and most aggravated stage of the malady.

One

One of my medical friends states as follows: "About this period (end of March) I was called to the assistance of a few families in Dunford Street; in three of these, the servants were first seized, afterwards the remainder of the family without exception. In two others, the children were seized next to the servants; but the parents escaped; and in one family, a younger daughter conceived she caught the disease by sleeping with her eldest sister."

Whatever may have been the specific nature of the disease, I am persuaded it had lost much of its virulence before it reached us, if I were to draw the inference from a comparison of the mortality caused by it here and to the eastward; for there are but few instances of its having proved fatal in or about this place.

Independent of the numerous deaths caused by the immediate operation of this epidemic, considered simply as such, I have reason to believe that it has been productive collaterally of more extensive mischiefs, by adding largely to the list of consumptive patients. Phthisis has been more than usually prevalent and destructive during the last few months, owing, I think, to the baneful effects of influenza. All those, who from an hereditary constitutional taint, and those predisposed to the disorder from a peculiar idiosyncrasy and conformation of system, or those who had already laboured under the slightest degree of pulmonic tubercular irritation, if attacked by the prevailing epidemic, will be found, I fear, ultimately to have fallen victims to pulmonary consumption.

Whether the above remark is likely to correspond with the past experience and future observations of others, I know not; but the fact has forcibly impressed itself on my mind; and, unhappily, I have already witnessed too many cases to strengthen and justify the opinion.

Q. When did the influenza begin and cease with you?

A. In or about the 20th of March, and wholly disappeared about the beginning of May, or at the latest the middle of that month.

Q. Did it begin and end sooner or later in the country than in the town?

A. It shewed itself first in the country, east of Plymouth, and appeared in Cornwall, lying west, later than at Plymouth.

Q. Do you believe it passes from person to person?

A. Out of seven medical men of extensive practice consulted, four gives an opinion of its non-contagious nature,



two are doubtful, rather inclining to its being infectious, and the other decides it contagious.

It is difficult to account for the various dissimilar and contradictory opinions which the medical world entertain respecting the nature of this malady. I feel great pleasure in communicating to you every fact that came under my own observation, as well as those which I have been able to collect from others, and I lament only that their paucity should render them of so little value.

27. Dr. BREE, Birmingham, April 10, 1803.

I have not been able to satisfy myself on this head. A person came from London with the epidemic upon him. As he had travelled all night, and was an old asthmatic, he did not at first consider his disorder as the influenza, which it clearly was.

This patient remained in a family under every symptom of the influenza, till he could pursue his journey, twelve miles further. None of the family, in which he staid a week, were infected by him.

The epidemic is distinguishable from a common catarrh by the loss of strength and degree of fever, and more particularly by the slow progress to recovery, and the great depression of mind which remains till the strength is restored.

In single instances the disease was frequently very mild; and where it went through families, it was frequently so mild as not to be distinguished from a common catarrh; it would therefore be properly termed a catarrh in such instances, the loss of strength and degree of fever being not considerable; yet there might be observed more depression in convalescence than usually follows or accompanies the progress of common catarrh.

In some few instances the disorder was attended by prostration of strength, equal to that of low fever; but in these, evacuations had been too large, or too long continued.

No case well marked occurred to me before the 6th of March: The disease has not yet finished its course here.

28. Dr. ALDERSON, Hull.

The influenza made its appearance here after some warm weather in the beginning of March, which was suddenly succeeded by a strong and very cold south-west wind, veering to the northward and loaded with sleet. At this time,  
as

as might have been expected, several catarrhs and some pneumonias made their appearance; but as reports of similar affections, with some distinctive marks, were prevalent in other parts of the country, we had no doubt in classing the epidemic under the fashionable title. Its most characteristic marks were fever, head-ach, weight on the eyes, pain in the arms and limbs, but the aching in the arms was the most pointed symptom. In some the irritation was nearly membranous; in others, the stomach and biliary secretions were the seat of disease; in all, considerable fever: and as it began at different times in different parts of the country, there was reason to suppose it contagious; but all who got cold at that period, and for six week afterwards, had nearly similar symptoms. In no family that I attended were all affected; but in general it has been so slight a disease, that I have scarcely ever prescribed for more than one in a family. Amongst the lower orders, from inattention to the inflammation along the mucous membrane extending down the bronchia, I can perceive symptoms of phthisis. Of these I have seen above a hundred, who began their tale with, "Sir, about six weeks ago I had the complaint, but thought nothing of it at the time."

The present epidemic is the inflammatory sore throat; several of them have run into abscesses, and in one instance I think the inflammation had extended into the trachea; for when it broke, suffocation was induced by the quantity of matter discharged. Where the stomach was the principal seat, an emetic, followed by rhubarb and salt of tartar, cured. Where the chest was affected, the blood was commonly sisy; and such were all benefited by one bleeding.

I have found the bark and acids hurtful, the extract of poppies the most useful sedative; and the common spirit of Mindererus, the most generally useful febrifuge.

#### 29. Dr. BLOUNT, Hereford, June 28, 1803.

The influenza appeared in these parts soon after Christmas, became very general in February and March, and began to disappear in April; but solitary instances of it were to be found till the middle of this month.

The first cases of it that occurred to me, were remote in the country, and among persons that did not seem to have had any connection with any one affected with it.

It often seemed to pass from person to person in the same family, but by no means universally so, for children generally

generally escaped, particularly young children, two only out of eight, in my own family, had it very slightly. The lunatics in our asylum were not affected by it. The old, the feeble, and particularly the asthmatic, were severely treated by it, but to few, very few indeed, did it prove fatal in these parts.

It did not appear to me to be conveyed by clothes or other instruments, but to be propagated by the atmosphere.

[ To be continued. ]

TO DR. BRADLEY.

MY DEAR SIR,

**M**EDICAL practitioners of the first eminence appearing divided in their opinion on the question now so frequently agitated, Whether the epidemic, which lately prevailed, was *contagious or not*? I have (agreeably to the invitation given your Correspondents to communicate the result of their experience in this disease), transmitted an account of its appearance and progress in the cavalry barrack at East Bourn, occupied by a troop of the second regiment of dragoons. If you think the facts it contains will assist your readers in forming an opinion on this interesting question, you will have the goodness to insert it in the next number of your useful publication.

I am, &c.

Bexhill Barracks,  
June 16, 1803.

EDWARD T. LUSCOMBE.

The cavalry barracks at East Bourn, occupying a square of about four acres, is situated within a mile of the sea, and one hundred and fifty yards of the town; but being built on an acclivity, is more exposed than East Bourn; particularly to the rage of the south-west winds, which are very prevalent, and blow at times, over Beachy Head, with tremendous violence.

The officers' apartments are separated by a thick brick wall from those appropriated to the accommodation of the non-commissioned officers and privates; the latter, consisting of ten rooms, are on the same floor.

During the month of March last, the influenza was very prevalent at East Bourn, and was epidemic in the town and neighbourhood some time before it made its appearance in the barracks.

On

On March 19th, in the evening, two private dragoons, in rooms No. 4 and 7, complained of violent pain in the head over the eyes, and every symptom of influenza, as described by Dr. R. Pearson, who all followed the treatment laid down in his publication: one was discharged to his duty on March 24, the other not until April 2; cough and debility resisting the usual remedies.

A third dragoon, in room No. 3, was attacked on March 21st, and remained incapable of doing his duty until the 25th; a fourth private was also attacked on that day in room No. 6, and remained on the sick list until the 27th. The farrier's wife, in room No. 4, and a child (who was, if I recollect rightly, in the same room) also went through the disease about the same time. All those persons continued in the barrack rooms; an hospital not having been then built.

The subjoined account will shew at one view, the number of persons in each room, and the proportion those attacked bore to those who escaped the disease.

I am not prepared to give it as my decided opinion, that the epidemic which lately prevailed, *was not contagious*; but from its appearance in East Bourn barracks, and all the information that I have been able to collect, I am inclined to think that it was not. And I believe that *its cause* must be sought in the state and variations of the atmosphere, and great and sudden changes of temperature.

*An Account of the Number of Persons who were attacked by or escaped the Influenza in the non-commissioned Officers and private Soldiers' Rooms, East Bourn Barracks, March, 1803.*

|                        | Men in each room. | Women in each room. | Children in each room. | Total of persons in each room. | Men attacked by the disease. | Women attacked. | Children attacked. | Total of persons attacked by the disease. | Total of persons who escaped the disease. |
|------------------------|-------------------|---------------------|------------------------|--------------------------------|------------------------------|-----------------|--------------------|-------------------------------------------|-------------------------------------------|
| Quarter-master's room  | 1                 | 1                   | 2                      | 4                              | —                            | —               | —                  | —                                         | 4                                         |
| Barrack serjeant's do. | 1                 | —                   | —                      | 1                              | —                            | —               | —                  | —                                         | 1                                         |
| Serjeants room         | 3                 | 1                   | 2                      | 6                              | —                            | —               | —                  | —                                         | 6                                         |
| Soldiers room, No. 1.  | 7                 | 1                   | 1                      | 9                              | —                            | —               | —                  | —                                         | 9                                         |
| — No. 2.               | 7                 | 1                   | 1                      | 9                              | —                            | —               | —                  | —                                         | 9                                         |
| — No. 3.               | 4                 | 1                   | 1                      | 6                              | 1                            | —               | —                  | 1                                         | 5                                         |
| — No. 4.               | 8                 | 1                   | 1                      | 10                             | 1                            | 1               | 1                  | 3                                         | 7                                         |
| — No. 5.               | 8                 | —                   | —                      | 8                              | —                            | —               | —                  | —                                         | 8                                         |
| — No. 6.               | 8                 | 1                   | 1                      | 10                             | 1                            | —               | —                  | 1                                         | 9                                         |
| — No. 7.               | 8                 | 1                   | 1                      | 10                             | 1                            | —               | —                  | 1                                         | 9                                         |
| Total                  | 55                | 8                   | 10                     | 73                             | 4                            | 1               | 1                  | 6                                         | 67                                        |



*To the Editors of the Medical and Physical Journal.*

GENTLEMEN,

THE annexed letter contains some Observations on the late Influenza, in answer to a letter received from Mr. Aikin, Secretary of the London Medical Society. As the paper is much too long to coincide with the plan of the Society on this occasion, I have to request you will give it a place in your valuable Journal

I am, &c.

June 11, 1803.

RICHARD DUNNING.

I beg leave to state to you generally, in reply to your comprehensive queries relative to the late epidemic, that I do not recollect to have observed a case of it distinctly marked in this town, until the 16th or 17th of March; that it prevailed in its highest activity in the course of a few days; and that its range, in a way to claim much attention, was little more than three weeks. Relapses, however, either from incautious exposure, or other inattentions, were not infrequent; but I do not believe that any original seizures of influenza were met with after three weeks; if any did occur, these were so much shaded and lost in other complaints, that they could not be satisfactorily enough ascertained to enable me to speak to them. A most petulant and very often an unexpectating cough, accompanied with uncommon debility, and other effects of the late impression, continued much longer, and in many subjects of it continue to this day; but the influenza had taken such compleat possession of our minds, that it is only very lately that we have ceased to associate the idea of it with almost every indisposition that has since occurred.

Superadded to the usual symptoms of winter catarrh, were a violent pain of the head, *generally of the forehead, confined over the orbits of the eyes along the frontal sinuses*; sometimes the pain was in the hinder part, but this was rarely; sometimes across the forehead, apparently along the course of the coronary suture; frequently a pain equally violent, of the back, and now and then about the chest and seat of the stomach. In many, a soreness amounting often to much pain, so universally through the muscles, particularly of the extremities, it led sometimes to a remark

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among

among medical men, that the seat of influenza seemed often to be muscular—a degree of *peculiar debility* (which was undoubtedly the pathognomonic trait of this epidemic) much greater and more sudden than could by any means be accounted for, either from the violence, length, or general character of the symptoms. The tongue was invariably covered more or less, generally indeed slightly, with a whitish coat; the loss of appetite was entire in most instances. The tenor of the pulse was always much more that of quickness than strength, and there was often a great tendency to perspiration over the whole surface, and in a few cases, a very distressing vomiting continued many days in spite of every remedy. In these instances, perhaps the principle of disease had passed into the stomach, either with the food or saliva, or this symptom more probably was merely sympathetic; certainly, it occurred only in very irritable habits. A nice observer assured me, and my own recollection confirms the remark, that when the head and chest were less affected, the extremities suffered proportionably more, and vice versa. However great the affection of the chest, I never adverted to bleeding, the remarkable prostration of strength always forbade it. If early called, I usually gave an emetic, which I always thought useful, and soon after its operation, a gentle laxative of calomel and rhubarb; these were followed by frequent doses of nitre, liquorice powder, antimonial powder, and Mindererus's spirit, and I generally gave an opiate at night. The latter did not certainly in my practice succeed at first in the early stages of the complaint; but I soon gave them, however, with considerable benefit when joined with a saline camphorated draught; indeed, in all the cases which were more remarkably attended with that peculiar debility that has, I believe, invariably characterized every recurrence of influenza, I gave the camphorated julep and spirit of Mindererus with very satisfactory effects; and after the removal of the febrile symptoms, I have preferred camphor and the squill pill to any preparation of the Peruvian bark. In a few of the severer cases which fell under my care, the repeated application of blisters seemed necessary and useful; indeed, I often thought it one of the best remedies.

On the authority of Dr. Huxham, I constantly recommended a liberal use of wine whey. This admirable combination of wine and milk, (at this time perhaps too much neglected) seemed to me excellently adapted to meet the general indication, for whilst it readily pervades the system

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or passes off through the great emunctories of the skin and kidneys, it affords at the same time an agreeable bland cordial principle of nutriment, peculiarly well calculated, without heating, to support the constitution under the pressure of so much debility. But after all, little as we know of the real nature and source of the late epidemic, and little fatal as it was in this neighbourhood, I am not sure that the greater number of my patients would not have recovered from it as readily and as perfectly by a little confinement and simple diluent food without medicine at all. Active medicines, and indeed every medicine, with some persons, most frequently nauseate; and hence, no doubt, often disturb and interrupt those agencies of the system, which under the slightest derangements of it at least, would soon determine health. The present anxious and very laudable endeavours to obtain accurate information, with a view to establish some data to be referred to hereafter with confidence in the event of similar epidemics, sufficiently confirm the late indecision of public opinion with respect to the late influenza, and justify an apprehension that medicines must have been sometimes given, and other means of cure adopted, in some measure, at random, and it may be feared now and then even with disadvantage.

“ Res fuit herclē diætæ potius accuratæ ac debiti  
“ Regiminis quam medicinæ elaboratæ.”

A few elderly persons only, and these were tottering under previous indisposition, generally of pulmonary, but sometimes of dyspeptic character, were destroyed here. We hear, therefore, with great surprize of its fatality in many other places. Since the influenza disappeared, I do not know that any disorders have prevailed at all remarkably; a few genuine inflammatory cases have occurred, but these have hitherto been certainly less numerous than they frequently are between spring and summer. A fine young woman, who had long enjoyed good health previously to an attack of influenza, is at this time, I much fear, on the brink of phthisis, perhaps it is already formed. It does occur to me, that I do not know an arthritic friend in this town who has not, within the last two months, been at least once confined; and I have now under my care, an old lady above sixty, whose health has always been infirm, and where I should least of all have expected gout, suffering under a severe first fit of it, and I am in attendance also at this time on several cases of acute rheumatism.

With respect to the much disputed question, whether the late influenza was or was not a contagious disease, I do not hesitate to say, that the result of my own observations never inclined me to subscribe the former opinion. This singular affection appears to have gone on in a pretty regular progression from east to west. We heard of it at first on the Continent; after some time in London; in a given time it seems to have reached Exeter, and from thence to Plymouth; and we now hear of it in Dublin; and, which is a very remarkable circumstance in its history, it does not appear that the course of it has been materially interrupted or forwarded by the winds. Its attack was here so sudden that it reached its acmè in a few days, and its retreat, I believe, was equally sudden with respect to new seizures.

The first well-marked cases of it which fell under my observation, were a woman and her two sons, fourteen and sixteen years old; these three were attacked within twenty-four hours of each other. Two days after I was called to a family consisting of six, a man, his wife, and four children, all of whom were taken ill nearly at the same time; two or three of them were previously very weakly, and all of constitutions extremely delicate. The aspect of the house in which they lived was due north. From this time my calls were continual from morning till night. I visited many families that were seized pretty regularly in succession in a way that might strongly persuade to a belief of contagion; many families in which several or all were seized nearly at once, and many where a single person only was affected. Indeed, I suffered in my own person no inconsiderable portion of influenza; and although I was occasionally in the midst of a large family, and my children perpetually about me, none of them to my knowledge felt a shade of it.

My ingenious neighbour, Mr. Little, (who thinks exactly with me on this occasion, as far as relates to contagion) whose practice is probably more extensive than that of any other medical man in this town, has told me, that availing himself of an opportunity when he was less professionally engaged, he visited some friends at Exeter, on the 13th of March; that he found the influenza there at its height, and that on his return to Dock, at the end of a week only, he learnt with surprise that we had been fully engaged in it for several days.

Dr. Remmett has very obligingly favoured me with the copy of a letter sent by him to Dr. Duncan, at Edinburgh,



in 1782, in answer to some queries relative to the influenza that prevailed in that year. This letter was either not received by Dr. Duncan, or by some inadvertence or other was not printed in the annals of that year, with the other papers on the same subject. Dr. Remmett never troubled himself, however, to enquire how this happened. The letter is immediately ad rem, and important in many respects, I am therefore very glad to avail myself of it. Such an opportunity of marking the progress of a similar epidemic must necessarily very rarely happen to an eminent physician. Those who best know Dr. Remmett's professional abilities, and have often availed themselves of his efficient prescription, will not read the following remarks with cursory attention. I should premise that the doctor has never believed these influenzas to have been at all contagious.

" SIR,

" I have received your queries relative to the late influenza, and from the circumstance of having travelled from hence to London (about 212 miles), and back again in five days, I can give you a pretty exact account of its progress. When I left home on Sunday, May 26, it had not then made its appearance among us, nor did I hear of it on my journey, until my arrival in London, on Tuesday evening, when it was so general there, that an apothecary, who was indeed a man of considerable practice, assured a friend of mine, that he had seen near 200 people ill of it on that day. I slept but one night in London, and on my return home, Friday evening, May 31, I began to feel a lassitude, which I at first attributed to the fatigue of an anxious and very hasty journey: On the next morning, however, the other more characteristic symptoms of catarrh came on, together with a feverish habit; and in this state I continued several days, the langour being all that time, and for a week or ten days afterwards, very considerable, but without fever enough to require confinement or take me off from business. I was thus the first person attacked by this very curious disorder in this town, and I think it probable that I brought it with me from London; but it seems to have travelled westward nearly as fast as I did; for on Saturday many were taken down here, and on Sunday, Monday, and the following days many more, and there is no doubt but it made its appearance at Plymouth before it could be discovered at Dock, which is only two miles to the westward of us. What I have said of myself

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applies

applies with very little variation to by far the greater part of those who had the disease, which was so general, that I can hardly name half a dozen who escaped it, and they were of habits and modes of life the most opposite to each other, and I have heard of no precautions made use of by any person. Even in this first stage of the disorder the fever was, however, in many very considerable, with great heat on the skin, and a state of pulse which induced some practitioners to draw blood, from which I never observed any bad effects, although I do not believe that it was in any case productive of much good in the primary state of the complaint. I should add, that in some the influenza put on the appearance of angina, and in others, it was attended with pains in the limbs, but the catarrhal symptoms were by much the most prevalent form of the disease. Its progress was very rapid for about a week, and after that time it became less frequent, though those who were then affected by it suffered more severely than those who had it at first. I cannot say, that I observed any notable crisis; but I think there were very few, if any, who got through the disorder without some degree of increased perspiration. I know of none who died in this stage of the disorder, and the best remedies were spt. Minder. and the occasional use of gentle laxatives, which were always of much service in reducing the fever, and lessening the uncommon languor with which it was attended. This leads us to account for some of the most remarkable symptoms, which may be clearly referred to the biliary organs.—But the most serious part of the history of this disorder is yet to be related as a *sequela*. On the 10th and 11th of June, pleurisies and peripneumonies began to attack those who had not taken proper care of themselves in the first stage of the disorder; or it may perhaps be better to give the name of pleuro-peripneumony to this state of the complaints, for I saw no one in whom the two affections were not combined; and it is worth remarking, that many became extremely yellow during the progress of this part of the disorder. On the 13th and 14th, (the weather being extremely hot) many more were ill of it, and for ten days it was so very prevalent, that it was hardly possible for me to do more business than fell to my lot. Here, however, notwithstanding the languor and other bilious appearances, blood-letting with blisters and the most powerful antiphlogistic regimen became indispensably necessary from the violence of the fever, the oppression of the breast, and acute pains in the side; and the blood was remarkably

markably sized and very much cupped. The loss was not attended, however, with as quick a relief as it generally produces in inflammatory complaints of the breast; but I have never known any alarming epidemic in which I had so much reason to be satisfied in the end with any mode of treatment. All other diseases seem to have been lost for some time in this one epidemic. As to the brutes, I can give no satisfactory information concerning them; but I am inclined to believe, that coughs were then and have since continued very frequent among horses. The difficulty of procuring dissections in private practice, (and mine is entirely of that sort) prevents my saying any thing to you on that head; and with respect to the Peruvian bark, I saw nothing to induce me to try it in either stage of the disorder; but, with convalescents, it has been productive of all its usual good effects.

“ R. B. REMMETT, Plymouth.”

Dr. Huxham observes, of a similar epidemic in 1733, “ *Nos tamen Plymuthi ante iv iduum Februarii vix attigit: quo die nempe Saturni, plurimi subito quasi correpti erant, postridie innumeri, ad xv. kalend. Martii omnes undique.*” The late influenza then, it appears, reached this place from Exeter at the most in three days, and spread through the whole of this large town in two or three days. Dr. Remmett has most unquestionably proved, that the epidemic of 1782, travelled at least with equal celerity, and that it observed the same line of direction; and the memoranda of our Hippocratic Huxham inform us, that the febres catarrhales epidemicæ of the years 1733 and 1737, were most strikingly similar, both in respect to the suddenness of their appearance and general concurrence of symptoms. Did ever the most malignant contagious disease on record spread with so much rapidity as these? If these epidemics spread with such unexampled rapidity through the medium of contagion only, might we not, consistently with all former observations, expect that their fatal effects on human life would have borne some proportion to such extreme activity? We can, therefore, more satisfactorily account, I presume, for this sudden dispersion of them through this kingdom, perhaps through Europe, and a considerable portion of the globe, by referring the cause of them to some peculiar constitution of the air, or rather to adventitious miasms or effluvia casually floating and conveyed through it. The latter, it is very possible, may be irregularly diffused through the atmosphere, may

impinge, therefore, on some persons in larger masses, and pass others altogether; and hence something like a conjecture may be offered, why some villages may have escaped the late epidemic, and why it has appeared in various degrees and different shades of character; but here too we must take into the account the variety of constitutions.

We have often heard of fatal and contagious fevers prevailing in different large towns of this kingdom, and that although these have been left to themselves, in many instances formerly, as far as relates to any means taken to prevent their spread, yet they have not extended beyond the respective towns, or, at the most, their immediate neighbourhood. The small-pox, of the worst character, are very seldom, if ever, out of these large towns; we hope now however, to be able to report, at no very distant day, their entire extinction in them; and yet I am informed that this very infectious disease has not been conveyed to Modbury during the last eight or ten years, a market town at the distance only of sixteen miles, and between which and Plymouth there is a great and daily intercourse. Indeed, were the plague itself, or any other the most contagious disorder of which we have any mention, at this moment in a central town of this populous kingdom, and the present intercourse with it not in the least suspended, I much doubt, indeed I will venture to say, that I do not believe that either of these would be propagated through this country with half the rapidity (might I not say with a hundredth part the rapidity) and regularity which have marked the progress of the late influenza. On the other hand, I entirely believe, that if all intercourse had been wholly discontinued throughout the kingdom during the last four or five months, that the late epidemic would, notwithstanding, have pervaded it much in the same manner we have seen it. Assuredly, then, this affection has been rather wafted on us, than communicated to us in the way of personal intercourse from town to town. Dr. Remmett tells us, that he travelled with the complaint to Plymouth, and there is no reason at all to doubt the fact; but how can we possibly believe that the infection issued from him alone, and from this source was propagated through this extensive town, containing more than twenty thousand inhabitants, in little more than twenty-four hours? Again, if these epidemics are so actively contagious, why do they not diverge with persons going in all directions?

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Why should they, unlike every other contagion of which we have any knowledge, pass regularly on in one unvaried rout?—But it has been often observed during the prevalence or previous to these epidemics, that various animals and birds have been affected and destroyed; and if I am not much mistaken, even an impression on the vegetable creation has been somewhere mentioned. I have just learnt, and I have no doubt the information is perfectly correct, that several horses died in this neighbourhood, very suddenly, during the time the late influenza was at the worst with us. That during the close of the last year, and the early months of this, that horses were every where unusually diseased, that very many died, (I knew a neighbouring farmer who lost three, and with difficulty saved several others) and that such were the apprehensions of the farmers for their horses at this time, it was a practice with those who thought the distemper infectious, to put large patches of tar upon the breasts of them by way of prevention; but many attributed, however, these disorders to the horses having eaten insects, which for many weeks were innumerable, and covered the fields in a most extraordinary manner, wherever there was any length of grass; and this, from the mildness of the season, was general in almost every field. These were covered with a sort of spider's web, and wherever you stepped, these insects flew off in vast numbers.—I noticed them many times—they were a long-legged, indeed, a sort of winged spider—I believe of the class *Diptera*; name, *Oleracea*. A respectable gentleman farmer, living near Modbury, on whose veracity I have the most perfect reliance, assures me, that towards the end of March last and beginning of April, during the prevalence of the influenza, that many of his horses, and those of his neighbours, were very much disordered: the disease, among them, was called the squinsy, and was marked with the following symptoms: Running at the nostrils, cough, sudden weakness and loss of flesh—(these are his own words)—none died—abscesses frequently formed and broke externally, between the cheek bones, about the root of the tongue, and sometimes internally, about the same situation. The same intelligent person, Mr. Parsons, tells me, that in November and December last, dogs were generally affected with a disease, termed with them the Houst; which he observed, seems to consist of a continual effort to vomit, and that froth and slime were thrown up by these efforts

efforts in considerable quantities; many of these animals were ill several weeks, and many died. In the advanced period of this distemper they were very subject to fits, as they call it, running here and there, and into pools and ponds; several ran off and have not been since heard of; they never attempted to bite, and therefore the apprehensions which were at first entertained that they were mad, were soon removed. I have judged this correct information too important to be omitted:—can these general and concomitant effects be attributed on any principle of reasoning, or even of probability, to intercourse and the medium of contagion?

The active sphere of febrile contagion, even that of the plague, is now, I believe, generally acknowledged to be limited to a few yards, if not feet; and, therefore, until we are more acquainted with the laws of contagion, and know what the principle of it is, we may be allowed to assert at present a belief, that the atmosphere, of *all contagions* which have a power of affecting the human constitution, is equally circumscribed; must not then the almost inconceivable progress in this point of view, which we have shewn always marks the influenza, and, I believe, has given it this designation, and also the synchronous affections of various animals, be unquestionably referred to some common agent or cause, at once applicable to all—a peculiar impregnation of the atmosphere? I believe these observations apply, with the strictest analogy, to the late epidemic. Dr. Huxham, adverting to the cause of those which occurred in the former part of the last century, and which, with his usual accuracy, he has most minutely described, or rather, indeed, delineated,—says, “*Omnino mihi pendere videtur à crasso, udo, gelidoque aëre, spiracula cutis occludente et acrem intra corpus coluvium congerente; nam præcedit hunc morbum semper, ac comitatur crassa admodum humidaque atmospheræ temperies.*” I must take liberty, however, to remark here, but truly with the most respectful deference to the opinions of so great a man, that if this state of the atmosphere alone were sufficient to produce epidemics of this description and extent, that these would necessarily have occurred much oftener than we have hitherto met with them; that from our present knowledge of the effects of atmospheric air on the human body, we are obliged to conclude, that no possible combinations of it, depending on dryness, moisture, heat and cold, as these happen in this part of Europe, or, indeed, in any part of the world, would probably occasion such consequences as we have lately seen result  
from

from it on the human constitution. If it follows, that a long continuance of that state of the air just mentioned, shuts up the pores, &c. the effects we might expect from these, would be a morbid plethora, gradually formed, and attended with corresponding relaxation and debility; but these do not constitute influenza, something more indisputably is necessary; more consistently with the present state of science will the materies morbi be sought for, on this and similar occasions, in some decomposition of the other constituents of the air, or be referred to some extraneous effluvia casually floating in it. Have any symptoms, at all corresponding with those of the late epidemic, ever been observed in any person under experiments, or cure, at the Pneumatic Institution?

If it were possible to find persons with hardihood and patriotism enough for the purpose, it is possible, and perhaps not improbable, that the latent principle of the late impression on the human system, would sooner be detected by a long suite of diversified experiments in this institution, under the direction and observation of its celebrated founder, or some ingenious philosophical Davy, than by any other means or inquiries that can be set on foot.

Has this deleterious principle to human health arisen from any particular exhalations of the earth, extensive lakes, forests, or morasses. We know that marsh effluvia constantly produce here epidemics, and that they are not contagious. Mildews, and blights of vegetables, fruits, and even trees, are often, I believe, very correctly referred to animalcules; by these, the entire organization of leaves is very soon completely destroyed, and many a healthy tree have I seen suddenly sicken, linger, and die; this is no infrequent occurrence. The atmosphere, it may be, and I believe is, full of animalcules. Imagination cannot conceive the infinite minuteness of these animated atoms. There is no putrefaction where these are not most abundantly present. A drop of stagnant water is a drop of animals. Nothing forwards, perhaps, the putrescency of animal substances so rapidly as the blow or germ of insects and animalculæ; indeed, they would seem almost to be at once the principle and pabulum of putrefaction. Have then adventitious myriads of those, or any state of our own, had any remote share in producing the late sedative impression on human life? The latest, and most philosophical writers, assure us of a very beautiful depurating process of the atmosphere, depending on, and even constituting

stituting one of the most important economies of the vegetable kingdom.

If this be true to the extent it has been asserted, must not any temporary diminution of it, to any considerable extent, from blasted forests, large tracts of vegetation, or other natural causes unknown to us, be followed with a corresponding insalubrity of the air, productive of disease to animal life? Has that deterioration of the atmosphere producing epidemics, like the late influenza, (if they are produced by any state of it) arisen from a plus or minus state of it? Have the cause or causes of influenza, be they what they may, been determined successively from east to west, by any influences of the sun or moon? or to what other physical causes can this rout of them be attributed?\*

Has the influenza appeared in the North Sea? If so, at what distance from land, and when? Has it been met with in the Atlantic; when and where?

It has not been disputed, I believe, nor is it probable it will be, that the late epidemic followed immediately, or very shortly after the application of its cause or causes; neither will it be denied, I think, that the application of this was always on the mucous membrane, lining the passages to the lungs, and on their various connections in the nostrils, frontal sinuses, &c.† This idea, the primary and great affections of the chest and head, the cough, gravedo, sneezing, vertigo, and catarrh, tend very much to strengthen.‡

Now, nothing can be more in opposition than some of these remarks are, to many circumstances undeniably established relative to the introduction and effects of most contagious principles on the human body. Typhus fever, as we usually meet with it here, is not formed in less than eight or ten days, in persons exposed to its influence.

\* Some of these queries and observations, when I had written them, appeared to me, as they undoubtedly are, exceedingly excentric, and I was therefore about to throw them by—but on reconsidering them, it struck me that they might possibly glance remotely at a something, which might bear more immediately on the subject; as, then, they occupy but a very little paper, and a small portion of time, I felt inclined rather to submit to the imputation of a little wandering, than suppress them. Bold inquiry and novel conjecture, will be necessary to ascertain the subtile cause of influenza.

† And it may be possible through the inhalents of the skin.

‡ Can the soreness and pain of the limbs be referred to the causes of influenza impinging on the skin?



The contagion of the small-pox does not produce its effects in so short a time as this; not sooner, indeed, than in fourteen or twenty days.\*

The measles, I believe, are determined by the same laws, and very probably most other contagious principles. Even the syphilitic principle of contagion, applied through the absolute medium of immediate contact, under circumstances of all others the most favourable to its sudden absorption, is many days before it establishes itself even locally, very often does not at all; and sometimes months and years elapse before it gains complete possession of the system. These observations might be much extended.—Dr. Fordyce says, “That when matter does not produce fever immediately, it does not enter the blood vessels, but lodges in some part of the body for some time, and as soon as it enters the blood vessels, and touches the heart, the fever immediately comes on.” I quote Dr. Fordyce, because, I believe, that fevers arising from *contagion per se*, do never take place until the principle of them has reached the blood vessels. The principle of contagion (for all contagions may be only modifications of the same principle) is very possibly so wholly extraneous, and so extremely destructive of human life, that were this principle immediately to enter the system as soon as exposed to it, life might always be irresistably extinguished very suddenly, or at the most in a few hours. If this conjecture comes near the truth, Nature it would seem, has kindly provided that the constitution shall not be suddenly surprized, and has therefore given it time to meet the impending enemy with all its resources of self preservation.

We hear, indeed, of persons attacked by contagious fever, and destroyed by it in twenty-four hours, but we never see this happening in this country, at least in this part of it. As such effects of contagious fever, then, are so contrary to any experience we have of it, (for we must reason from what we know) it will not be very difficult to believe, that these instances of sudden mortality can happen only from contagion (if it ever happens from contagion), in its most concentrated state, suddenly introduced in union with, and through the medium of, an atmosphere most highly vitiated and destructive of the principle of life.

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\* It is a very remarkable fact, that the variolous principle applied externally to the skin, establishes itself earlier in the system than when received usually into it.

life. But after all, it is even a dispute with the latest and best writers, whether these terrible diseases are contagious or not. But with respect to the air, we know that this can be so vitiated by a variety of natural and artificial means, that a single inspiration of it immediately extinguishes human life; and we can admit, therefore, very readily, that it can be more or less changed from its healthy standard, so as to produce every possible gradation of effect on the human body,\* from the slightest indisposition to the most sedative impression and death.

Mr. Young, of Plymouth, a gentleman of the greatest respectability in this neighbourhood, and of much learning and great talent for observation, in a conversation on the subject of influenza, expressed to me, in the strongest terms, his entire disbelief that epidemics of this description are in any degree contagious. To the opinions of this gentleman who, from a very long and very extensive practice from which nothing ever diverted his attention, has had opportunities of noticing several recurrences of influenza, which he assures me he has minutely observed, I pay the greatest deference.

After I had written the preceding observations, of which Mr. Young has been pleased to speak in terms of approbation, he very kindly pointed out to me the following important quotations from an old author, Petrus Salius Diversus, than which nothing can more conclusively apply to some of the foregoing remarks, and, indeed, to the subject of influenza altogether. These extracts are long, and they might have been with great effect much extended; it is impossible to abridge them.

Speaking of an epidemic that happened in the year 1580, similar in all its character and consequences to these we have seen lately, and during the late century, and referring its cause to some exhalations and state of the atmosphere, Salius observes, in a work printed at Frankfort, 1586, "Cum enim aer levem tantum corruptionem passus est, tunc epidemios vulgaresque solum, non pestilentes edere consuevit, sicuti anno proxime elapso millesimo quingentesimo octuagesimo factum est, in quo ex corruptione aeris, levi tamen per universam Europam et ad exteras usque nationes vagarunt morbi illi, qui à vulgaribus diverso nomine appellati, unam tamen formam tantum in omnibus regionibus habuere. Hi accedebant cum febre in aliquibus validâ, in aliquibus levi, cum capitis gravedine; superveniebat distillatio admodum molesta, quæ in thoracem decumbebat; hinc oriebatur tussis vehemens ex  
quâ

quâ in principio excreabant patientes tenuia et cruda: Sitis ut plurimum pauca vel nulla erat, in appetentia magna, et gustatus ferè abolitio, *notabilis que lassitudo et corporis imbecillitas quiescente febre* subsequatur; febris ut plurimum in quarta et ante quartam terminabat sed tussis in multis per plures et plures dies superdurabat et vix tandem hi concocta expuebant—hi morbi ut plurimum erant solubres,\* in sanitatem que omnes terminabant, præter eos qui valetudinarios, vel debiles, vel senes vel qui angusto essent thorace et distillationibus obnoxii, vel infirmos vel eos, qui pravo utebantur victu quique ægritudine ipsâ ausi sunt indiscriminatim et sine ratione vivere.” Again, he says further on, “Quoniam autem non prava nec ingens sed levis fuit hæc corruptio aëris, ideo tantum epidimios non pestilentes protulit morbos.” The course of this epidemic was, however, from west to east; he says, “Hæc epidemia à partibus occidentalibus ultimâ hyeme incipiens, et motum habens versus orientem continueque à regione in regionem propinquam transmigrans, nec ineunte vere, nec eo procedente nec etiam adventante æstate imo nec sub cane nec etiâ, subsequente autumno unquam à *proprio motu* cessavit—quinimo et tempori frigidiori et calidiori et flante tam austro, quam Boreâ et pluvioso et sereno cælo peragravit hasce omnes Europæ regiones et omnia loca indiscriminatim.” He adds of this epidemic;—“Quam eandem pravam et perniciosam aëris qualitatem, ultra homines sensere etiam cætera viventia: hinc aves illæ exterarum terrarum statis temporibus adire solent, hæc aëris pravitate incitata, has nostras fugientes ad alias regiones ante tempus avolant, et quæ super arbores nidificant et dormiunt, super ipsam terram et in locis infimis, altiora caventes, nocte degebant. Bruta autem animantia quæ ex herbarum et arborum germinibus ac foliis victitant eadem aversabantur, quoniam hæc sub dio posita ab aëre *circumstanti* aliququaliter infecta erant, quæ omnia pravitatis et corruptionis aëris (quæ tamen fuit levis) indubitata erant indicia et argumenta.”

Salus's definition of contagion is, “Nam contagium nihil aliud est, quam aliquorum vel saltè duorum contactus, quorum unius in alterum, istius contactûs ratione, similis gignatur morbus.” I am very desirous to mention, and I have the doctor's permission to do so, that Dr. Magennis, physician

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\* Solubres is probably an error of the press for salubres or sanabiles.

physician of the Royal Naval Hospital at this place, a gentleman whose manners are as amiable as he is eminent in his profession, entertains the same opinions with respect to the non-contagious character of the late influenza, as those I have advanced. Mr. Sargeant, to whom I have submitted this paper, assures me, that he thinks with me on the question of contagion as applying to the late and former influenzas. Mr. Sargent is the oldest, and I shall not offend any one if I say he is the most respectable surgeon in this town. He is, I believe, the friend and father of us all.

I am just favoured with the following answer to an inquiry how the influenza appeared in the large well known school of the Rev. Mr. Bidlake, a gentleman of considerable reputation in the literary world. "This school consisted at that time of nearly thirty boarders besides day scholars. An usher assists Mr. Bidlake. This gentleman was taken ill of the influenza, and suffered a good deal from it; however, he continued to attend as before in the school, and although constantly with the pupils, particularly the boarders, no disorder was communicated, and the young gentlemen were free from any symptoms of it. Mr. Bidlake was slightly indisposed, and also a female servant. When the usher became a little better, he went with one of the boarders to a cottage Mr. B. has in the country, and although they slept in the same room, and the influenza\* had not left the former, yet the other remained well."

The following remarks on the sweating sickness come rather out of place, but they did not occur to me before. Of what genus in nosology was the *sudor anglicanus*? This non-descript appeared for the first time in September, 1485, and although it raged little more than a month, destroyed many thousands. This epidemic broke out again in 1517, and it was said of it then that it carried off the patient in three days; again, for the third and last time, this fatal disorder spread rapidly through the kingdom in 1551.

This epidemic was big with death, and this character and effect of it seem at first strongly to favour the idea that it was an infectious disease; but if we advert to the little facilities of intercourse that then necessarily subsisted throughout the kingdom, and at the same time the extreme rapidity with which it spread through it, this opinion of it is but very feebly supported. The acute Hume, speaking of this dreadful disease, observes, "There raged at that time in London, and other places, a species of malady unknown to any other age or nation, the sweating sickness, which



which occasioned the sudden death of great multitudes; though it seemed not to be propagated by any contagious infection, but arose from the general disposition of the air and of the human body. In less than twenty-four hours, the patient commonly died or recovered; but when this pestilence had exerted its fury for a few weeks, it was observed, either from alterations in the air, or from a more proper regimen which had been discovered, to be considerably abated." Have we any medical history of this epidemic? What historian has given us the best account of it?

It would seem perhaps that I am anxious to establish the fact, that influenza is not contagious. No, the very reverse of this is the case; my fears are, that contagion is not the principle of it; for over any highly vitiated state of the atmosphere, or even slight deviations of it from its healthy standard, whether arising from particular decompositions of its constituent principles, or from exhalation, or any physical causes of which probably we are wholly ignorant, we have not, nor can we ever have, any extensive controul; but with respect to the principle of those contagions which act on the human body, my friend, Dr. Jenner, has possibly opened a door which may ultimately lead on to the extinction of contagion altogether: Considered in this point of view, the present discussion becomes important, and ceases immediately to be, what I have heard it termed, merely an abstract and speculative investigation, from which nothing useful to society can possibly result.

Such are the observations which the perusal of your queries have suggested. Unacquainted with the intentions and plan of publication which the Medical Society are about to adopt on the present occasion, I have sent them with all the expedition my avocations would possibly admit of; they will necessarily, carry in some part of them, the marks of haste. I have gone into many of the questions at considerable length, and have given my opinions, and ventured some conjectures, in the most unreserved manner. Although I hold it a duty to be always at my post, ready to throw with cheerfulness my mite into the public treasury when called on, or whenever I judge that I can be useful, I should not certainly have obtruded my opinions on the present occasion, if I had not been favoured with your printed address. The many inaccuracies of this paper, therefore, which have arisen from haste, and other obvious causes, will, I have no doubt, be received with allowance by the candid. From the idle, the ill-natured,

natured, and the captious, I shall never expect even the semblance of courtesy. If, what I apprehend will be the case, the paper is extended to an inconvenient length and from this, or any other circumstance, does not coincide with the intentions of the Society, I have to request that you will return it to me as soon as is convenient, or to Dr. Jenner.

I have subjoined a state of the weather, &c. for February and March last, which was given to me by a very accurate and ingenious man, whose instruments I know are very good; but when we recollect the wonderful powers of the human machine in accommodating itself with impunity to an increase of heat, &c. vastly greater than ever happens in nature, or rather the power of preserving nearly its original temperature under these circumstances, we may undertake, without much presumption, to assert that no variations of the atmosphere, cognizable in this country at least by any instruments we have hitherto employed, can ever be satisfactorily adduced to account for influenza. Other instruments, and other tests, are unquestionably required, to detect and analyse the latent principle. What share had the nervous system in the late affection of influenza?

#### STATE OF THE WEATHER.

|      |                  |       |     |                              |    |
|------|------------------|-------|-----|------------------------------|----|
| Feb. | 8 $\frac{1}{2}$  | 39.45 | N.  |                              | 42 |
| 1    | Noon             |       |     | Fair with clouds             |    |
|      | 10 $\frac{1}{2}$ | 30.35 | N.  |                              | 48 |
| 2    | 8 $\frac{1}{2}$  | 30.20 | N.  |                              | 46 |
|      | Noon             |       |     | Cloudy with few showers      |    |
|      | 10 $\frac{1}{2}$ | 29.89 | NW. |                              | 50 |
| 3    | 8 $\frac{1}{2}$  | 29.80 | N.  |                              | 46 |
|      | Noon             |       |     | Fair with clouds             |    |
|      | 10 $\frac{1}{2}$ | 30.04 | N.  |                              | 54 |
| 4    | 8 $\frac{1}{2}$  | 30.21 | NE. |                              | 44 |
|      | Noon             |       |     | Fair all day                 |    |
|      | 10 $\frac{1}{2}$ | 30.34 | E.  |                              | 48 |
| 5    | 8 $\frac{1}{2}$  | 30.05 | NE. |                              | 43 |
|      | Noon             |       |     | Fair all day                 |    |
|      | 10 $\frac{1}{2}$ | 29.98 | NE. |                              | 50 |
| 6    | 8 $\frac{1}{2}$  | 29.71 | NW. |                              | 43 |
|      | Noon             |       |     | Morning cloudy with showers, |    |
|      | 10 $\frac{1}{2}$ | 29.68 | N.  | evening fair                 | 46 |
| 7    | 8 $\frac{1}{2}$  | 29.67 | N.  |                              | 42 |
|      | Noon             |       |     | Fair all day                 |    |
|      | 10 $\frac{1}{2}$ | 29.93 | N.  |                              | 47 |

|           |                          |       |     |                                                   |    |
|-----------|--------------------------|-------|-----|---------------------------------------------------|----|
| Feb.<br>8 | 8 $\frac{1}{2}$          | 30,67 | N.  | Cloudy most of the day                            | 41 |
|           | Noon<br>10 $\frac{1}{2}$ | 30,26 | N.  |                                                   | 45 |
| 9         | 8 $\frac{1}{2}$          | 30,32 | N.  | Cloudy most of the day                            | 39 |
|           | Noon<br>10 $\frac{1}{2}$ | 30,47 | N.  |                                                   | 53 |
| 10        | 8 $\frac{1}{2}$          | 30,45 | N.  | Fair with clouds                                  | 41 |
|           | Noon<br>10 $\frac{1}{2}$ | 30,56 | E.  |                                                   | 50 |
| 11        | 8 $\frac{1}{2}$          | 30,55 | E.  | Fair all day                                      | 40 |
|           | Noon<br>10 $\frac{1}{2}$ | 30,55 | SE. |                                                   | 49 |
| 12        | 8 $\frac{1}{2}$          | 30,47 | E.  | Cloudy all day with little rain                   | 43 |
|           | Noon<br>10 $\frac{1}{2}$ | 30,33 | W.  |                                                   | 54 |
| 13        | 8                        | 30,06 | W.  | Morning hard rain, after-part<br>fair with clouds | 50 |
|           | Noon<br>10 $\frac{1}{2}$ | 29,98 | N.  |                                                   | 49 |
| 14        | 8 $\frac{1}{2}$          | 29,98 | NW. | Cloudy most of the day                            | 40 |
|           | Noon<br>10 $\frac{1}{2}$ | 29,90 | NW. |                                                   | 52 |
| 15        | 8                        | 29,68 | NW. | Cloudy with showers, wind<br>fresh                | 49 |
|           | Noon<br>10 $\frac{1}{2}$ | 29,56 | NW. |                                                   | 53 |
| 16        | 8 $\frac{1}{2}$          | 29,66 | NW. | Fair with clouds and showers,<br>wind fresh       | 49 |
|           | Noon<br>10 $\frac{1}{2}$ | 29,86 | NW. |                                                   | 53 |
| 17        | 8 $\frac{1}{2}$          | 29,74 | W.  | Rain most of the day, wind<br>fresh               | 50 |
|           | Noon<br>10 $\frac{1}{2}$ | 29,63 | W.  |                                                   | 53 |
| 18        | 8 $\frac{1}{2}$          | 29,67 | W.  | Cloudy with showers                               | 50 |
|           | Noon<br>10 $\frac{1}{2}$ | 29,83 | NW. |                                                   | 50 |
| 19        | 8 $\frac{1}{2}$          | 29,70 | S.  | Cloudy with showers                               | 48 |
|           | Noon<br>10 $\frac{1}{2}$ | 29,44 | S.  |                                                   | 51 |
| 20        | 8 $\frac{1}{2}$          | 29,43 | N.  | Morning rain, after-part<br>cloudy, wind fresh    | 49 |
|           | Noon<br>10 $\frac{1}{2}$ | 29,62 | N.  |                                                   | 47 |
| 21        | 8 $\frac{1}{2}$          | 29,80 | N.  | Fair with few clouds                              | 46 |
|           | Noon<br>10 $\frac{1}{2}$ | 30,03 | N.  |                                                   | 54 |
| 22        | 8 $\frac{1}{2}$          | 30,15 | N.  | Fair with clouds                                  | 45 |
|           | Noon<br>10 $\frac{1}{2}$ | 30,19 | S.  |                                                   | 51 |

|            |                   |                |            |                                                                   |          |
|------------|-------------------|----------------|------------|-------------------------------------------------------------------|----------|
| Feb.<br>23 | 8½<br>Noon<br>10½ | 30,14<br>30,07 | SW.<br>SW. | Cloudy with showers                                               | 50<br>53 |
| 24         | 8½<br>Noon<br>10½ | 29,94<br>30,10 | SW.<br>N.  | Rain all day, evening fair                                        | 52<br>50 |
| 25         | 8½<br>Noon<br>10½ | 30,19<br>30,21 | N.<br>W.   | Cloudy with showers                                               | 46<br>53 |
| 26         | 8½<br>Noon<br>10½ | 30,25<br>30,23 | W.<br>W.   | Cloudy all day, with few showers                                  | 51<br>55 |
| 27         | 8½<br>Noon<br>10½ | 30,16<br>30,41 | W.<br>NW.  | Morning rain, after-part fair with clouds                         | 53<br>54 |
| 28         | 8½<br>Noon<br>10½ | 30,40<br>30,33 | W.<br>NW.  | Cloudy with small rain most of the day                            | 50<br>56 |
| Mar.<br>1  | 8½<br>Noon<br>10½ | 30,28<br>30,20 | W.<br>NW.  | Cloudy with small rain most of the day                            | 53<br>57 |
| 2          | 8½<br>Noon<br>10½ | 30,10<br>29,55 | NW.<br>NW. | Cloudy most of the day, evening hard wind and rain                | 53<br>55 |
| 3          | 8½<br>Noon<br>10½ | 29,65<br>29,87 | N.<br>N.   | Cloudy with showers of snow                                       | 48<br>50 |
| 4          | 8½<br>Noon<br>10½ | 30,03<br>30,09 | N.<br>N.   | Fair with clouds, and few showers of small snow. Fire in the room | 44<br>49 |
| 5          | 8½<br>Noon<br>10½ | 29,99<br>29,99 | NE.<br>S.  | Cloudy most of the day with few showers                           | 42<br>53 |
| 6          | 8½<br>Noon<br>10½ | 30,09<br>30,23 | E.<br>N.   | Morning rain, after-part cloudy with showers                      | 46<br>46 |
| 7          | 8½<br>Noon<br>10½ | 30,20<br>30,22 | N.<br>NE.  | Cloudy with few showers                                           | 43<br>50 |
| 8          | 8<br>Noon<br>10½  | 30,14<br>30,15 | NE.<br>E.  | Cloudy most of the day                                            | 48<br>48 |
| 9          | 8½<br>Noon<br>10½ | 30,07<br>30,00 | NE.<br>E.  | Cloudy all day                                                    | 42<br>50 |



*State of the Weather in March.*

149

|      |                  |       |     |                                 |    |
|------|------------------|-------|-----|---------------------------------|----|
| Mar. | 8 $\frac{1}{2}$  | 30,10 | E.  |                                 | 43 |
| 10   | Noon             |       |     | Cloudy all day                  |    |
|      | 10 $\frac{1}{2}$ | 30,23 | E.  |                                 | 53 |
| 11   | 8 $\frac{1}{2}$  | 30,33 | N.  | Fair with clouds                | 43 |
|      | Noon             |       |     |                                 |    |
|      | 10 $\frac{1}{2}$ | 30,51 | N.  |                                 | 54 |
| 12   | 8 $\frac{1}{2}$  | 30,54 | N.  | Fair with clouds                | 39 |
|      | Noon             |       |     |                                 |    |
|      | 10 $\frac{1}{2}$ | 30,56 | N.  |                                 | 45 |
| 13   | 8 $\frac{1}{2}$  | 30,50 | N.  | Fair with clouds                | 39 |
|      | Noon             |       |     |                                 |    |
|      | 10 $\frac{1}{2}$ | 30,41 | N.  |                                 | 45 |
| 14   | 8 $\frac{1}{2}$  | 30,32 | WN. | Fair with clouds                | 46 |
|      | Noon             |       |     |                                 |    |
|      | 10 $\frac{1}{2}$ | 30,18 | WN. |                                 | 53 |
| 15   | 8 $\frac{1}{2}$  | 29,87 | NW. | Rain most of the day. No fire   | 51 |
|      | Noon             |       |     | in the room                     |    |
|      | 10 $\frac{1}{2}$ | 29,89 | N.  |                                 | 51 |
| 16   | 8 $\frac{1}{2}$  | 29,99 | N.  | Fair with clouds                | 47 |
|      | Noon             |       |     |                                 |    |
|      | 10 $\frac{1}{2}$ | 29,95 | W.  |                                 | 51 |
| 17   | 8 $\frac{1}{2}$  | 29,89 | NW. | Cloudy all day                  | 50 |
|      | Noon             |       |     |                                 |    |
|      | 10 $\frac{1}{2}$ | 30,06 | W.  |                                 | 53 |
| 18   | 8 $\frac{1}{2}$  | 30,13 | SW. | Cloudy all day                  | 52 |
|      | Noon             |       |     |                                 |    |
|      | 10 $\frac{1}{2}$ | 30,21 | SW. |                                 | 54 |
| 19   | 8 $\frac{1}{2}$  | 30,20 | S.  | Very cloudy all day with little | 52 |
|      | Noon             |       |     | rain                            |    |
|      | 10 $\frac{1}{2}$ | 30,15 | S.  |                                 | 55 |
| 20   | 8 $\frac{1}{2}$  | 30,19 | W.  | Rain most of the day            | 52 |
|      | Noon             |       |     |                                 |    |
|      | 10 $\frac{1}{2}$ | 30,24 | SE. |                                 | 54 |
| 21   | 8 $\frac{1}{2}$  | 30,21 | SE. | Fair with clouds                | 53 |
|      | Noon             |       |     |                                 |    |
|      | 10 $\frac{1}{2}$ | 30,12 | SE. |                                 | 58 |
| 22   | 8 $\frac{1}{2}$  | 30,05 | E.  | Fair all day                    | 58 |
|      | Noon             |       |     |                                 |    |
|      | 10 $\frac{1}{2}$ | 30,06 | F.  |                                 | 59 |
| 23   | 8 $\frac{1}{2}$  | 30,14 | SE. | Cloudy most of the day          | 54 |
|      | Noon             |       |     |                                 |    |
|      | 10 $\frac{1}{2}$ | 30,28 | S.  |                                 | 57 |
| 24   | 8 $\frac{1}{2}$  | 30,21 | E.  | Cloudy all day                  | 54 |
|      | Noon             |       |     |                                 |    |
|      | 10 $\frac{1}{2}$ | 30,10 | E.  |                                 | 57 |

|      |                  |       |     |                        |    |
|------|------------------|-------|-----|------------------------|----|
| Mar. | 8 $\frac{1}{2}$  | 30,07 | E.  |                        | 53 |
| 25   | Noon             |       |     | Fair with clouds       |    |
|      | 10 $\frac{1}{2}$ | 30,02 | E.  |                        | 58 |
|      | 8 $\frac{1}{2}$  | 30,13 | E.  |                        | 53 |
| 26   | Noon             |       |     | Fair with clouds       |    |
|      | 10 $\frac{1}{2}$ | 30,28 | E.  |                        | 59 |
|      | 8 $\frac{1}{2}$  | 30,28 | N.  |                        | 57 |
| 27   | Noon             |       |     | Fair all day           |    |
|      | 10 $\frac{1}{2}$ | 30,24 | W.  |                        | 60 |
|      | 8 $\frac{1}{2}$  | 30,18 | N.  |                        | 55 |
| 28   | Noon             |       |     | Fair with clouds       |    |
|      | 10 $\frac{1}{2}$ | 30,18 | N.  |                        | 60 |
|      | 8 $\frac{1}{2}$  | 30,08 | N.  |                        | 53 |
| 29   | Noon             |       |     | Fair with clouds       |    |
|      | 10 $\frac{1}{2}$ | 30,11 | N.  |                        | 56 |
|      | 8 $\frac{1}{2}$  |       | NW. |                        |    |
| 30   | Noon             |       |     | Fair with clouds*      |    |
|      | 10 $\frac{1}{2}$ | 30,20 | W.  |                        | 55 |
|      | 8 $\frac{1}{2}$  | 30,27 | NW. |                        | 54 |
| 31   | Noon             |       |     | Cloudy most of the day |    |
|      | 10 $\frac{1}{2}$ | 30,20 | W.  |                        | 56 |

To Dr. BATTY.

SIR,

**M**Y practice in the obstetric art being deduced from the principles inculcated in your lectures on that science, I conceive it incumbent on me to transmit you the enclosed observations on a disease intimately connected with it, and in which medical practitioners in general are concerned. If the subject is favoured with insertion in your valuable Journal, from its extensive circulation I am induced to think it will afford some gratification to a class of society whose exertions are influenced equally by the dictates of humanity as by pecuniary remuneration.

The almost invariable fatality of that alarming disease Hydrocephalus Internus, has so impressed the public mind with its attendant danger, that to determine the existence of the disease, is, in a word, to presage a short career to its possessor. Indeed, I am fearful there are some practitioners so firmly persuaded of the inefficacy of their exertions, that they resign calmly the case to Nature, who, though

though in some cases capable of correcting slight morbid actions, cannot be expected to correct so great a deviation from her natural course, and more particularly as this deviation is dependent on two such important causes, increased arterial excitement, or deficient action of the absorbents. Ideas thus prejudiced, the efficacy of our art thus infringed upon, our most elaborate consideration is demanded to disperse this unmerited disgrace.

That we possess the means wherewith to accomplish this grand object will be substantiated by the case in consideration; and it is communicated with the grateful satisfaction of having restored to health, one who would otherwise have fallen a victim to this disease.

That there is a *period*, however, when these means may be had recourse to, and although vigorously pursued, yet not the desired success attend it, I think is very obvious, and the grounds of our failure may with propriety be rested on this cause. If the fluid secreted, is in that quantity which shall render an extensive introduction of mercury into the system necessary, the powers of animal life being greatly impaired, the introduction of so powerful an antidote cannot but tend to increase that debility, and in so great a degree as to hasten the termination of life before the absorption of the fluid has been affected: it is therefore highly necessary to arrest this disease in its early stage, the advantages of which are so very obvious. It would be fortunate if the exciting cause of every disease was as clearly established, the knowledge of its cause regulating our exhibition of medicines; but, if we are so determined on the nature of the disease; if the same remedies applied in two cases, equally decisive, are not attended with similar effects, to what are we to attribute this failure? Why does not the result prove equally favourable in every instance: The treatment is far from novel, it is admitted by all practitioners. These circumstances considered, this conclusion may, I think, be inferred: First, that it is a disease the *consequence* of increased arterial excitement or diminished absorption. Secondly, that our success or failure is certainly dependent on the means employed for that purpose, but particularly, on the *period* when those means are had recourse to. The first conclusion is substantiated, by the success of those means most powerfully diminishing the *volume* as well as the frequency of the blood's circulation, and those stimulants, exciting the absorption of the fluid detained by morbid action: the second, by the different

success attending the application of the same remedies in cases equally decided.

With respect to the remedies employed, they will be introduced in the relation of the case; they were those generally advised. But with regard to the *period when* they are applicable, as in cases of dangerous uterine hæmorrhages, we can fix no exact limitation; as the life or death of our patient is in our hands, we must act decidedly but cautiously.

If circumstances equally favourable appear, as in this instance, on the fourth day, sufficient remission of the symptoms will have ensued as to raise our expectations, and allow a remission of our applications: This relaxation favours the restitution of the natural healthy actions; and if nutriment of a light nature is exhibited in small quantities, will enable us to exhibit the stronger tonics, as bark and vol. alkali, with advantage.

CASE.—W. Coggan, No. 23, Chandler Street, Grosvenor Square, aged 19 months, having become very emaciated, and otherwise unwell, I was requested to see him. The account I received was as follows: This child, about two months previous, had recovered from an illness which lasted seven weeks, during which time the second molaris of each side of the under jaw had protruded: No alarming symptoms appeared any farther than general emaciation: His spirits and sensibility were unimpaired. On the 4th of June, the mother informed me some *different symptoms*, from what she had before observed appeared; and in the evening a violent convulsive fit occupied him for a quarter of an hour; the child became after this gradually worse, emaciated in a great degree, and his appetite totally forsook him. It was more, however, in consequence of the *different appearances* and *deadly look* of the child, than from its sufferings, that she now applied for assistance. On the 16th of June, I found him with a quick febrile pulse, inattentive to any object approaching him, but apparently at ease when allowed to remain undisturbed: His bowels being constipated, I directed calomel gr. iij. statim exhibend. On the 18th, I found the purge had operated briskly. The sensibility however was by no means relieved; on the contrary, had in a great degree increased, being now insensible even to the most luminous object; violent screams being uttered every now and then, and even strabismus was sensible to the bye-standers, the pupil having lost all excitability to contraction.



traction. On examining the mouth, I could perceive no mark or appearance of teeth protruding through, and the circumstance of having so lately cut two of the molares, induced me to think I could afford no relief mechanically. That some mischief was arising in the brain, these symptoms sufficiently indicated; I therefore was determined to lose no time; at four P. M. I applied hirudines *vj. temporibus; empl. cantharid. capiti denudato, tinct. digit. et scilla, partes æqualis, gt. *vj.* om. 4to. hora in quovis vehiculo, and directed unq. hyd. c. camphor. 3j nocte utend.* These were repeated the ensuing day; the irritation of the head kept up by the ung. sabinæ. On the eve of the fourth day, the effects of the hyd. were evident in the system, and the symptoms were materially alleviated: he became very restless and uneasy in any position, appeared to be under much pain with the irritation which the mercurial friction produced: the degree of insensibility almost totally disappeared, and he became irritated on the approach of any of his former playmates, even as they entered the room. The iris, though not so dilated, was not endued with much power of contraction. These favourable appearances induced me to refrain from the farther exhibition of hydrag. the leeches however were employed twice more, when the ung. sabinæ alone was continued.

On the third day of our cessation of medicine, the stomach began to resume its accustomed functions (which the introduction of mercury, by friction, admitted to be regained with greater freedom), and he became weary of bed. Tonics combined with small doses of vol. alkali, were now exhibited with daily good effects. The child has now recovered its perfect health, and within these three days cut two cuspidati of the under jaw.

In the last number of your publication, Mr. Ricards relates some appearances which took place during the convalescent state of two patients who had laboured under this disease. In the present case, as the stomach began to resume its functions, a contraction of the upper and lower extremities took place, which increased to a great degree, and induced more distress than the child had suffered during the whole disease, being solicitous for food but not capable of assisting itself. As the general health however became established, this appearance gradually disappeared. The natural disposition which all muscular fibres possess, is their tone. The flexors from their insertion, may in this instance have overcome the tone of the exteriors, and in  
their

their action kept the extremities in a contracted state. As the excitability of the muscular fibres became more universally increased, the two sets of muscles had their actions performed with their accustomed unison.

I am, &c.

July 13, 1803.

JOHN JULLION.

CANDID REMARKS ON MR. JOHN BELL'S PRINCIPLES OF SURGERY: BY AN OLD MEMBER OF THE LONDON COLLEGE OF SURGEONS.

1. *On the compression of large blood vessels in surgical operations.*

AN opportunity has recently occurred to me of perusing several pages of a splendid and expensive work,\* entitled, "PRINCIPLES OF SURGERY," the first volume of which is "PRESENTED BY THE AUTHOR TO THE SURGEONS OF LONDON." So magnificent and valuable a present must be received by them as an indubitable proof of the author's discernment and esteem; it will not only be considered as a fresh mark of his anxiety for the public welfare, but as an evidence of his affectionate concern for the reputation and professional skill of the LONDON SURGEONS. This being the *third systematic work*† of the kind, which has lately arrived from the metropolis of North Britain, practitioners in London will, doubtless, be ever ready to acknowledge their obligations to the surgeons of Edinburgh, for thus zealously stepping forward in aid of their improvement.

I am myself a genuine disciple of the London school; and indeed, it has never been my good fortune to visit the famous universities of Scotland, although if I were to judge by their voluminous productions, the northern surgeons have a much greater facility of teaching and writing than my tutors in the south. Some of the lessons which I have learnt from the HUNTERS, the BROMFIELDS, the POTTS, the CLINES, and the BLIZARDS of London, are so entirely different from

\* The first volume, *i. e.* all that has yet been published, is sold for no more than FOUR GUINEAS, in boards!

† The two former Systems of Surgery were by Mr. BENJAMIN BELL, and Mr. LATTI, of EDINBURGH.

from those of our Scottish masters, that I feel it a difficult task to decide who is in the right; but, being a little prejudiced in favour of my own school, I almost am jealous lest any of the London students should be misled by the high authority of the BELLS.

The prejudice in favour of my old tutors has not so far prevailed, as to close my eyes against improvements arising from any other quarter; it does, however, so far predominate, that I cannot patiently bear to see respectable surgeons of London treated as men without common sense, or chirurgical knowledge! This abusive and acrimonious spirit is much more conspicuous in the writings of Mr. JOHN BELL, than in those of his temperate namesakes, whom he therefore stigmatises as dull "phlegmatic" beings.\* But it forms no part of my present plan to notice the illiberal reflections and personalities of Mr. JOHN BELL, nor to point out *the minor inaccuracies* which appear in his writings; "SUCH ERRORS, HOWEVER DANGEROUS TO THE AUTHOR'S REPUTATION, WILL NOT MISLEAD THE YOUNG SURGEON, FOR WHOSE USE THIS SYSTEM IS DESIGNED."†

A few weeks ago, on observing a quotation in the Medical and Physical Journal, for June 1803, p. 501, I was directed to that part of Mr. BELL's volume which describes one of the modes of restraining hæmorrhages; Mr. BORRETT has therein cited the opinion of Mr. Bell, with all that deference which is due to his celebrated name, and seems modestly afraid lest the successful event of his own practice should encourage other surgeons to follow his example in similar cases. Mr. Borrett, it appears, was educated in one of the London schools; he adopted the principles of Mr. CLINE and ASTLEY COOPER, which, in my humble opinion, under such circumstances, were highly commendable, and deserving of imitation. The case brought forward by this young surgeon is of the utmost importance and utility, as it tends to establish a practice which Mr. JOHN BELL has endeavoured to discourage. Mr. Borrett has "had the most satisfactory demonstration, that the artery (of the thigh) may be effectually compressed at the groin." Mr. CLINE, Mr. LUCAS, and Mr. COOPER, had also received satisfactory proofs of the same fact; all which proofs are detailed in the Medical

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\* Vide Dawplucker's Remarks on the first volume of Mr. Benjamin Bell's System of Surgery, p. 11, &c.

† See the author's Advertisement to Vol. I. of his Principles of Surgery.

dical and Physical Journal. Mr. Borrett, however, seems to have regarded this mode of restraining an hæmorrhage, in the lower extremity, as a *novel* experiment, which was first taught him in the year 1795, by Mr. A. COOPER; he was therefore very properly searching for further evidence in confirmation of that practice, not knowing that it is extremely common on the Continent, and has been often had recourse to in the London hospitals.

The opinion which Mr. BELL has advanced respecting the compression of the crural and brachial arteries at their origin, are likely to paralyse the efforts of young practitioners, at a moment when the greatest boldness and promptitude of action are required. This question, therefore, becomes a matter of general concern, and merits the fullest investigation. But, to prevent misconception and unfairness, it will first be proper to quote Mr. Bell's own words on this subject.

“ ON THE DIFFICULTY OF COMPRESSING THE GREAT ARTERIES AT THE AXILLA OR GROIN,” p. 414, &c.

“ In performing our operations on the great arteries of the arm pit or groin, we must trust nothing to assistants, nothing to compression of the artery; we must do our operation with peculiar boldness and skill, otherwise we shall hardly save our patient, for in a single moment he is either safe or dead.

“ Camper was the first who imagined that the axillary artery might be compressed above the place where the tourniquet can be applied; he demonstrated the fact; he put the pipe of a syringe into the right subclavian artery; he threw water along the arteries, and allowed it to flow out, by opening the left axillary artery; he then applied his thumb upon that artery, *below* the clavicle, and found, that by a moderate pressure he could resist the stroke of the syringe, and prevent the water ~~from~~ flowing out. Mr. Blizzard was the next who spoke of this observation, as of importance, especially to the military surgeon. Perhaps, there could not be a more patriotic and sensible thing, than to give a lesson on the application and use of the tourniquet to the cadets, of the artillery school; and in a discourse on this subject, we find Mr. Blizzard giving a slight sketch, by Cipriani, of the manner of applying the compress, and of fixing it by pressing with the thumb *above* the clavicle. The expectation excited by so natural a proposal, so well supported by anatomy and experiment, if not by experience, was very great. It was very natural to suppose



suppose that it must be equally easy to compress the femoral artery at the groin: at last it came to be universally believed, that the surgeon had no reason to be afraid; that if he failed to suppress any hæmorrhages, it must be for want of skill; that the fixing of the thumb over the clavicle, or groin, was as effectual as the application of the tourniquet itself. What good, or harm, may have been done by this invention it were presumption in me to say; but this much it is my duty to mention to you, that this method of compression is *insecure*; that it will be apt to fail you in your greatest need; that the living circulation, and the struggling of a man under the tortures of an operation, are very different from the experiment by Camper with an anatomical syringe on a dead body.

"I will also tell you what I have actually seen. In an aneurism of the axilla, the surgeon trusting to the compression which his assistant made above the clavicle, opened the tumor, was deluged with blood, and saved the patient only by striking a great needle under the artery! he saved his patient for the moment, but could not save his life; he died of hæmorrhagy in a few days.

"A friend of mine appointed myself and another surgeon to compress the artery of the groin, while he performed the operation for femoral aneurism. Our cushion was well made; our pressure upon the artery, in making the experiment before hand, stopped at once the pulse in the foot, and the throbbing of the aneurism; we pressed much more firmly during the operation; I fixed the compress with all my force; the other gentleman lay over me, and supported my thumbs with his. We had every reason to believe that we had a perfect command of the artery; yet at the very first stroke of the knife, the surgeon having cut into the aneurism, was covered with blood, and saved his patient with difficulty.

"Mr. Allanson was called to a man who had been blown out at the port-hole of a ship by his gun going off while he was ramming home the charge, and found the arm so shattered, that he was forced to amputate at the shoulder joint. In performing this operation he found that the compression of the subclavian artery, even in a man who was lying quite stupid from the violence of the explosion, had not the slightest effect upon the artery; for having begun his incision on the part the most distant from the axilla, on the outside of the arm, he found the smallest branches bleeding profusely, and his expression is remarkable:—  
*'after which an arterial branch discharged so freely that*

*we*

*we were convinced the pressure on the subclavian artery was not effectually though judiciously made.* (Allanson, p. 185.)

"Conclusion.—I will repeat with confidence what I have formerly affirmed, *that it is one thing to suppress the pulse in the lower part of the limb, and another thing to stop the pulse in the great artery.*—I have tried in great operations, near the trunk of the body, to stop the blood by pressure; but though I could suppress the pulse of the femoral artery with my fore finger, I could not command its blood with the whole strength of my body.\*

"I beseech you then, do not deceive yourselves with any such expectation; do not believe that the effect of this pressure is such as to allow you to perform a quiet, deliberate operation; look upon this operation as one where you have to deal with an open artery, and lay your account with being covered with blood the moment you open the sac. Nor must you ever expect to clear the great cavity of blood, so as to enable you to see the bleeding artery; it will, on the contrary,

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\* "The fact which I have here affirmed, is of too much importance for me not to maintain it with more than common earnestness. I affirm then, that—though the throbbing of an aneurism, or the pulse in the lower part of a limb be quite suppressed, yet the circulation is not stopped, and I entreat the young surgeon never to trust to any such mark of the compression being effectual. This I have formerly affirmed in my *Anatomy of the Arteries*, and will continue to affirm (as Luther said) though as many devils as there are tiles in Bath were combined against me. It is because I have affirmed this, and because I have ventured to doubt, that compressing the carotid Arteries will cause sleep, cure convulsions, and restore maniacs! that Dr. Parry, of Bath, has run out upon me the whole length of his chain; he has abused me in a magazine, and, if I am rightly informed, has written lately a book on Angina Pectoris, where I am not spared: I have had retention enough not to answer Dr. Parry in his magazine; yet he is not to suppose that I will let myself be worried peaceably.

"Dr. Parry asks, Whether the ceasing of the pulse in the lower part of the limb be not a certain mark of the circulation being suppressed? And, whether there be any other mark by which the Surgeon can know when his tourniquet is effectually applied? I am confounded at such questions coming from a gentleman of Dr. Parry's rank in his profession. The surgeon always screws the tourniquet till he suppresses the pulse in the lower part of the limb; but he never knows whether he has suppressed the circulation, whether the artery be effectually compressed till he has begun his operation, and then if the arteries of the limb bleed, he screws this tourniquet a little firmer. Once, while I was performing the operation for aneurism in the arm, although the tourniquet was so applied as to suppress both the pulse of the wrist and that of the aneurism, the instant the incision was made the blood flowed in full stream. My assistant screwed, and screwed again; he actually undid the tourniquet in the middle of my operation; took it away, and applied another, and then I finished my operation. This happened in a public hospital.

"AM I A DOG THAT YOU ARE COME OUT AGAINST ME TO BEAT ME WITH STAVES." *Bell's Principles*, p. 416.

trary, fill the cavity with blood faster than you can bale it out, till the patient breathes his last. Operate in such cases with that rapidity and decision which can alone ensure your patient's safety: there are occasions, in which the old seducing word *Caution* is full of danger."

At page 426, Mr. Bell, among his *RULES OF PRACTICE*, says, "When the tourniquet cannot be applied, trust nothing to the compression at the axilla, or groin; for though it is sometimes effectual, it often fails, and lives have been endangered by a surgeon's entering on such operations without being prepared for the worst. You find by making the experiment on your own arm, that you can stop the pulse; you think yourself able to secure the patient; but it is, I protest, a mere deception, for the circulation is not suppressed when the pulse ceases, or the pulsation of the tumor prevented."

In the 2d. volume of his *Anatomy*, 8vo. Edinburgh, 1797, p. 359, are these words, "The old story of compressing the axillary artery above the clavicle, is now of no credit with any surgeon of knowledge and good sense;" and at p. 257, Mr. Bell tells us, "After having employed all his strength in attempting to restrain the bleeding of the femoral artery, he has seen it, with horror, rush as freely as if he had not been there."

These then, are Mr. Bell's opinions, and facts. I shall now subjoin some observations and evidence, which induce me to believe there are men "*of knowledge and good sense*," on the other side, whose sentiments deserve attention.

London, July 20, 1803.

[ To be continued. ]

To CHRISTOPHER DENNETT, Esq.

SIR,

I TRUST you will excuse my not answering your letter in this Journal for April, till I had time to pay that attention to it, which the importance of the subject demands. Accept my thanks for the flattering terms in which you speak of my endeavours to promote vaccination. It gives me sincere pleasure to find, that you, who have so often seen the inoculated Small-pox in its most favourable form, are become a strenuous advocate for the inoculation of the Cow-pock. No stronger argument of its decided superiority can be adduced.

I had

I had seen your letter in the *Journal* for September 1801; and have made some observations on it, which will appear in the second part of my treatise. The mode in which you preserve vaccine matter, is the same in which that was preserved, which was given to Mr. Cline by Dr. Jenner, in the year 1788; and which produced the first instance of vaccination in this metropolis. It is a mode, in which variolous matter had been preserved by Dr. Jenner, and other medical men.

Quills and ivory have been recommended, and employed, by different practitioners, in different forms. One gentleman, who has distinguished himself by his exertions in vaccination, uses the quill whole; and after charging the end of it well, inserts it into another; in the same manner as you direct. He also rubs it on the incision till the matter is dissolved.

Having been assured by Dr. De Carro, that his ivory lancets had proved very instrumental in propagating the practice, I endeavoured to get some made after the same pattern as one which he sent me. Being disappointed by the person to whom I applied, I had recourse to a quill, as one of the best substitutes; knowing that it had often been used for the purpose of preserving matter, but not recollecting that it had been mentioned by you.

In one circumstance, however, and that, in my opinion, not a trifling one, the quill sharpened like a toothpick differs from that recommended by you; which is, that it admits of our performing the operation by a mere puncture. When performed by an incision, or as you recommend, by three or four incisions, it must be allowed, the chance of exciting the disease is still greater; but it is so much more violent, when excited, that I prefer the method of inoculating by puncture.

The probability of success, from using the matter on a toothpick, is great; and by its being divided into so many parts, the chance is multiplied. Dr. Waterhouse successfully inoculated six persons with two toothpicks, when the matter was two months old. He did not entertain any apprehension of danger to the patient, or offence to the parent, from vaccinating one person after another with the same instrument; such as Mr. Galliard alludes to in the last number. If there be any parents who harbour that foolish prejudice, it is the duty of medical men rather to remove it, than to root it in their minds.

It is well known, that the blood is not infectious. Were it otherwise, there would be danger of communicating all  
the



the diseases of the person inoculated, to the person from whom matter is taken; when it is taken a second time, either with the intention of saturating the first puncture, or inoculating in the other arm, without washing the lancet every time. It is well known, that scarcely any inoculator is very scrupulous in this respect; but the oftener the lancet is washed the better, on another account; which is, that when it is less clogged with matter, it is less likely to produce a spurious pustule.

In a considerable number of instances, two or three persons have been inoculated with one lancet of dry matter, which I had sent to medical gentlemen, and others, in various parts of the kingdom; and surely this was not only excuseable, but commendable; since, in a great proportion of those cases, the small-pox was either in the same place, or in the neighbourhood.

It is in consequence of this necessity of exciting the guardian disease with all possible expedition; a necessity, alas! which too frequently occurs, and too frequently will occur, till medical practitioners are more provident, and more careful, either to maintain a succession of cow-pock patients, or to preserve a stock of vaccine matter, that I thought it necessary to mention, that more than one patient might be inoculated with one vaccinator.

At present, when the practice of vaccination prevails in almost every town, those who want cow-pock matter may, perhaps, be accommodated as they wish. It was far otherwise when there were few sources of supply; and still fewer in which the public could place much confidence.

In a former number of this Journal, an apprehension was expressed by Dr. Marcet, that the influence of some persons might occasion a discontinuance of the use of glass, as a preserver of vaccine virus. If his partiality in favour of that method were well founded, it would not readily be laid aside; but it is found so frequently to fail, that those gentlemen by whose influence it was established, now candidly confess, it has not answered their expectations.

This agrees with the general testimony of the most distinguished inoculators in other parts of the world; particularly, Dr. Waterhouse and Dr. De Carro. It is therefore, of some importance that it should be known; on account of the difficulty of collecting such quantities of matter, the injury done to the arms of those under vaccination by collecting it, and the disappointment which attends the want of success.

Your case of cow-pock, in a subject who appeared totally unsusceptible of the small-pox, is extremely interesting. Nevertheless it is not impossible, that at some future period a change in the constitution might have taken place. A parallel instance of this sort I have recorded: it was communicated to me by Dr. Bancroft, jun. His brother was inoculated for the small-pox eleven times; the last time by Dr. James Sims, in the Small-pox Hospital, in both arms, with recent variolous matter; but in vain. He afterwards caught the disease in the natural way, and had it severely.

A child of Mrs. Strachan, at No 48, Carnaby Street, died of the small-pox. Another child, who lay in the same bed, resisted infection. Since that time, I inoculated it with vaccine matter, which readily succeeded. These cases may have some effect in guarding medical practitioners against a hasty conclusion, that any one is insusceptible of variolous or vaccine infection.

New Street, Hanover Square,  
July 18, 1803.

I am, &c.

JOHN RING.

*To the Editors of the Medical and Physical Journal.*

GENTLEMEN,

I Have enclosed the description of a Case, which, although it may suggest no improvement in practice, may, from its curiosity, merit a place in your useful publication.

Francis Otter, by a fall in 1796, bruised his side, and was supposed to break one or more of his ribs; but no particular inquiry was then made as to the nature of the accident, nor any medical assistance required. From this time he perceived a small tumour in the centre of the first false rib, which continued gradually to increase, without occasioning any extraordinary pain or inconvenience, until it attained the very uncommon dimensions described in the annexed drawing; by which it is seen to occupy the whole of the right hypochondric, right iliac, and epigastric regions; to extend upwards beneath the sternum, and downwards near to the umbilicus: the circumference at the base being two feet ten inches and a half; the broadest diameter, as shewn by the line A. B. one foot and one quarter of an inch; the narrowest diameter, according to the line C.

D. eight

D. eight inches and three-quarters. The line E. is intended to mark the height of the tumour, above the parietes of the abdomen, from which it was gradually elevated to the extremity of that line. The external surface exhibited no remarkable appearance, being covered with enlarged veins, until a few days previous to the breaking of the tumour, when the more elevated portion became of a livid hue, and the part F. put on the appearance of incipient gangrene. On examination, it was very evident that the marginal parts of this tumour were formed of bone, and the centre likewise gave a sensation of resistance greater than cartilage, but less than bone. On the upper part it was easy to remark, the sternum forming that boundary of the tumour thrown upwards from its situation. I first saw this case in 1798, and from that time had marked its progress with considerable attention, being by no means satisfied with the opinion I had formed concerning it. I had never failed to advise the man to use no other means than such as were necessary to guard the surface from friction, and by no means to suffer the part to be opened either by the knife or by caustic, a plan which had been proposed by some empiric. The patient was the more inclined to attend to this instruction, as he suffered no other inconvenience, than such as arose from the size of the tumour; being able to pursue his daily labour, which was that of a labourer on the road, until about three months ago; to lie down in bed and sleep undisturbed; to eat heartily, and with appetite. Latterly, the size of the tumour has rendered him very unweildy, and this, together with his age, which is now 80, has prevented him continuing his occupation. I supposed the tumour to arise from aneurism of one of the intercostal arteries; and having explained the nature and danger of the disease, had charged the patient to inform me immediately on the rupture of it.

On the 5th of June, 1803, I was informed this event had taken place; and on visiting the patient, I found a small opening, nearly in the centre, marked by the letter F, from which a large quantity of a fluid, resembling pus, tinged with blood, was poured out; it was glairy, and perfectly inodorous; the quantity discharged could not be less than a gallon in the twenty-four hours, that which was preserved filling two large sized chamber pots.

On the 6th, the discharge continued, pulse intermitting, extremities cold, complaining of a little pain on pressing the lower part of the abdomen.

7th, The discharge much abated; pulse firm and regular; has eaten with appetite.

8th, The discharge has ceased, leaving the tumour flaccid, with a gangrenous slough about to separate around the orifice; pulse firm and good.

9th, The discharge has recommenced; the pulse good, but pain in the lower part of the tumour very great; tongue dry.

10th, Has passed a quiet night, but is this morning very restless; pulse intermits every fourth pulsation; the tongue moist; the gangrenous disposition of the skin more extended; the discharge very profuse, and most uncommonly offensive.

11th, From the state of the patient yesterday, I concluded he could not long continue; and was much surprised to find this morning, that the discharge was much abated in quantity, and much less offensive; the pulse was good and regular, and nourishment had been taken in abundance, with appetite; the tumour was much contracted.

13th. The tumour continues to discharge, and to settle; pulse is firm and regular; the entrance of the abscess presents a projecting substance, which when drawn out proves to be a portion of the rib in a state between bone and cartilage; much more of the same substance was also removed, and a considerable quantity of offensive matter pressed out.

14th, The pulse was very regular and firm, the tongue moist, the tumour much diminished but bulging very considerably at the lower part. In order to evacuate the matter more readily, I made an opening at the lower part, marked G; some florid blood flowed out, but the wound was soon plugged up by the semi-osseous substance contained in the tumour. At first the patient complained of violent pain; the pulse was interrupted, and the whole frame appeared to suffer a considerable shock. In the evening, the lower orifice had discharged the same fetid matter mixed with semi-osseous substance, which had protruded from the upper orifice; pulse regular, appetite good. From this time to the present day, the patient has continued daily to amend; for some time, cartilaginous substance was discharged with very offensive matter; this has gradually diminished; and now the discharge is a laudable and good pus in moderate quantity; some exfoliations have already taken place, and more may be expected; the tumour is so much contracted, that there is not more space than two inches between the superior and inferior orifice. The internal



ternal surface of the abscess exhibits healthy granulations; every present appearance makes the recovery of the patient undoubted.

I cannot omit this opportunity of returning my public thanks to Mr. Hartley, to whom I am obliged for the very accurate sketch which accompanies this description, by which the situation and extent of this extraordinary disease is rendered much more evident than words alone could make them.

Having given as accurate an history of the progress of this disease, as my opportunity of acquiring information would admit, I shall defer to a future number, some observations on the nature of the disease; and its application to illustrate some of the laws of the animal œconomy.

Grantham,  
July 3, 1803,

I am, &c.

BEAUMONT LEESON, jun.

#### DESCRIPTION OF THE PLATE.

A. B. The longest diameter of the tumour.

C. D. The shortest diameter.

E. A line intended to mark the elevation of the tumour above the abdomen.

F. The opening formed by mortification.

G. The artificial opening made by incision.

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#### MR. CHAMBERLAINE, on the AMENDMENTS of the MEDICINE ACT.

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“Non sunt autem peiores laquei, quam laquei legum.” BACON. RESUSC.

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TO DR. BRADLEY.

SIR,

IT is now exactly a twelvemonth ago, since I took the liberty of trespassing on the patience of the Readers of the Medical and Physical Journal, by troubling you with some Observations on the substance and tendency of a new act of parliament, known by the name of the MEDICINE ACT, which, as it then stood, tended greatly to embarrass those gentlemen of the Medical profession who are practitioners in Pharmacy, and more particularly those who from their situation and circumstances, find their account in keeping shops for selling medicines *by retail*.

Very soon after the publication of my letter to you, in

No. 42, of the Medical and Physical Journal, I had the satisfaction to find, that the observations and cautions contained therein, not only answered the purpose of putting my brethren of the pharmaceutical profession on their guard against the swarms of informers, who if no notice had been taken of the probable consequences of the act in its then state, would have dealt destruction very extensively around, but have also had their share in being the means of bringing about a very important and salutary reformation of the act itself.

Not many days after that letter had made its appearance in public, I was waited on by a gentleman from the Stamp Office, who informed me that I had it in my power to render an essential service to those who were about to be employed in a revisal of the schedule of the Medicine Act, by giving my assistance in pointing out such articles as had been improperly introduced into it.

I attended this gentleman at his chambers in the Temple, at an appointed hour; and we had a long conversation on such clauses of the act as bore most heavily on the medical practitioner; at the conclusion of our conference, he put a schedule into my hands, requesting me to take it home, and strike my pen through the names of those articles which I was of opinion ought not to have been inserted.

In complying with this request, I did not content myself with merely striking my pen through the names of the exceptionable articles, but subjoined my reason to each, why I thought it ought not to stand; confining myself, (with the exception of two or three things) to the articles of the Pharmacopœia, and not meddling with many others which appertained to the province of the perfumer and confectioner.

The alarm excited by the provisions of the act, and the insertion in the Schedule of such names as *Spanish juice*, *refined liquorice*, *arrow root*, *Turkey rhubarb*, and many other things equally undeserving a place therein, soon arrested the attention of the druggists of London; meetings were held, committees were formed, and, as the first step, a Memorial to the Lords of the Treasury was drawn up, praying a suspension of such prosecutions as might be brought under this new act, for the dispensing of medicines not properly coming within the meaning of the act, but which were included in the schedule.

Various communications were in the mean time received by the Committee from different parts of the kingdom, on the uncertain state into which the dealers in medicine were thrown by the operation of the Medicine Act; and the

the London Committee were looked up to by the associations formed in different parts of the kingdom, as the medium through which an amelioration of the act, and of their situation in consequence of the act, was to be hoped for.

The Memorial was laid before Mr. Vansittart, who most readily and obligingly appointed a day at the Treasury for an interview; and at the appointed time, a deputation of four members of the Committee waited on him, and had a conference with him of above two hours, during which time various points in dispute were fully entered into.

The hardships to which all who dealt in any of the articles set forth in the schedule, were exposed to from the inroads and perjuries of common informers were particularly dwelt on. Feeling the force of this observation, Mr. V. replied, that it should be proposed to Parliament that in future all informations under the Medicine Act should be prosecuted by the Commissioners of the Stamp Office, who would not encourage any vexatious suit, or endeavour to strain the act beyond its just or fair limits.

We represented to him the great disproportion of the penalty to the offence, and instanced the possibility of a shopkeeper being prosecuted to conviction in the sum of **ONE HUNDRED POUNDS**, *besides costs of suit*, for the unintentional fraud against the revenue of *one shilling*,\* and at the same time adverted to those articles in the schedule which could not by any means be construed into nostrums, or any way proper to be included in the schedule.

It was also urged, that the allowing six months to the informer to bring his action, was giving him too great a latitude for committing his depredations; as total ruin might ensue to a person who might unintentionally and unknowingly continue the sale of a stampable article, contrary to the statute, in all that time; and that we conceived, if the law should enact that the prosecution should be brought within *one month*, the ends of justice would be fully answered. To these, and other propositions, Mr. Vansittart attended with much attention and patience, but gave no specific answer; only took notes of them; and promised that a bill for amending the act should be brought

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\* Common Spanish juice, as may be remembered, was among the articles of the late schedule. A retail apothecary, or grocer, selling eight separate pennyworths of Spanish juice therefore, without affixing a three-half-penny stamp on each, was liable to a penalty of *ten pounds* for each parcel; and if unlicensed, *twenty pounds more*, the penalty for selling without a Medicine LICENCE!

brought into the House of Commons with a new schedule, free of the objectionable articles, which should be printed, and sent to the Committee; and time allowed for consideration.

It certainly was never the intention of the Legislature to harass or throw any difficulties in the way of the regular medical practitioner; and this both Mr. Vansittart, and the Commissioners of Stamps assured us; and it now appears evident, that such a schedule would never have passed the house, but in the "*mob\* of bills that pressed on the consideration of the last parliament, and when it was in its last agonies.*" The Commissioners indeed, did every thing that men could do; and issued instructions to those who are employed by the Stamp Office to enforce the observation of the laws, not to lay informations or prosecute on account of any articles in the schedule, which were now found to be improperly placed therein.

Pending these transactions, I had enough to do to read all the letters I received from every quarter, some much to the purpose, and others very silly, particularly three or four anonymous ones, which I believe came from some of that description whose harvest was spoiled by the timely developement of impending mischief; and I am the more inclined to be of this opinion, from the publication, just about the time, of a most insidious advertisement, which appeared in all the newspapers, stating that, "Regular apothecaries, chemists and druggists had nothing to dread, the legislature having paid particular attention to their situation, and made a clear distinction between them and the dealers in quack medicines."

To this curious assertion was subjoined the fourth and fifth sections of the act; and by this advertisement, which many looked on as genuine authority from the Stamp Office, numbers of people were lulled into a security, and sold without scruple, stampable articles without stamps or licence. The fallacy of this publication I took on me to expose, at a general meeting of the Chemists, &c. &c. held at the Crown and Anchor, October 12, shewing that it had neither head nor tail; the advertisement was not dated from the Stamp Office, nor authenticated by the signature of Mr. Beresford, Secretary to the Commissioners, as it would have been, if genuine.

But, an event soon happened, which shewed, that the fears I had expressed, and the cautions I had given, were  
not

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\* Sir William Scott's Speech, April 6, 1803.



not in vain; and that the anonymous authors of private letters and of public advertisements, tending to mislead, were equally mistaken.

Although the Commissioners of Stamps, much to their honour, did their best to prevent the prosecution of individuals for the sale of what I term *innocent* articles, this did not prevent OPPOSITION COACHES from being started; and those informers, not connected with the Stamp Office, saw no reason why they might not run their machines, for a short time at least.

On a certain day, notice was given to some of the members of the Committee, that several informations under the New Medicine Act were to be tried before the Lord Mayor (Sir John Eamer), and that it was reported, in case of convictions upon these informations, the penalties would not amount to less than from four to five hundred pounds.

None of these were laid by any of the people connected with the Stamp Office; this was a "separate concern."

Some four or five members of the Committee made it their business to attend at the appointed time. The period being arrived, in waddled a fat, chubby figure, the informer's witness, bending under a huge wallet as large as the bag of a Jew old cloaths man, stuffed with various articles purchased from unwary dealers, each article carefully marked and labelled with the name of the offender, date, place, and every other circumstance; and from the bulk of the wallet, we were inclined to think, report for once might speak truth to the number of informations to be laid.

The first article produced was one ounce of refined liquorice, wrapped in brown paper, sold by a grocer in Houndsditch.

The majority of those who were summoned to appear, were grocers and confectioners, there were also one or two WIDOWS of apothecaries, who, to preserve life and soul, struggled to keep together the business of their deceased husbands until a purchaser could be found. There were no apothecaries nor druggists summoned; for informers always attack the most vulnerable, that is, those who are most likely to be ignorant of the law, and least likely to contend with them.

Where so productive a harvest was expected, in case of conviction on such a multitudinous budget of *qui tam* informations, the informer could easily afford the expence of employing counsel. An eminent barrister urged the suit, on behalf of the plaintiff. On the part of the defendant, Mr. Estcourt, the Solicitor of the Stamp Office, attended. We now saw, for the first time, an officer of the crown in  
a new

a new and perhaps unprecedented situation; not standing by to see that the law was enforced upon the offenders against a revenue act, but as the advocate for those who had infringed it. His pleadings however were not directed to overturn the arguments of the learned counsel; these were unanswerable; but rather, to act as a mediator, and take off the blame from the defendant, whom he represented as having acted under the sanction of the Commissioners of the Stamps, who had informed a person deputed by the confectioners, that no prosecutions would be brought against persons selling such and such articles, not being medicines, although specified in the schedule. The learned counsel contended, and justly, that it was no matter to him in respect of his client, whether the law was a good one, or founded in error, it was sufficient such a law existed, and no legal power, not even the Lords of the Treasury themselves, could set aside an act of parliament.

I cannot see on what ground the Lord Mayor could possibly have avoided convicting the defendant, but for an accidental circumstance. One of the informations lay on the table, which Mr. Complin of Bishopsgate Street, who sat next to me, was reading, while I looked over his shoulder; I observed, that in one part of it, certain very material words, essential to constitute the validity of the information, had been omitted.

Whatever certainty is required in an indictment, the same is necessary in a *qui tam* information;\* and consequently, as all the material parts of the crime must be precisely found in one, so must they precisely be *alleged* in the other. The information only stated that A. B. had sold one ounce of refined liquorice, contrary to the act; but, the material allegation, or averment, namely, its "*being a medicine used for the prevention, cure, or relief of a certain disease, ailment, complaint, &c. &c. incidental to the human body,*" was totally omitted. I communicated this discovery to Mr. Newman,† who agreed with me that it was fatal; and immediately shewed the Lord Mayor that the business was at an end; the information was of course quashed; and as all these summonses and informations were alike deficient in not having those material words of the act, every one of the other informations fell to the ground.

[ To be continued. ]

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\* Burn.

† Clerk to the Lord Mayor.

*To the Editors of the Medical and Physical Journal.*

GENTLEMEN,

**I**N your 52d Number for January 1803, Mr. Low has stated a method by which metallic casts may be obtained from the osseous cavities of the human ear. The same process has been described in the Lectures on the Art of making Anatomical Preparations, as delivered by Dr. Baillie and the late Mr. Cruikshank, full ten years since, and that process was regularly mentioned for at least five successive years, to the writer's knowledge, as well as the person's name who contrived it. Other casts, of a similar kind, had been occasionally made, but the certainty of success was fixed by the method of coating the temporal bone, and heating it so as to expel the contained air. The compound fusible metal is liable to oxydation at the red heat which is necessary to be given to the bone, so that grain tin is found to make a more beautiful cast. A tube must also be fixed into the meatus externus, in order that a greater pressure of the melted metal should urge its flow into the small cavities. A coating of pipe clay is better than one of Paris plaster; but if the latter be used, it should be altogether included in a crucible, to prevent cracks and flaws, which will often drain out the metal before it sets, and spoil the cast.

Preparations of this kind have been long used at the lectures in Windmill-street, and those were presented to the teacher by Mr. Carlisle, who contrived the method of making them.

I am, yours, &amp;c.

REMEMBRANCER.

*To the Editors of the Medical and Physical Journal.*

GENTLEMEN,

**T**HE following singular case of Monstrosity has lately come under my observation; and although the particulars of it, so far as regard the child, may not afford any practical inference, yet as it may be interesting to practitioners of midwifery, if you think it worth a place in your very useful work, it is at your service.

Faversham,  
Nov. 8, 1802,

I am, yours, &amp;c.

J. T. GIRAUD.

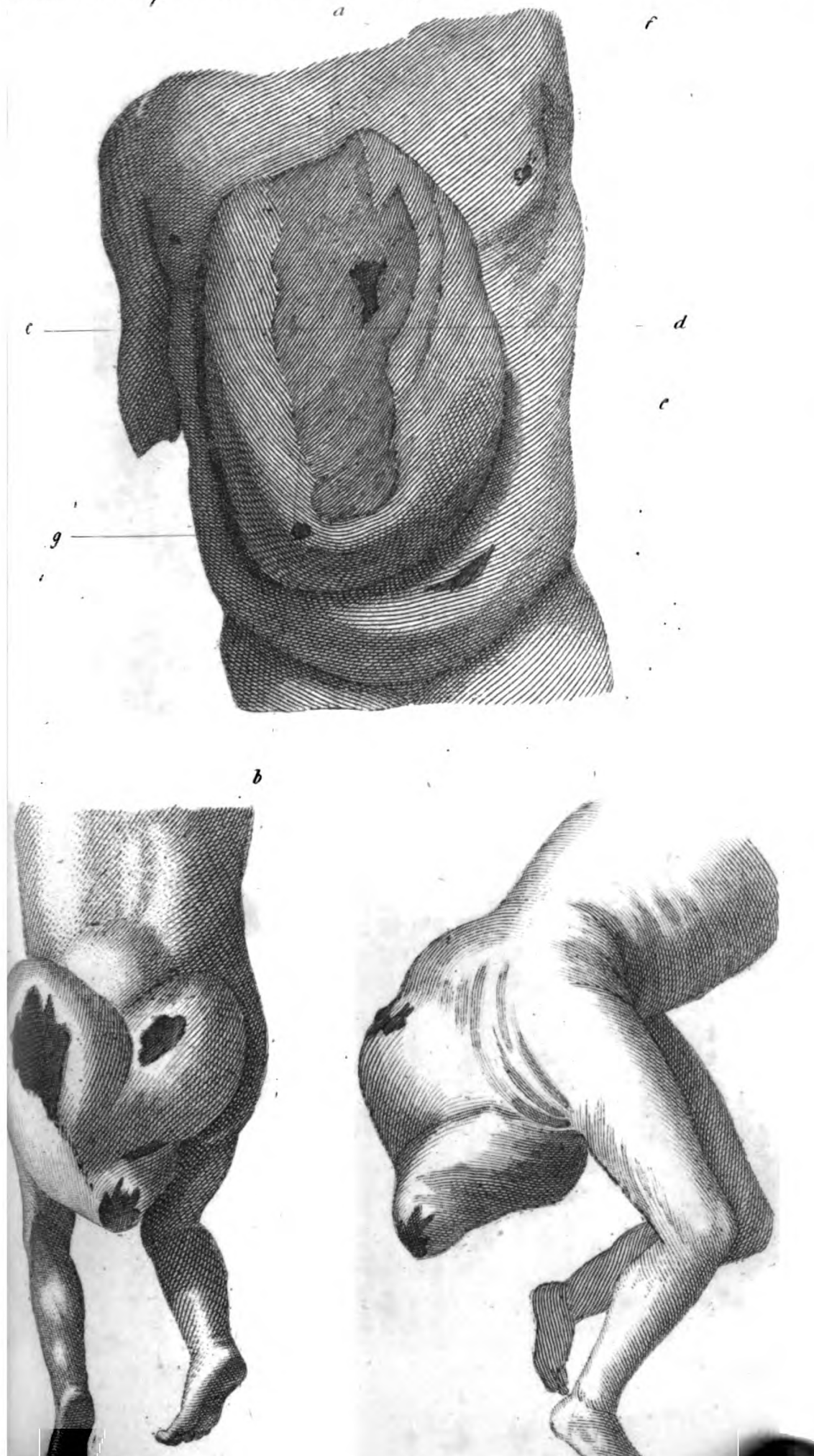
Mrs.

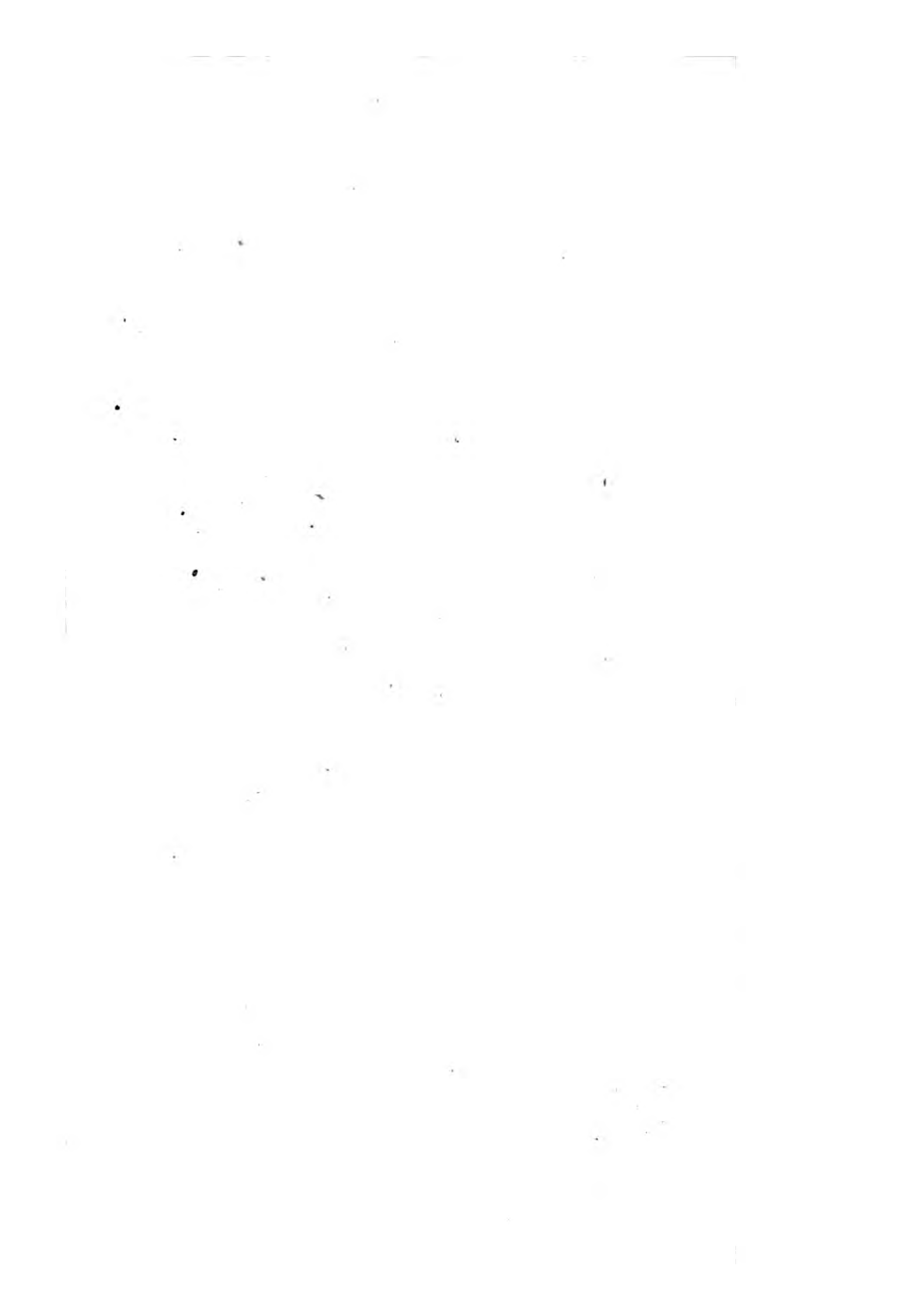
Mrs. B. aged 33 years, having borne five healthy children, was taken in labour the beginning of June last, the sixth time. The presentation was natural, and the birth of the child easy, till it arrived at the hips, when, in addition to the natural pains, a very considerable force was found necessary to complete the delivery. It proved that this extraordinary difficulty was occasioned by a preternatural tumour, in bulk, at least, equal to the child's head, somewhat of a pyramidal form, the base attached to, and extending over the glutæi muscles. The child was a full grown female foetus, strong and healthy, and in every other respect well formed. The tumour had an unequal feel, some parts possessing a considerable degree of firmness, while other parts were soft, with apparent fluctuation. A few days after birth, a portion of the surface inflamed and ulcerated, discharging a considerable quantity of thin sanious matter, the size and shape of the tumour undergoing, in consequence, some degree of alteration. This ulceration and discharge continued, more or less, upwards of three months, without in the least impairing the health of the child, or seeming to cause any great inconvenience. At length, however, the ulceration became more deep and extensive, the health of the child became impaired, and it gradually sunk. At the time of death, a considerable alteration had taken place, both in the form and proportionable size of the tumour, and sphacelation had commenced, and extended over a considerable portion of the surface. The annexed engraving, from a sketch taken after death, will give a pretty correct idea of the form and proportion of the tumour at that time.

Upon dissection, the tumour was found to be constituted of innumerable cysts, of various sizes, formed of thickened cellular membrane, and intermixed with adipose matter; their contents were various, and put on the different forms of lymph, glairy fluid, pus, and grumous matter, of a deep yellow and brown colour. I sent a part of this swelling to Mr. A. Cooper, who saw the child, and was consulted respecting the propriety of an operation for the removal of the tumour. During gestation the mother had suffered no unusual inconvenience, neither had she experienced any fright, nor laboured under any disagreeable impression. Her family, however, had some striking traits, the most conspicuous of which indicated a scrofulous diathesis, and to which, perhaps, the morbid state of the above described subject, may be referred. The following is a brief statement of these facts.

G. W.







G. W.

At an early age lost a leg, in consequence of a diseased knee joint; he enjoyed good health, however, to an advanced age.

His Wife, Mrs. W.

Had one thigh considerably shorter than the other. She used to assert that her father and grandfather laboured under the same defect. She bore many children, and lived to upwards of ninety years.

Of their Children,

W.

Now living, has been many years subject to nephritic and calculous complaints, and rheumatism: His

Son,

Has several children, some of whom are subjects of scrofula, and one of his daughters has a short thigh.

J.

Now living, has been afflicted with scrofulous tumours and ulcers.

Daughter,

Who is the mother of the subject above described, has the same shortness of one thigh, which her grandmother and others of her ancestors laboured under.

G.

Died, aged about sixty, of schirrous inflammation of the rectum.

P.

Lost his sight at the age of 15 months, from inflammation induced by measles, shortly succeeded by scarlet fever.

G.

Died in the prime of life, after long lingering under lumbar abscess.

*To the Editors of the Medical and Physical Journal.*

GENTLEMEN,

**T**HE papers I have had the honour of addressing to you on the furniture of a sick chamber, and hints respecting variolous infection, partook, I am aware, too much of the diffusive turn of a young author, and as such I crave indulgence; you will now find them stripped of their drapery, and the reader will arrive at the information without his route being very circuitous; and if you think the following also deserving the public attention, you will please to insert it.

There are certain complaints of the urethra and neck of the bladder, that require, in my opinion, the constant abidement of the elastic catheter in the urinary passage during the continuance of the disease. I do not mean that the same catheter must remain the whole time, as calculous incrustations would undoubtedly take place, and a change of the instrument, to prevent such an unpleasant event, must be frequently necessary.

As I have not frequent leisure to refer to the different authors on surgery, it was imprinted on my mind, that the plan I had proposed for securing the elastic catheter in the bladder, and which was adopted in a consultation a few years back, had novelty in it; in short, its simplicity had led me to believe that it must be pretty generally practised, till I purchased Mr. Hey's cases.\* In a work of such respectability, I found a method recommended very different from mine, and, as I think, inferior to it.

The plan I recommend is this, and the following drawings will more fully illustrate it. The elastic catheter is to be passed in the usual way; and when it is in the bladder, the patient, or assistant, is to press the catheter rather farther in, than where it would remain without pressure. We are then to apply a slip of adhesive plaster on each side the penis, nearly its whole length, and to the end of each plaster, near the preputium, a tape is to be fixed. These are to be tied to the rings of the catheter; and a little more than  
midway

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\* The mention of Mr. Hey's name, points out the very great utility of your Journal, for had there been a respectable publication, like yours, many years ago, so much valuable treasure as his work contains, would not in all probability have been locked up.



midway of the penis, you are to encircle it and the two lateral plasters, with two other slips of plaster, taking care these surrounding plasters are not placed on each other, and this is all that is necessary.

My motive for pressing the catheter rather more into the bladder, is to allow of the swelling of the penis, which must sometimes happen, particularly in young persons, during sleep.

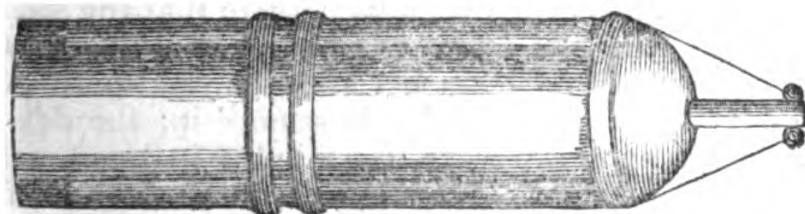
The circular plasters are intended to confine the lateral ones; and my reason for using two, is, in case one should give way.

Cleanliness may call for a frequent renewal of the plasters, and, if necessary, to wear a T bandage for any external opening in *perinæo*, or other cause, it need not interfere with the plasters.

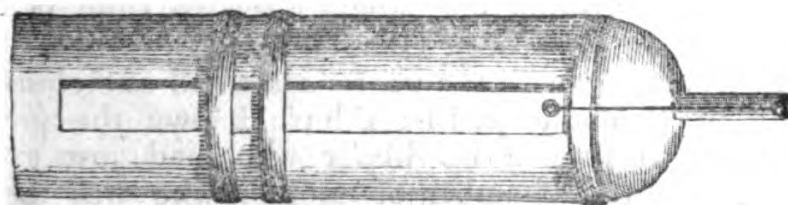
As to the protection of the end of the catheter, I have ever found the patient's contrivances the best; do not put him in a state of security as to this particular, by any thing you do; leave this part of the business to the patient, and he will attentively, and safely, guard it from harm and inconvenience.

*Views of the Penis, with the Elastic Catheter secured.*

Front View.



Lateral View.



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*On some of the FURNITURE of a SICK ROOM.*

THERE is no part of the furniture of a sick chamber that calls more importunately for reform than close stools.  
The

The great fault in the structure of them is their being contrived for more purposes than one; in the chambers of the wealthy, in particular, we see them become a piece of furniture, as Dean Swift says, "with rings and hinges counterfeited;" and being a piece of elegant furniture it must remain in the room; the pan and contents only are removed, and this very frequently not until some hours after being used, during which time the wood is imbibing the putrid effluvia.

I shall now beg leave to speak more particularly of the structure of those close-stools in general use with the middling and lower class of people, and to which this paper more especially applies. They are made square, and when you are called upon to visit a patient as the lid is a flat surface, you will observe it take the place of a chair by the bed-side, and being so flat it generally answers the purpose of a table; also this nauseous putrid apparatus is placed directly under the nose of the patient, where it continues without the least exposure to air or fumigation during the whole illness. I have known the stench complained of by the patient. The nurse answers, "I am sure I have emptied it;" and, with few exceptions, neither the nurse nor the patient have the least idea of the close-stool itself being the cause. The sick person then is persuaded to be reconciled; he conceives he must be mistaken in *imagining* a stench, although he is nearly poisoned with it. If perchance however the patient is positive that the stench is in the close stool, he becomes tired of complaint, as the nurse remains obstinate in her assertion, and perhaps will once or twice at most growlingly remove it; the sick patient is then hurt in two ways, the mind is irritated, and he breathes an unfit air. We know there are diseases where the sense of smelling becomes more acute, the phthisis pulmonalis for example; and the attentive practitioner will be cautious in visiting his patient a second time in boots after they have once been complained of.

How frequently with the poorer class will one close-stool go through a whole parish; I have known the precious chest brought from a neighbour who had just expired upon it, into the chamber of another who was immediately fixed there.

I shall conclude with the alteration I propose. In the upper part the lid should be convex; this will prevent its being applied to more uses than one, no person can make a chair of it to sit upon; it will not hold barley-water, or other drink, it will consequently be removed from the bed-side,

side, which is one point at least gained, if it never gets fumigated, and the lid should not be attached to the close-stool by hinges, but should lift off, to allow the patient to lean his back against any thing.

Much more might be said on the subject, but I am addressing myself to those who will readily comprehend my meaning; and nauseous as the subject at the first blush may appear, I trust it will be found to be of material advantage.

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*On the REAPPEARANCE of CONTAGIOUS DISEASES.*

I thank you for your flattering notice of my paper, but I believe you misunderstood me; when I spoke of having more observations, I did not mean to say they were all on the subject of the sick chamber, but those arising during some years of practice in Surgery, Midwifery, and the Practice of Physic.

There is a proposal for the extermination of the Small-pox by universal vaccination; but to me there seems something more than Vaccination, and the plan already mentioned, necessary to extirpate that disease.

Some years ago, in looking over the Philosophical Transactions, I read, that during a funeral at a country village, there was a most abominable stench issued from the grave, which was found to proceed from the bursting of a coffin, and which, to the best of my recollection, the hoary sexton declared to have been deposited nearly twenty years; many of the people went home sick, and in a short time the small-pox was very general in the village.

Now, Gentlemen, if the variolous infection may lay dormant in the earth so many years, it certainly would be politic for the grave-digger to make use of some fumigating process at the time of his occupation, to annihilate the small-pox infection, provided there should be any extricated; and unless it is by some means destroyed, it is probable that we may be frequently exposed to the contagion.

I am, &c.

W. MARSON,  
Member of the College of Surgeons.

## MONTHLY REPORTS.

*Cases admitted under the Care of the Surgeon of the Finsbury Dispensary, St. John's Square, Clerkenwell, from June 10, to July 10, 1803.*

|                         |    |                        |    |
|-------------------------|----|------------------------|----|
| Ophthalmia - - - -      | 1  | Hydrarthrus Genu - - - | 2  |
| Phlegmone Testis - - -  | 1  | Prolapsus Ani - - - -  | 1  |
| Abscessus - - - - -     | 3  | Leucoma - - - - -      | 1  |
| Ulcera Cruris - - - -   | 12 | Cataracta - - - - -    | 1  |
| Fistula Lachrymalis - - | 1  | Hematuria - - - - -    | 1  |
| Contusiones - - - - -   | 9  | Suppressio Urinæ - - - | 1  |
| Combustura - - - - -    | 2  | Spinæ Incurvatio - - - | 1  |
| Lues - - - - -          | 3  | Incontinentia Urinæ -  | 1  |
| Gonorrhœa - - - - -     | 3  |                        |    |
| Scrophula - - - - -     | 1  | Total -                | 45 |

In the practice of Surgery, it is not unfrequent to find more trouble and disagreeable circumstances arising from the treatment of cases which are apparently to a common observer, and especially to the patient himself, of a trivial and un consequential nature, than from those which are generally considered as cases of the first magnitude. A successful operation for Aneurism, or Lithotomy, where the conduct is plain and void of difficulty, shall often produce a lasting reputation, while an obstinate and insignificant eruption, or some such case, shall frequently baffle all our endeavours, and perhaps bring disgrace upon the practitioner.

From daily observation, it appears to me that the majority of the profession pay too slight a regard to what may be called the Minutiæ of Surgery. Their attention is too much converged to the consideration of those well-marked diseases, which have been regularly classed by Nosologists, while the variety of anomalous appearances which are frequently occurring are not sufficiently noticed. Persons who are unacquainted with the Physiology and Pathology of an animal body, and of the powers of art on the structure and functions of that body, estimate the difficulty of removing a disease as proportionate to the danger connected with it; but it must be well-known to every practitioner, that there are many cases perfectly unconnected with danger which give far greater embarrassment and trouble than diseases of the most formidable aspect.

As there is no disease which is attended with so great a variety of symptoms as syphilis, so there are some of those symptoms



symptoms that occasionally happen, which are peculiarly troublesome, and their removal attended with much difficulty; and there are some of those whose existence is not dangerous but rather inconvenient to the patient, and which exist even after the disease (in itself considered) is eradicated. I know of no circumstance more distressing, and productive of more trouble to the surgeon, than that of Warts, which though at first sight they may seem by an unaccustomed observer to be very insignificant, yet are absolutely, in many instances, extremely harrassing; and the more so, inasmuch as a person so afflicted expects their removal to be easy, and is much dissatisfied at their continuance.

I believe that mercury has no influence on these excrescences, and that when all other symptoms are removed, and such a course has been employed as is customary to adopt to eradicate the disease, there is no indication for a further continuance of it on account of warts. It should seem as if there was a peculiar action induced in the parts for the formation of these excrescencies, and when one of these has once arisen, it is astonishing how quickly it increases and how very difficultly it is eradicated, while that disposition remains in the parts; for although it may be acted upon by escharotics, as soon as their action has ceased there is a speedy renewal of the wart. I have seen the most alarming inflammation arise in consequence of the application of powerful caustics, especially when arrived at the root of the wart; and during the existence of that inflammation, the excrescencies have shot forth with redoubled vigour.

In these cases many have much extolled the application of the aq. litharg. acet. undiluted; this often has a very excellent effect in warts of a softer nature, but in many of these, it is altogether without effect.

A case occurred to me lately, where all the usual remedies which are considered as corrosive were used without producing any good effect, and some even seemed to do harm; and these yielded at last to the powder of sabina, which acts by producing a considerable discharge from the surface, by which the excrescence is gradually wasted, without causing an eschar, like a caustic application. This remedy likewise gives little or no pain, and I have never seen it productive of inflammation; which not unfrequently follows the use of either a solution of muriat of mercury or pure potash, or any other of the most potent caustics.

*Account of Diseases in an Eastern District of London,  
from June 20, to July 20, 1803.*

| ACUTE DISEASES.        |    | Diarrhœa - - - - -        |    | 5 |
|------------------------|----|---------------------------|----|---|
| Typhus - - - - -       | 8  | Prolapsus Ani - - - - -   |    | 1 |
| Hepatitis - - - - -    | 1  | Hysteria - - - - -        |    | 3 |
| Rheumatismus Acutus -  | 3  | Hypochondriasis - - - - - |    | 2 |
| Cynanche Tonsillaris - | 2  | Herpes - - - - -          |    | 7 |
| CHRONIC DISEASES.      |    | Rheumatismus Chronicus    | 12 |   |
| Tussis - - - - -       | 10 | PUERPERAL DISEASES.       |    |   |
| Tussis & Dyspnœa - -   | 7  | Peritonitis - - - - -     |    | 2 |
| Phthisis Pulmonalis -  | 3  | Menorrhagia Lochialis -   |    | 7 |
| Hydrothorax - - - - -  | 2  | Dolores Post Partum -     |    | 4 |
| Anasarca - - - - -     | 3  | INFANTILE DISEASES.       |    |   |
| Gastrodynia - - - - -  | 4  | Aphæ - - - - -            |    | 3 |
| Enterodynia - - - - -  | 5  | Herpes - - - - -          |    | 5 |
| Dyspepsia - - - - -    | 6  | Diarrhœa - - - - -        |    | 3 |
| Obstipatio - - - - -   | 3  | Ophthalmia - - - - -      |    | 2 |

## CRITICAL ANALYSIS

OF THE

## RECENT PUBLICATIONS

ON THE

DIFFERENT BRANCHES OF PHYSIC, SURGERY,  
AND MEDICAL PHILOSOPHY.

*The Edinburgh Practice of Physic, Surgery, and Midwifery, preceded by an Abstract of the Theory of Medicine and the Nosology of Dr. CULLEN, and including upwards of Six Hundred authentic Formule, &c. with twenty quarto plates. A new edition in five volumes, viz. the two first on Medicine, the third and fourth on Surgery, and the fifth on Midwifery. 1803.*

THE numerous additions with which the present edition of this valuable compilation has been enriched, and the quantity of medical knowledge which it contains, will justify us in bestowing on it more notice than a mere compilation might at first seem to demand. The title by which this work has long been known, is, "The Edinburgh Practice," by which is meant, a summary of all the knowledge, theoretical as well as practical, taught and practised at the Edinburgh School of Physic. A work of this kind, if executed with fidelity, cannot fail of being extensively useful, provided too much

be

be not expected from it. The perusal, or even study of a work of this kind, can no more make an accomplished physician than the study of Blackstone's Commentaries can make a profound lawyer; but there is a large class of medical students and practitioners to whom this Compendium must be desirable, as to them it offers the only probable method of coming at much valuable information, which it is better to know imperfectly, than not to know at all.

In the preface, the Editor speaks of the plan and performance of his task with modesty and propriety. The parts which are the most considerably increased in the present edition, are *the Cases and the Formulae*, both of which add most materially to its utility as a practical guide. It was hardly necessary, we think, to introduce any justification of extending the plan to Surgery and Midwifery, as well as Medicine; the education of a physician includes all these branches, and, what is more to the point, the readers to whom this work will be particularly acceptable, are, we conceive, the largest and the truly respectable body of practitioners in this kingdom, those who unite in practice all the branches of the Hippocratic art.

A sketch of the history of Medicine forms the Introduction. It is brought down to the time of Harvey, generally; and a very good view is given of the leading points which distinguished the practice of Hippocrates. From the time of Harvey, this history only flows in one channel, namely, the rise and progress of the Edinburgh School of Physic. We do not mean, however, to insinuate any accusation of improper partiality in thus confining the subject; the writer gives fairly and candidly that which he professes to give, a History of this celebrated Medical School; and perhaps, in the compass which he allows himself, a more extensive view of the modern theories of Physic, (though always equal to and generally far surpassing in excellence the crude conceptions of the ancients) would only perplex by excess of brevity.

The first chapter contains a view of the Theory of Medicine, an account of the principal functions of the body, and of some of the most popular systems. It will be sufficient for our readers to say, that the account of the functions of the body is given from an elementary and elegant work in the Edinburgh School, Dr. Gregory's *Conspectus Medicinæ Theoreticæ*, and that the Systems which are explained are those of Cullen and Brown. The latter is introduced with no great respect; but it is not now that the Brunonian system will be thrown back by such disparaging expressions as, "many of our readers will little expect to see Dr. Brown's opinions seriously noticed,"—"dignified by its admirers with the title of a system,"—"converts to the doctrine are totally unable to recollect when or how they were converted;" and others of the same stamp.

Brunonianism was indeed first adopted by young students, and it was long before it had acquired that rank among medical systems to which its ingenuity and the abilities of its inventor justly entitled it; but the young men who enrolled themselves among the first

supporters of Brown's opinions, were some of the highest ornaments to the Edinburgh School, and the system itself has gradually wrought a change of great extent both in the general practice of physic, and even in the language of medical reasoning.

As some system of Nosology must be taken as the text-book for descriptions of diseases, the Editor (as will be readily supposed) follows that of Dr. Cullen, a translation of which is prefixed, for the benefit of those readers (perhaps not a few) to whom the perusal of the original would be attended with some trouble.

Therapeutics, or the Practice of Medicine next succeed, and occupy the remainder of this and the succeeding volume. Febrile diseases are the first given; and on this subject, of infinite importance, great attention is bestowed. Dr. Darwin's system of Fever, taken from the *Zoonomia*, is first however introduced, as an appendix to the chapter on the theory of Fever, where indeed it would have come in with much more propriety along with the Brunonian system, which it so closely resembles. Though the Editor takes Cullen for his guide in regulating the nosology, and makes ample use of the "First Lines," much more than the concise and often meagre descriptions of this author is required by the reader who would have recourse to such a work as the present as a guide to his practice; the editor therefore very properly has supplied the deficiencies of description by the valuable matter contained in the works of Lind, Ferdyce, Huxham, Saunders, Currie, and many other eminent practitioners. Still, however, we are compelled to remark, that though a great mass of excellent matter is collected, it is merely thrown down upon the pages, without much method or system; long quotations are given from these writers, perfectly apposite indeed, but not interwoven into one clear and intelligible whole, nor arranged in that lucid order which is so necessary to assist the student, and to prevent that perplexity which must ensue from a multitude of counsellors. Full as the chapter on fever is, some omissions occur on points of practice, owing perhaps to the Editor confining himself too strictly within the limits of a mere compiler's duty. We might instance more particularly the use of certain remedies in typhus fever to fulfil peculiar indications, which we think might have been rendered much more conspicuous than in the pages before us. The particular use of opium in the spasmodic symptoms of the worst species of typhus; the advantage to be derived from a vigorous but cautious use of calomel, where much foulness of the intestinal canal is apprehended; the diaphoretic powers of ether, so much insisted on by Dr. Carmichael Smyth, and some other circumstances of the kind, would have added much to the intrinsic value of this part of the work, and might have been introduced in the place of some foreign matter of inferior importance. On turning over the method of purifying ships, apartments, and goods from the infection of fever, we had no doubt of finding due notice taken of the mineral acid vapours, and the superiority of this method over the old fumigations with wood, gunpowder, and aromatics,



aromatics. This we the more fully expected, as the excellent practice of cold affusion, so admirably inculcated and explained by Dr. Currie, is introduced with due attention. It was with no small surprize that we found not a single syllable on the acid vapours, though the fumigating processes recommended by Lind are detailed with great minuteness. The Editor has shewn himself too well acquainted with the actual state and modern history of physic to be ignorant of this improvement, why then has he not thought proper to mention it?

The two first volumes of this large and useful work are occupied by Medicine. We do not think it necessary to give any further analysis of their contents; all the principal diseases are noticed in general in a very ample manner, and the authorities consulted by the compiler are always respectable, and among those of established reputation, which are to be found in every library. This part of the subject does not admit of or require the illustration of plates. A single one is given, Mr. Watt's portable pneumatic apparatus for procuring the gasses for medicinal purposes. We shall decline our usual custom of giving a specimen of the execution of the work, as it can hardly be requisite in the present instance, and as the Editor has chosen that the readers should find not only the matter but the *very words* of Cullen, Lind, Fordyce, and many of the Correspondents that have long enriched our Journal with their Communications.

[ To be continued. ]

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*A Second Treatise on the Bath Waters, comprehending their medicinal Powers in general, and particularly as they relate to the Cure of Dyspepsia, Gout, Rheumatism, Jaundice, and Liver Complaints, Chlorosis, cutaneous Eruptions, Palsy, &c.* By GEORGE SMITH GIBBES, M.D. F.R.S. late Fellow of Magdalene College, Oxford. 8vo. pp. 120. Bath, 1803.

THE first Treatise of this zealous advocate of Bath water, exhibited the analysis of this renowned spring with so much accuracy of chemical investigation, as to leave nothing further to be desired on this head as long as chemistry remains what it is. In the present work, Dr. Gibbs proceeds to its application, as appears from the title page, to all the principal diseases for which the Bath water is recommended. In so doing, something more is intended, and we may rather entitle this little work a defence of the virtues of Bath water against the attacks of Drs. Heberden, Saunders, and some other physicians, "who, residing at a distance from Bath, are not fully aware of its medicinal excellence." The controversy is certainly interesting, and the author defends his point with candour and urbanity. The sentiments of the late Dr. Heberden on the powers of Bath water, (an authority of no small weight, as far as authority ought to have weight on such subjects) strike directly at the root of the high reputation of this spring, by refusing to allow

it more, or scarcely more, medicinal virtue than common water heated to the same temperature. In no part of the writings of this venerable physician is this opinion expressed so unequivocally as in his posthumous *Commentarii*, (article, *De aqua Bathonica*). After lamenting the uncertainty of establishing facts in medicine, and giving in illustration the utterly contradictory opinions on the efficacy of Bath water, uttered by physicians of learning and sense, this is the inference which he deduces: "Profecto ut mihi videtur ubi medici prudentes in tam diversas sententias eunt, ibi censendum est hos fontes esse exiguarum vel nullarum virium." Nor is he more favourable to chemical analysis in general, "Taceo chemicorum analyses, ut parum idoneas ad vires quorumcumque medicamentorum explorandas."

Dr. Saunders, in the first edition of his valuable Treatise on the Liver, by extolling the power of simple warm water in circumstances of disease of this organ, in which Bath water is known to be serviceable, has contributed to throw some doubt on part of the supposed medicinal virtue of these springs. It is right, however, to observe, that this physician has, in the third edition of this work, retracted or modified this opinion in the following terms. "A more intimate acquaintance with the power of Bath water, and a minute inquiry into its sensible effects on the animal economy, having inclined me to think more favourably of its use, independently of its being merely an aqueous diluent." These, with the sentiments of some other medical observers on the subject, are the opinions which Dr. Gibbes aims to refute, chiefly by endeavouring to shew that these waters do really possess an actively sensible operation; that they are capable of producing as much positive mischief, when misapplied, as benefit when cautiously employed; and that the diseases where they are used, are of a nature to require powerful remedies, and, if we may so speak, to do credit to the healing art and the skill of the physician.

The chalybeate contained in this water must, after all, be the *only* foreign principle on which the medical chemist can rest with any security, and the author shews he is aware of this, by the stress which he lays on the peculiar mode of its combination with the water. He observes, "Reasoning a priori from the impregnation discoverable in the Bath waters by chemical agents, we certainly should not be led to suspect that they would have any great effect on the human frame. Experience, however, teaches us, that these waters possess very active powers when introduced into the body; and we are, I apprehend, authorized in attributing their effects to those substances in them, with which chemistry has made us acquainted. Because other chalybeate waters contain larger quantities of the metal, it is not to be supposed but that a different mode of impregnation may augment or vary the effects these produce on the animal economy. Who could suppose that a little addition of one of the principles which compose our atmosphere, could change calomel into corrosive sublimate, or that the imperceptible operation

operation going on in the glands of vegetables, should produce from water, air, and earth, the deadliest poisons; poisons which, when once admitted into the animal system, cause instantaneous death? It is not, I contend, from the fewness of the principles, or from their quantity, that we can declare these waters to possess no activity, or, possessing it, to determine that it does not arise from the substances as yet discovered in them."

And again, "The chalybeate impregnation is of so delicate a kind, and so different from that of all other waters, as nearly to have eluded the nicest chemical research. The almost volatile state of the iron must give it an activity upon the human system, fully equal to what we see produced by these waters. Besides that our taste and smell discover in these waters, when fresh from the spring, a very perceptible chalybeate impregnation, chemical agents constantly detect in that state a larger proportion of iron in them. It is also found that the more delicate the reagent is, the greater is the quantity of iron discoverable. In my former treatise, I mentioned the reasons which induced me to believe that the iron was nearly in a metalline state. In that state, so extremely divided, and applied dissolved in water at such a temperature, there does not arise a doubt that most of the medicinal effects of these waters may be with confidence attributed to that cause."

What, however, let us ask, is an *almost* volatile state of iron? Is not the ingenious author aware that he is throwing out an idea which sound chemistry will not support? Is this supposed *volatility* of iron any thing more than that the impregnation with this metal is so slight that it is *soon lost to the senses*; namely, so soon as the heat which it naturally possesses has passed away. That more iron should be detected by a delicate than by a sluggish reagent is not very surprising nor uncommon. Neither do we suppose that the following presumptive argument will be considered as very convincing. "The diseases arising from diversity of climate are no less attended to, than the preservation of the human species by suitable nutriment; nay, the diseases which arise from the use, or abuse of what counteracts the effects of climate, are frequently to be obviated by natural and medicinal means discoverable on the spot. The effect of an effect seems to be provided for; indeed there is no one part of Nature, where such a dispensation cannot be traced. To see, therefore, spring up in the midst of a fertile valley, such a stupendous provision as the mineral waters of Bath, must lead us to an investigation of the most interesting nature, when we consider that they must have been sent to answer some adequate purpose."

The author candidly allows that the practice of the General Hospital does not produce a conviction of the efficacy of these waters in any very decided manner. The reason he admits to be, that other medicines have been combined with the water, so as to throw some uncertainty on the proportion of benefit due to the water itself.

self. This concession is fair, but the sceptical enquirer will ask, why it has been necessary to call in so much auxiliary aid?

We are compelled to remark, that the author has, in more than one instance, allowed his zeal for the reputation of this celebrated spring, to outrun his better judgement. We do not hesitate to say *better* judgement, for many very valuable practical remarks are given in the short compass of these pages, and the discrimination between the *lædientia* and the *juvantia* in the different states of the diseases which are treated of, is laid down with much clearness and precision. But the virtue of the Bath waters is a subject of so much importance, that we may be allowed, we trust, to pursue it somewhat further.

"With every one who reflects seriously on the efficacy of the Bath waters in removing the early symptoms of some of the most fatal diseases to which man is subject, their credit will in this respect stand as high as if they removed the complaints when fully formed."

Surely not! An emetic exhibited on the first accession of typhus fever will sometimes, by removing the early symptoms, prevent the further progress of the disease; but ought, therefore, the credit of the remedy to stand as high as if it had removed a fever of a week's standing?

The *modus operandi* of these valuable waters (for valuable they certainly are) is involved in much obscurity. The author does not attempt to add any thing on this head to the conjectures of other writers. As a chemist, we must acknowledge, we hardly expected that he would have thought the following hypothesis worth a repetition.

"It appears from the observations of M. Mandell, a medical professor at Nancy, that the state in which the iron exists in the Bath waters is the most proper for the cure of chlorosis. I extract the following passage from that respectable monthly publication, the Medical and Physical Journal. M. Mandel explains the recent system of Dr. Rollo, who maintains that the greater or less quantity of oxygen in the blood, is the cause of several disorders. Without overturning this principle, he opposes the author's application of it to certain diseases, particularly chlorosis, which, he says, is determined by the smallest quantity of oxygen, and against which he recommends the metallic oxyds, as the most proper to furnish the oxygen. He, on the contrary, proves that this disease is subdued by medicines calculated to lessen the quantity of oxygen, rather than increase it; that it is cured by iron which has undergone no preparation, but the minutest division of its particles; whence he concludes that we ought not to consider oxygenation, but rather ferrugination, as the efficient cause of cure."

Granting the efficacy of abstracting oxygen from the blood in chlorosis, and the de-oxygenating power of the iron in the Bath water, and making the most ample allowance for the quantity of iron  
ever



ever asserted to be contained in this water; let the ingenious author, for a moment, calculate the proportion between the alleged cause and effect, and he must see that there is a degree of extravagance in hypothesis which excludes all other sentiment but that of ridicule.

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*The Report on the Cow-Pock Inoculation from the Practice at the Vaccine-Pock Institution, during the Years 1800, 1801, and 1802, read at the General Meeting of the Governors, February 7, 1803, at the Shakspeare Tavern, written by the Physicians to the Institution; to which are prefixed, two painted Engravings of Cow-Pock and other Eruptions.* London, pp. 136. 8vo.

It is not often that a public charity can present to its governors and to the public at large, so interesting and every way valuable a report as the present. Much is owing undoubtedly to the high importance and the comparative novelty of the subject, and a great degree of praise is also due to the Medical Directors of the Institution for the earnest attention and philosophical spirit of inquiry which are exhibited in these pages.

This institution, the plan of which was first agitated at Dr. Pearson's house in December, 1799, has now subsisted for three entire years, during which time 1202 patients have been inoculated, namely 317 on the first year, 287 on the second, and 569 on the third. On this sum total the reporters make the following observations. "We are aware that a greater number of persons will be expected to have been inoculated for the cow-pock than are above stated; but it must be considered, that the house for this practice is not situated in a part abounding with poor people; and when it is also considered, that the grand objects of the institution were the preservation of the succession of matter, for the public at large, and for determining the laws of action of the vaccine poison, by accurate registers of observations, it is hoped it will be found, that these points have been completely, or at least in great part attained. With respect to the former of these last-mentioned objects, we have the satisfaction to report, not a week, and very often not a day has passed, without applications being made to the institution for matter to supply great part of the metropolis, and still more extensively, provincial practitioners. In particular, here has been the appointed office for supplying the navy and army by order of government. Nor have the benefits of the institution in this respect been confined to our own country, for France, Germany, Russia, Portugal, Italy, different parts of Asia, Africa, and America, and the West-Indies, have all been furnished with matter from this source. In no instance that has come to our knowledge has our matter been followed by any other effect than the cow-pock; but in a few cases, the small pox, from the intervening agency of that poison (although at first confounded with the cow-pock) has taken place. The chicken-pox, measles, and ulcerous sore throat, which sometimes

sometimes occurred during the cow-pock, were too obvious to be imputed to the vaccine poison."

To those only who imagine that the vast heterogeneous mass of population which constitutes *the public*, will instantly act with the vigour and unanimity of a select set of enlightened individuals, can it be a matter of surprize that the bulk of the inhabitants of this kingdom should have been, and should still remain, stupidly indifferent to the benefits of vaccine inoculation, after all reasonable evidence had been laid before them. If however the present report should present a scanty sum total of operations, it exhibits a rich collection of facts selected from the means of observation that have been afforded, which, for the purpose of observation at least, have been amply sufficient. The reporters have thrown together these remarks in the form of propositions or aphorisms, which are here given along with their explanatory comments and annotations.

It would only fatigue our readers again to lay before them the *principia* of vaccine inoculation, with most of which they must long have been familiar. We shall therefore only select a few passages that offer any novelty or refer to points still controverted. "The red areola during the beginning and early part of the scabbing process generally took place, but when it was absent in other respects the pock was the usual one; and the susceptibility of the small pox *was equally destroyed as when the most extensive erythema appeared on the inoculated part.*" A little further on this opinion is explained somewhat more at large. "The areola is neither essential in the same, nor different constitutions; nor connected with the fever; nor with the age of the matter; nor with the quantity of it; nor with the mode of inoculation; but with apparently the state of the skin, in even different arms of the same person; for in the same person, one arm had borne a pock with a large red areola, and the other had a pock with none at all; some have had no areola, and yet a fever; and others no observable fever, yet there was a considerable areola.

"The cicatrix is not always a mark of security, though the absence of it is a certain test that the preservative power of vaccine inoculation has not been secured."

When any symptoms of general fever occur during inoculation, if they happen on the sixth, seventh, and eighth days, the reporters ascribe them to teething or some accidental cause; if later, to the true vaccine disease.

"A disease from various morbid poisons may occur at any period between the time of vaccine inoculation, and the time of the vaccine constitutional affection." The coincident infection of small pox, which has not unfrequently occurred, and which was so satisfactorily explained by Dr. Woodville, is here particularly alluded to. The authors would also infer from this, that the supposed axiom, that two constitutional diseases cannot exist at the same time, is erroneous, and has led to a false supposition of an eruptive species of cow-pox. And yet we may remark, that the very circumstances

cumstances of the modification in the appearance of the vaccine pustule produced by the operation of small-pox infection, might be urged in *support* of the disputed axiom. The succeeding proposition, indeed, is more to the point; it is, that "any disorder whatever may take place at any period of the vaccina, except, after a certain progress, the variola."

The reporters here instance a variety of disorders of children that have occurred during the vaccine infection. This is a most important subject of collateral observation, to which all practitioners ought to attend with care. We believe it still open to future investigation.

"The animal economy, for the most part, does not seem to be either bettered or injured by going through the vaccina"

The only consequences of this inoculation hitherto observed, have been, according to the reporters, suppurative swelling of the axillary glands, in very rare instances; and in children not previously subject to eruptions, occasional eruptive vesicles of different forms, for a year or more afterwards.

"Persons who have already gone through the Vaccina, are unsusceptible of it a second time.

"No difference could be perceived in the agency of the vaccine matter according to the age of the pock, or to the presence and absence of areola, except in certain early stages of it, being more efficacious than others." As this relates to a point of practice of considerable importance, and as the opinions of many inoculators will be at issue upon it, we shall give the remarks of the reporters on this subject, and our readers must judge for themselves.

"It was the usage of the Institution almost always to inoculate with matter of the 8th, or 11th and 12th days; and from our ample experience we affirm, that if the pock of the 11th or 12th day was not yet in the scabbing stage, or was but just beginning, the matter was equally efficacious with that of the 8th day; yet, if the pock had begun to scab, or was advanced to that state, this old matter oftener failed than younger matter: but when the matter of such old pocks failed to excite the vaccina, considerable inflammation, or phlegmonous eruption or pimple (which is improperly called spurious cow-pock) did not more frequently occur than from younger matter of the distinct cow-pock, when it failed; and the bad consequences did not ensue more frequently from such old matter, than from matter of the 8th day, or earlier.

"Whether the matter was taken from a pock which had an areola or not, the effect was not on that account different. We have used matter, when it could be had, as early as the 5th day, but it excited the vaccina with the usual appearances; and certainly it was not, on account of the age of the matter, more mild."

"Matter from a pock still containing lymph, though as late as the fifteenth day; and even pus when the vesicle had become a pustule, generally produced no effect at all except like that of a common scratch; but sometimes it took effect, and then it produced the genuine distinct vaccina.

"In

"In the same arms, matter of the 8th day and of the 12th has been employed, and the event was, that each sort excited the genuine and similar vaccine pocks; and the same effects were seen from matter, so inoculated, of the 11th and 15th days."

Many other important points and remarks are contained in this volume, which is altogether one of the most valuable documents on vaccine inoculation that has appeared, since the publication of those whereby the practice was first established. Two beautiful plates are prefixed, exhibiting vaccine and variolous pustules, and some varieties and anomalies that are described in the course of the book.

We do not consider it to fall within the office of this Retrospect to make any observations on the Plan of the Institution; and we also most willingly avail ourselves of this plea, to pass over, without remark, a circumstance alleged against the conduct of the Discoverer of Vaccination, which the Reporters have thought it necessary here to introduce.

## MEDICAL AND PHYSICAL INTELLIGENCE.

**PLAN of LECTURES on the VACCINE-POCK INOCULATION, at the Institution, (founded Dec. 1799, late No. 5, Golden-Square,) No. 44, Broad-Street, Golden-Square, by GEORGE PEARSON, M.D. F.R.S. Physician to the Cow-Pock Institution, &c. &c.**

A Lecture to be given at the Institution once or twice a week, according to the subject of it, for about twelve weeks. The principal objects will be,

1. The history of what is known of the vaccina in cows.
2. The history of the discovery, introduction, and propagation of vaccine inoculation.
3. To shew, in patients at the institution, the progress of the inoculated cow-pock, through its stages of growing into a vesicle, constitutional disorder, scabbing process, deciduary carbuncle-like scab, with a view especially to make known the distinguishing characters of the vaccina.
4. To explain the unusual, or accidental symptoms and effects of the vaccina: viz. eruptions, phlegmonous inflammation, erythema, axillary swellings, essera vaccina, pustule, ulcerations of inoculated parts, &c.
5. To explain the anomalous eruption of inoculated parts.
6. To explain the anomalous course of the inoculated vaccina.
7. Intervening disorders, especially the small-pox, measles, chicken-pox, contagious angina, hooping cough, tooth rash, red gum, &c.

8. In-



8. Instances, by inoculation, of the small-pox and cow-pock at the same time in the same person.
9. The various modes of preserving vaccine matter.
10. The effects of various modes of inoculation.
11. The effects of matter at different ages of the vaccine-pock.
12. The effects of inoculation of persons who have undergone the small-pox, or cow-pock.
13. The effects of inoculation when it fails to destroy the susceptibility of the small-pox.
14. The medical treatment and regimen during the cow-pock.
15. The effects on health subsequently to inoculation.
16. The vaccine inoculation instead of the small-pox, as vicarious of a disease in sheep.

PROPOSALS.

1. Subscribers for life, viz. of ten guineas, to the Vaccine Institution, to be admitted gratuitously; as well as
2. Perpetual pupils to Dr. Pearson's lectures in general; and his
3. Other pupils on becoming perpetual, in addition to their present lectures, to be admitted on the same terms.
4. Those who are neither subscribers to the institution, nor are pupils, as just mentioned, are to pay three guineas for a single course, or six guineas as perpetual.

SMALL-POX AND INOCULATION HOSPITALS, PANCRAS.

*Extract from the Committee's Report presented to an Half-Yearly General Court, held at Batson's Coffee-House, Cornhill, London, on Thursday the 16th Day of June, 1803.*

VARIOLOUS INOCULATION.

31,352 patients have received the benefit of this department of the institution from its commencement until the 1st of January 1802; and during the past year only 88 persons have been inoculated for the small-pox, of which number 39 were out-patients; and as only 10 persons have received the variolous inoculation since January last, this practice at the hospital may be considered as generally superseded by the substitution of the

VACCINE INOCULATION.

This practice began in this hospital under the direction of Dr. Woodville, with the assistance of Mr. Wachsell, the resident surgeon, on the 21st of January 1799; and from that period to the 1st of January 1802, the patients received into the hospital were

|                                                    |      |
|----------------------------------------------------|------|
|                                                    | 1580 |
| Out-patients                                       | 5912 |
| During the year 1802, in-patients were             | 337  |
| Out-patients                                       | 3990 |
| From the 1st of January 1803, to the 15th of June, |      |
| instant, in-patients                               | 70   |
| From ditto to ditto, out-patients                  | 1826 |

13715.

Of

Of this large number *there has not been any instance in which the inoculation proved unsuccessful.* The committee desire to repeat what they stated in a former report, that 2500 were, after their recovery, found to be secure from the natural smallpox, by receiving the variolous inoculation, without any effect; and that in all this extensive practice, the committee have not heard of any one complaint from amongst those who were not inoculated a second time, of their having taken the natural small pox, although they were chiefly indigent persons, and the far greater number of them living in places where the air is very confined; and particularly where it has been since ascertained, that the natural small-pox was prevalent amongst those with whom many of them necessarily had continual intercourse.

The benefits of this institution, in its respective branches, are not confined to the metropolis or its vicinity; for it has always received patients from considerable distances, and also that applications are continually made to it from various parts of the united kingdom, from America and the West Indies, and also from the British settlements in the East Indies, for correct information of the practice and mode of treatment, and for supplies of matter for inoculation, which have been always readily furnished.

The committee rejoice in being enabled to witness the above numerous instances of its utility, and they invite the continuance of the public support as long only as the poor shall need its refuge and protection.

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Dr. HEINZE has inoculated more than three thousand sheep with the cow-pock, on the estate of Count N. S. Rumanzoff, in the Ukraine, and thus secured them from a contagious distemper which proved mortal to the flocks of the surrounding districts; and even in the place where the experiment was made, to such of the sheep as had not been inoculated.

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C. PAYSE has found, that a lute fit for all the operations of chemistry may be made by mixing eggs, both the whites and yolks, with half their weight of quick lime.

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### TO CORRESPONDENTS.

Communications are received from Mr. G. N. Hill, Mr. A. Hunter, Mr. Aldus, Mr. Reid, and from the Continent.

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### ERRATUM.

Vol. x. p. 46, l. 7, from bottom, for *not*, read *most*.

THE  
Medical and Physical Journal.

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VOL. X.]      SEPTEMBER 1, 1803.      [NO. LV.

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*Printed for R. PHILLIPS, by W. Thorne, Red Lion Court, Fleet Street, London.*

DR. BEDDOES'S COLLECTION OF PAPERS ON  
THE INFLUENZA.

PART II.

I Must begin with expressing my regret for the loss of a letter from Mr. MORRIS; Bristol; and another from Mr. HILL, Shepton Mallet.

The first (No. 30) expressed his belief that the influenza was not contagious, principally because he had known instances, where one or only a few of a family had been affected, notwithstanding free intercourse:

Mr. Hill (No. 31) inclined to the same opinion.

32. Dr. DOYLE, Ross, Ireland, July 17, 1803.

What they call influenza here is epidemic (I may say) every spring season. It has been particularly so for six or seven years past. It generally sets in with the cold dry weather in March, and varies with the degree of intensity of the vicissitudes of heat and cold until the middle or end of May. The latter was the case this year; we had some very warm days about the middle of April, shortly succeeded by very intense cold dry winds, until the end of May, during which month the epidemic seemed to be at its height here, becoming more mild as the heat increased in June, when it disappeared almost entirely.

It first made a noise by its appearance in large cities. May this not be owing to the great number assembled? Its appearance in Ross, a large country town, and in the country for twenty miles round, varied little, as also its decline. It was little mortal in any of its stages in Ross, particularly when early attended to, but was more mortal in the country; I do think much owing to the contrary circumstances and management.

The recovery of sound persons attended to was generally the 5th, 9th, or 11th day, and few relapses happened except

(No. 55.)

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cept in case of neglect, such were not violent; such as had the lungs before weak or affected, fared worse; and when death happened, which was not always the case even with them, it occurred about the 9th or 11th day.

Its sudden attack on whole families should induce me to think it was not contagious, but entirely owing to the then reigning constitution of the air, which was exceedingly sharp, and entirely originating from the general causes of diseases usually occurring in spring, varying in degree, and something in types, with those general causes and constitutions of the people. I could not find it communicated by clothes, further than by change in quantity or kind, which I believe sometimes procured it.

However, you must observe I am not fond of contagion, and verily believe it often exists but in the doctor's brain. In most cases of disease we cannot be at a loss for sufficient and satisfactory causes, which will excite similar disease in the same family, town, or even country, which I am certain it would be useless to recapitulate to you; and why should it not be the case in influenza, which (as far as my observation extends for some years) is chiefly of an inflammatory nature, varying to or from the real state of pulmonary inflammation, as we find in the different degrees of pleurisy, peripneumony, asthma, and other attacks on the lungs, which seems to be the organ principally, though not only affected. I have experienced, *in general*, the same plan of cure answer best, particularly when early applied, otherwise it did not answer as well as in the unequivocal pneumonia.

I said *in general*, as I think I have observed about five years past what is called influenza to partake much of an erysipelatous nature, the fever attending being much of that kind, and local attacks of erysipelas occurring exteriorly on many parts of the body, when the lungs were quickly relieved; I have not the smallest doubt but this type of disease often occurs unobserved, or is mistaken for real inflammation. In the former case bleeding did not answer except at the very commencement of the attack, and then moderate; it was destructive at any other stage.

You will observe it would far surpass the limits of this, to enter more at large on this subject; but as you have required I should say something of it, beg leave to offer you the above observations just as they occurred.

33. Mr. HEY, Leeds; July 29, 1803.

After mentioning his public and private occupations, observes, the influenza in slight cases so much resembled  
a common



common catarrh, that no distinguishing criterion could be pointed out. But in general, the attacks of this epidemic were much more debilitating than in the common catarrh. Many complained of great soreness in the throat, when upon inspecting the fauces no morbid appearance could be perceived. A teasing cough was a general concomitant, though a few patients had all the common symptoms of the disease without cough.

Some felt great difficulty of respiration upon lying down, who were much relieved by leeches applied to the sternum, or the operation of an emetic. A frequent pulse and furred tongue generally attended, though many had the pulse betwixt 80 and 90, with a clean tongue, who were much otherwise indisposed.

A sudden transition took place in some, especially elderly people, from a febrile state to a state of debility. Stimulants, such as the volatile alkali, and *spt. ætheris vi- triolici*, were of great service in such cases. If the disease was contagious, the influence of contagion must have been very rapid. But upon the whole, I should rather be inclined to call the disease epidemical than contagious.

34. *Mr. HILL, Barnstaple, June 29, 1803.*

The influenza appeared in this neighbourhood some time in February, and still continues to the present time.

The disease has not been general, but arose in some remote places about the same period, and in such still continues to shew itself.

In most instances, not above one or two in a family.

It was not contagious. In some families of ten or fifteen, not above one or two were affected. The same in villages.

It would be particularly flattering to convey to you some acceptable matter of observation; but so little have we seen of the disease in this neighbourhood, that I have little to offer. It has not been fatal in one instance within my knowledge, or that of my friend of South Molton, (Mr. Bryan) though we have heard of many cases; but, as far as we could trace them, they did not appear to us to have been cases of influenza. Every thing, from an aching tooth to a fractured leg, almost, has been deemed the influenza.

35. *Mr. GOODWIN, Wirksworth, Derbyshire, July 3, 1803.*

I think the complaint first appeared in this place about the 20th of March, (I cannot be certain to two or three days)

days) and almost totally disappeared by the middle of May. It was most general about the 10th of April. This country being very populous, and the intercourse almost constant, I had not an opportunity of observing whether there was any difference in the date of its appearance in more or less frequented places.

After it ceased to be general, there were some single cases, but these were few, and at no very distant period from the general affection. The complaint was so common about the 10th of April, that it seemed to me to be occasioned by some peculiarity of atmosphere, and not by passing from person to person; but of this I cannot pretend to be certain, and only mention it as matter of opinion. The disease sometimes occurred more than once in the same person; some attributed the return of the symptoms to what they called taking cold; to others, the recurrence was without any evident cause. The common symptoms were, frequent pulse, pain in the limbs and head, extremely troublesome cough, sickness at stomach, great dejection of spirits, and very great lassitude. In some cases the cough was incessant, night and day; these patients had also a great deal of fever. Some had considerable difficulty of breathing, and pain in different parts of the chest. In some the tonsil glands were enlarged and very florid; and I saw some cases where the inside of the cheeks, tongue, and throat were affected with aphtha. The symptoms commonly abated, and sometimes went entirely off, in five or six days; sometimes in three or four days; and in some cases continued much longer.

When I was called in early in the complaint, I invariably gave an emetic. I never repented this practice, as it was, *in all cases*, attended with advantage. I then ordered my patients to drink plentifully of barley water and gum arabic, infusion of linseed, and to those who could bear it I gave small doses of James's powder or tartarized antimony. In cases attended with much pain about the chest I ordered blisters, and sometimes the loss of some blood. I soon learned that much bleeding was hurtful, by bringing on symptoms of debility. I heard of some people who were incautiously bled, who sunk under the disease. I did not lose one patient. The stomachs of many of my patients were much affected by even very small doses of the preparations of antimony, and some could not bear the least particle. In such cases, preparations of antimony were immediately abandoned, and very small doses of ipecacuanha substituted, and I thought with advantage.—

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When the mouth and throat were affected with aphthæ, I gave myrrh and bark, and with evident success. I allowed my patients to drink small beer, and a little wine diluted with much water.

36. **Mr. HODGE**, Sidmouth, July 4, 1803.

The influenza appeared in this neighbourhood about the middle of March, and ceased to be common about the same time in April, though after that time it now and then occurred; I have not seen many instances of its passing from one person to another, but I have seen many attacked in the same hour on the same day, and conceive it to be epidemic, resembling in many instances, particularly in old people, chronic catarrh; I have not been able to ascertain the situations least exempted from the disease. Am sorry my observations are so few; have only to add that it was not generally severe in my practice, not having lost a patient except when connected with peripneumonia vera.

37. **Mr. GRIFFITHS**, Cardiff, April 9, 1803.

I am induced to believe the influenza is epidemic; because, in numerous instances, several of a family have been attacked on the same day.

In the majority of cases, the influenza is distinguishable from common catarrh.

Had not the influenza prevailed, the symptoms so much resembled, in several instances, common catarrh, that I should have been of opinion they belonged to the latter.

Generally the depression was more considerable than is common in catarrh; and the disorder had, in numerous instances, all the gradations from pneumonia to low fever.

The disorder so varied in its attack and progress, that I cannot, with any degree of correctness, specify the date of the disease.

38. **Mr. COOKE**, Gloucester, June 13, 1803.

The influenza appeared with us in February, and became less frequent in April, ceasing gradually, if not entirely, in my practice, through the last month.

I considered it an epidemic disease; I rather suspect it did not pass from person to person, unless it degenerated into typhus, which it frequently did from predisposition in the patient, from neglect, or from maltreatment. The above, I believe, consolidates complete reply to all your queries, to which I would add, that I always observed an  
O 3 attack

attack of influenza immediately excite constitutional complaint (that is, those by which persons had been before frequently attacked) of whatever species they might be, whether rheumatism, nervous affections, paralysis, &c. and if there was a predisposition to phthisis, typhus, inflammation of any particular viscera, &c. these all occurred; but if influenza continued more than three or four days, symptoms of low fever always commenced, with reason to dread infection transferrable. The common characteristics were, fever, excessive perspiration, and little general pain, or universal pain without perspiration, accompanied with a peculiar noisy, disagreeable sensation, confined to one side of the head, nose, and face, (similar, I suspect, to the *tic dolo-reux*); this painful symptom would often baffle every attempt to remove it (after all other symptoms were dispersed) for, perhaps, two or three weeks, and then gradually or suddenly go off—sometimes terminating in abscesses in the frontal or nasal sinuses, abscesses in the ear, &c.

I have reason to think that the bladder in women was sometimes attacked with influenza, and that the eye and the œsophagus have also experienced the same affection without any material derangement of the general system in either case.

Emetics, diaphoretics, purgatives, and a generous, free dilution, was the plan I always found successful, and never observed the disease prove fatal, excepting when the chest was attacked violently, which was frequently the case with old asthmatic persons.

Your request of an immediate answer, compels me to send a rough sketch of my observations, which if of the least service to you, will very much gratify me.

39. Mr. LOMAS, Aspatia, April 18, 1803.

As the disease has in general been so mild here, as to require little aid from medicine, I have had but few cases to attend to; I therefore must confess myself unable, as yet, to decide upon its contagious nature.

I have hitherto been accustomed to attribute the propagation of such complaints to an epidemic constitution of the atmosphere alone; but from instances which have recently occurred, I am rather inclined to think the present disorder contagious. The supposed mode of introduction into families; the succession of attack upon the individuals of those families; the sudden effect produced upon the system in twenty-four or thirty-six hours, after being exposed



posed to it; some families being affected generally, and others at no great distance (in country situations) being perfectly free from it, are my principal reasons for suspecting its contagious nature.

Upon close examination, I think, in general, no doubt would arise, whether the case is catarrh or influenza.

Before the frequent occurrence of the complaint excited more strict attention, I think it probable that single instances might be mistaken for common catarrhal affections. But being myself affected towards the first in this neighbourhood so differently from what I had ever experienced in common catarrh, and afterwards hearing others describe what I had felt, the idea of a prevailing epidemic struck me before I heard any account of influenza.

In some of the cases I have attended, robust men complained, all at once, of an uncommon degree of languor, lassitude, muscular pain, and soreness; in some smart, in others scarcely perceptible, rigors preceded the more violent symptoms, such as oppression at the chest, pain in the head, &c.; these last generally took place on the second or third day, with greater and more sudden depression than I ever saw in common catarrh. In all there has been a great sensibility of external cold.

Although I have employed the lancet in two instances with good effect, yet, in general, I think the disease borders more upon low fever than pneumonia.

I cannot say that I saw a well-marked influenza before the 8th instant; it is now becoming daily more prevalent.

40. **Mr. LAWRENCE, Cirencester, April 14, 1803.**

I am not able yet to determine from my own observations, whether the influenza is contagious or otherwise. I think it may be communicated from one person to another, yet my observations lead me to consider its powers in that way to be weak.

I ground my opinion chiefly from having seen several instances where only one, and where only two, in families consisting of greater numbers have hitherto felt the disorder; some instances have occurred where two have slept together, and one only received it; this happened in my own family. Again I must observe, that it has appeared in families where the most, and likewise the whole, have felt it in succession.

In many cases I have remarked its great resemblance to the common catarrh; yet different constitutions seem to

admit of considerable variety in the symptoms; in so much, that by comparing a number of cases, it may, I think, be distinguished from that disorder.

In some cases the symptoms so much resembled those of common catarrh, that I should have considered them such, had my mind been free from the idea of influenza.

Often the depression has been great and sudden beyond what is seen in common catarrh; gradations from pneumonia have been very frequent even down to feelings of great debility. I have seen no case shewing a disposition to degenerate into low fever.

The first case of well marked influenza I saw, I believe was on the fifth of March; it happened to be a robust healthy farmer, who the week before, on a journey into Essex, passed twice through London; he lives in a village about five miles from hence, where, at that period, the influenza had not appeared, but was then universal in London. Many cases come now daily before me, for it very much prevails at this time in this town, and in the neighbouring villages.

41. Mr. CUSTANCE, Kidderminster, June 13, 1803.

I need not trouble you with any particulars of the characteristic symptoms, as they are not only well known to you, from your own observation, but also from the different publications on the subject by various practitioners.

Whether the influenza has been a *contagious* disease or not, I really cannot satisfactorily determine. I am of Sir Roger de Coverley's opinion, when he so wisely decided, upon another occasion, that "much might be said on both sides;" however, upon the whole, I think that the preponderance of probability is in the scale of contagion. I will now state a few facts, that appear to me to favour this supposition. The influenza certainly gradually passed from one town to another. It prevailed at Stourbridge about a fortnight or three weeks before it was noticed at Kidderminster, and it was another fortnight before it appeared at Bewdley, which is three miles on the other side of us, so that it should seem to have travelled in a north-east to a south-west direction.

The first cases I saw of it, were three children, in one family, who sickened within a few days of each other; the father and mother both were attacked in about a fortnight after. The gentleman had it so severely that he did not recover from it in less than ten or eleven weeks. In my own family, my two servants were attacked together, and

I was

I was severely and suddenly seized about ten days after. My bowels were from the first very much affected, and the subsequent debility was considerable, and continued for a month or five weeks. My wife and child were so slightly affected, that it is doubtful whether they had it at all; and a sister of Mrs. Custance, who resides with us, certainly escaped altogether; but it very rarely happened that *part* of a family escaped. Many persons are persuaded that they were attacked repeatedly with it; but I think this a mistaken notion, and rather am of opinion that they had not completely recovered from the first attack, before some of the symptoms were aggravated by indiscretion and carelessness. Nevertheless, in one instance, I believe a child was seized a second time, a month or six weeks after she appeared quite well of the former attack. A gentleman, who had been confined to his room ten weeks with a broken leg, was free from the complaint during its rage amongst us, although many people daily visited him, (especially myself and other medical friends) yet he got about into the air only a few days before he shared the fate of his neighbours. The instances of mortality have been very few indeed amongst us. I lost three patients, one a girl of fourteen years old, the other two under a year; and I am persuaded that my medical brethren here were equally fortunate.

We considered and treated it as an inflammatory disease, with the precaution of bleeding very sparingly or not at all. Debility so soon supervened, that I always preferred blisters to bleeding; the latter was employed in only one case by me. The following mixture I found invariably useful after the first stage of the disease.

R. Tinct. opii, gt. xx. spt. atheris vitriol. ℥iij. infus. gent. c. 3vj. lb. to be taken according to the age of the patient.

I forgot to mention, that several individual cases of influenza have occurred since it ceased to be a general disorder.

#### 42. Dr. TURTON, Swansea, June 19, 1803.

Whatever information my memorandums or recollection can furnish you with, respecting this singular epidemic, I will with much pleasure communicate.

Its first appearance here was about the middle of March, and was preceded by sore throat and other diseases of debility. Its duration was not more than three weeks.

The general seizure did not appear to be different in date

date here and in the country round. I saw two or three at some distance from hence before I was attacked myself.

Whether it was communicated from person to person, or whether the blow was generally produced from the same atmospheric cause, it is not very easy to determine.

It is however to be marked, that many families were not affected at all; and that when one of a family was seized, it seldom failed to extend its influence in a greater or less degree to most of the members of it.

The aged and infirm, and those who were from any cause much debilitated, suffered severely.

Of my patients only one died, and she had been previously bled before I saw her.

Those who persisted in the use of wine and good food were but little affected, and were soon restored. Children were principally afflicted in the eyes and lungs; women and puny persons with long continued catarrhs; men at the first attack had great confusion of intellect, probably from torpidity of the meninges of the brain.

The seeds of plithisical complaints were sown in some tender habits; and I am afraid its ultimate mischief is not yet vanquished.

The same causes, whatever they were, may again produce similar effects; it will therefore be desirable, whenever it happens, to have the collected opinions of men who personally and professionally marked its progress.

Epidemic diseases are too apt to appear and vanish without concern beyond the period of their existence, and with very little more than traditional memory of their relation, symptoms, and effects.

I rejoice exceedingly that you are about to register the history of this malady, which has certainly appeared before, and will doubtless appear again.

Did it not follow the line of the earthquake? and was not the earthquake some few years ago succeeded by a similar national affection?

43. Mr. BEAUMONT, Melbourne, Derbyshire, July 15, 1803.

1. The influenza appeared as early as the latter end of January, but became very general in February and March, and did not disappear till the latter end of May or the beginning of June.

2. As far as I can recollect, it appeared in a neighbouring hamlet before it appeared in Melbourne; this I am clear in, that it was much more general in that hamlet, before it was thus general in Melbourne.

3. We



3. We had single instances with us after it ceased to be general.

4. With respect to this query, whether it passed from person to person or not, I cannot so well answer. In many cases it appeared pretty clearly to do so; and again, in others, it was very difficult thus to trace it, it seemed rather to affect almost the whole family at once.

I shall just observe, that from what I have read and heard of the influenza, the inhabitants of this town and neighbourhood have been much more favourably dealt with, at least as to general attack and violence in individual cases, than many other places in the kingdom;

44. Mr. PEARSE, Honiton, July 12, 1803.

1. The influenza appeared here the first week in March, and ceased about the middle of May.

2. It appeared in the neighbouring parishes at the same time that it did in this town.

3. By the end of March it was very general in the town and country, and continued so all through April and the first week in May, when it abated, and but a few cases appeared afterwards in a slighter degree.

With respect to your fourth query, whether it was propagated by contagion? Your superior judgment is better able to decide. The disorder was in many instances sudden in its attack; several were taken in the market, and came immediately to me for assistance; some whole families were seized with it, while, in other instances, two or three of a family would escape. I myself was taken down the second week in March; my daughter three days after my attack; a young man, my pupil, had it slightly near three weeks after, but not any one of the family had it besides, though constantly together.

Several whom I have attended, after being confined for three or four days, have got apparently well, but who have relapsed; the disorder has been more severe on them than the first seizure, and continued for seven or eight days. Nurses who have attended the sick, some have escaped, and some have had the disorder slightly.

45. Mr. CAMBRIDGE, Minchin Hampton, Gloucestershire,  
July 28, 1803.

The first appearance of influenza in this neighbourhood, which came to my knowledge, was on the 16th of February,

ary; the last patient I attended, recovered the beginning of May.

In most instances, the disease, in its progress, was eight or ten days, though some continued ill several weeks, whilst others recovered in a few days.

After the epidemic became general and was on the decline, some who had not been previously affected were seized in a greater or less degree, and were longer recovering than those who were earlier affected.

From the observations I have been able to make on this disease, I remarked, that different constitutions were very differently affected. The most general symptoms I met with, were prostration of strength; a sudden and extreme debility of the whole system; an acute pain affecting chiefly the fore part of the head; a sense of stricture across the chest, as if bound round with a cord; a hard cough; a slow fever with a small weak pulse, and great depression of spirits. These symptoms were present, generally, the second day, accompanied with catarrh. I have met with many instances where the symptoms were widely different, varying in degree in different persons.

In others, the disorder manifested itself differently and betrayed symptoms of pneumonic inflammation; in some the pulse was quick and strong, beating an 100 strokes and upwards in the minute; great thirst, a dry foul tongue, with anxiety and nausea. Asthmatic patients suffered very severely, and some, I am informed, died from suffocation.

#### 46. Dr. FRAZER, Wisbich, Cambridgeshire, May 5, 1803.

The first case I saw of the influenza was in this town on the 11th of March, about which time it shewed itself in a great number of families. No instance of the disease (within my knowledge) had previously occurred in the circumjacent country; but in a few days, and before we could suppose the contagion could pass from one person to another, the whole neighbourhood for several miles, was affected. Persons living in most retired and isolated situations were attacked. It raged with great violence for a month in both town and country, when it began to decline.

From the 11th of April to the beginning of May, I have seen the disease occasionally, but it was no longer an epidemic, it appeared sporadically, and now at least not at all contagious. When this disease prevailed the most, and was attended by the worst symptoms, the weather was remarkably

markably warm, the air dry and sultry, such as it is often observed in this country to be in July and August, previous to our sickly season, which follows in September and October. In the feebly parts of this county, and especially in the neighbouring parts of Lincolnshire, the influenza was soon complicated with or followed by a bilious remittent fever, of short duration, and often fatal termination. The sufferers were, in almost every instance, labouring poor, whose houses and beds were filthy, their diet scanty and of bad quality, who had little medical attendance, and who too often had recourse to spirituous liquors. The wealthy, on the contrary, in every case within my knowledge, escaped (i. e. recovered). Before I received your letter, I have often agitated within myself whether the influenza was propagated from person to person by contagion, or depended on a peculiar infectious state of the atmosphere. I have been much puzzled by what appeared to me contradictory evidence; but, upon the whole, I was inclined to refer the whole disease to the atmosphere. Several families, consisting of many individuals, were attacked nearly on the same day.

On the 16th of March, I was requested by a humane clergyman, as I rode along the road, to visit three poor cottagers families, who lived in a sequestered situation. In one family there were a man, two women, and four children, all of whom, together with the two other families, were attacked within twenty-four hours of each other. I have observed in many instances persons residing in the same family, and even sharing the same bed with the diseased, who have escaped; but I consider this fact as militating as much against the hypothesis of an infecting atmosphere as against the other opinion. My chief reason for supposing the disease to depend on the atmosphere was, from observing it in so many instances to be soon complicated with or followed by the prevailing diseases of the country, and which are not in themselves infectious. I think also that most of those who escaped were elderly persons or young children, who from their occupations or age were much confined to the house.

The measles and scarlatina, or any other infectious disorder in this country, does not spread so rapidly, and embrace such a number of persons at the same time, as the influenza has done; besides they are diseases against which we are generally guarded, and endeavour as much as possible to avoid. If the disease has lately appeared to attack a single individual in a family where none were attacked before,

before, and without infecting any other in the family; and if this fact has frequently occurred, as I think it has, does not this go far to prove the disease not contagious? But *suppose* it to be a fact, and it is equally if not more hostile to my hypothesis. Both sides of the question labour under great difficulties; the field of objections is too ample and difficult for me to enter on, and I must content myself with a few hints for your consideration. I have seen some instances where the disease in question seemed plainly to be communicated from the sick to the healthy, in others it gradually extended through a large family in a few days, while those who kept out of its way, have altogether escaped. I have been sometimes disposed to think, that the influenza was first produced by external causes existing in the atmosphere, and was afterwards propagated by human contagion. Is not the plague often produced and propagated in this way? and from what I have observed and seen of the yellow fever, I am disposed to think the same of it. I approve highly of your practice of fumigating with nitrous vapours, and have no doubt but it prevented the progress of the disease; but might not the same effects be produced, supposing the disease depended on atmosphere miasma? It at least corrected the atmosphere where those exposed passed most of their time. Your information respecting the re-sowing of barley is probably correct. I have not been in those parts of Norfolk where barley is sown, but have observed that the oats here have been much blighted by parching winds.

In a particular district of this country, a fever of a peculiar nature has prevailed, resembling the yellow fever in its symptoms, the rapidity of its progress, and fatal termination. I have often thought fumigations would be useful, but medical men are seldom at hand to direct them.

47. Dr. FRAZER, Wisbich, Cambridgeshire, June 12, 1803.

The influenza, which, as I before informed you, ceased here about the middle of April, made its appearance again in May; the leading symptoms were the same as in the first attack. About the same time also a most malignant fever, having some symptoms in common with the influenza, began to rage in that part of Lincolnshire contiguous to us, which has proved fatal to hundreds.

I have myself been severely attacked, I think, by influenza, and confined to the house for the last twelve days;  
the



the fever has now left me, but a troublesome cough, &c. still remain.

From this statement you will perceive that it was utterly impossible before now to indulge myself in the strong inclination I felt of writing to you. I find by the last number of the Medical and Physical Journal, that medical men are much divided in their opinions as to the causes of influenza. I perceive that you lean to that side which considers the disease in its origin and progress, as depending on human contagion. The arguments on this side I confess are strong and numerous, but I am less than ever inclined to subscribe to them, though I confess I am not able to refute them. In my last letter I informed you the disease appeared here in a great variety of persons at the same time. The town of Wisbich had, at that period, a circumvallum of health; none of the neighbouring villages had been visited by influenza; and if the disease was imported here, why did it not affect our neighbours, through whom the infected persons must have brought it? *Very young* and *old* people here have generally escaped, and many, of all ages, in families where the disease severely afflicted others. I am aware that this last fact militates against my own theory, because it may be said, if the cause of the disease existed in the atmosphere, why were not all affected? I have scarcely any reply to this, but the old one of *different degrees of susceptibility*, and this reply is applicable to both sides of the question. But is it not only possible, but probable, that contagious particles may exist in the atmosphere, totally unblended and separated from its other component parts? and may not these particles be taken in by some, while others altogether escape? May they not also be taken in, in greater or less proportion? Many parts of England have not been visited by the influenza; how is this to be accounted for? Not surely by saying they had no communication with the diseased. I have seen the disease in the most sequestered situations. It may be worth while to inform you a little as to the country I now inhabit; it is a country *sui generis*. We have a few inconsiderable rivers moving sluggishly to the sea, but every four or five acres for twenty miles around me, is surrounded by a ditch with stagnated water. When these ditches are filled with water, the people are healthy, and, in proportion as water diminishes, our endemic diseases increase. We had very little rain here during the winter and spring, but much dry weather, and unusual warmth in the spring months. These are the reasons, in  
my

my opinion why influenza was complicated with our endemics; and they lead me also to believe that influenza is a weed of our own growth, that is, that it would have appeared here without communication with any other place. What you observe with respect to the extending influence of miasmata is I think perfectly correct. It may be limited to half a mile or so, but we are not certain that that limitation depends upon miasmata being diluted by commixture with the atmosphere; there may be other causes. Some years back, while residing in Virginia, I visited a gentleman living in the county of Essex, upon the Rappahannock river. When this gentleman succeeded his father, he told me that he cut down a grove of trees that intercepted his view of the river, and also a marsh which lay near the river. Agues till then were unknown in his family. In the following and several succeeding years, almost the whole family, consisting of a number of Negroes and Whites, were attacked with intermittent fevers, and continued to be so until he replanted the trees, the removal of which Mr. Lomax at length suspected to be the cause of disease. Trees in that country are of rapid growth, and in a few years Mr. L. and his family were completely freed from the ague.

The re-appearance of the influenza after it had ceased for a fortnight is an argument with me for supposing the disease not contagious. In its second visit it did not affect several in a family as at first, but was confined to one, or at most two. I have seen a few cases in which the same person was twice attacked. Your patient, Mr. H. tells me, he had influenza at Clifton, and he certainly had it here.

Being struck with the re-appearance of the influenza, I took the liberty of questioning Dr. Frazer concerning the exact agreement of the first with the second complaint. In a letter, dated July 4, he says:

“ I am certain the influenza re-appeared in this neighbourhood with all the general symptoms which first distinguished it. I have now two patients, whose cases are as completely marked as any that occurred to me in March.”

48. Dr. CLARK, Newcastle, Tyne, May 25, 1803.

I am most decidedly of opinion, that the influenza of this year spreads by contagion, although I have not been able to trace its introduction into this part of the country with that certainty I did in 1782. But as it appeared first in the sea-ports, and has, and is still, gradually extending itself into country villages, it appears probable that it was imported

ported from London. It did not appear as an epidemic in this town till the beginning of the second week of March, and was at its height during the fine temperate weather in April.

Dr. Winterbottom gives me an account of some Negroes, from Sierra Leone, who have been apprentices to mechanics both here and at London, all of whom have had the influenza.

49. Mr. BARLOW, Blackburn, May 27, 1803.

The enquiries you have stated respecting the nature of the influenza, I will endeavour to answer with as much precision as time and circumstances will admit, but not having had any prior intention of publishing my observations on the subject, you will consequently conceive that I am less prepared to convey my sentiments to you than I otherwise might have been. The existing difference between the influenza and common catarrh, appears to me to rest in the greater degree of febrile symptoms, resembling those of typhus, and the continued period to which the fever has in a greater number of cases been protracted in the former than in the latter disease. Some of the leading symptoms attendant on catarrh have been comparatively mild, and in many instances totally wanting in the influenza, such as sore throat, hoarseness, sneezing, and defluction from the eyes and mouth, when the other symptoms of a more malignant nature, as frequency of pulse, pains of the limbs and chest, extreme restlessness and anxiety, (and in a few instances of females, syncope) with great prostration of strength, and confusion of ideas amounting during the night to delirium, have marked the peculiarity of this epidemic, and shews in some degree the difference betwixt the two diseases, though in a majority of cases the leading characteristics have been nearly concomitant.

The influenza pervaded this town and neighbourhood about the beginning of April, and disappeared in about the space of six weeks; during this period the weather was milder than it generally is at that season of the year, and some part of the time the heat was greater than what is common in this district; yet this state of temperature produced no manifest change in arresting the progress of the disease, when in all probability, and under similar circumstances, catarrhal affection alone would have disappeared; and no difference was observable either in the appearance or disappearance of the disease, betwixt that of the town and adjacent country. With regard to the distinction between

tween common catarrh and the influenza, as far as my observation goes, I am led to believe, that its progress in pervading the different districts of this island in succession, together with the diversity of symptoms above stated, render the two diseases in some degree different. To what this distinction is ascribable, whether to some specific state of the atmosphere, or susceptibility of constitution in particular classes of society of imbibing contagion, I am at a loss to determine; nevertheless, the disease has been comparatively less general amongst children than adults, and of much longer duration in the latter than the former; this circumstance however proves nothing, for we frequently observe diseases affecting children when adults are in a great measure exempted, such for example is the scarlatina.

I am well aware of the difficulty of establishing the truth respecting the contagious or non-contagious nature of the influenza; and with regard to its general diffusion amongst families where I have attended, I have not observed any material difference between the power of propagation of the influenza, and what has occurred at other times in the typhus fever. In many instances it has been diffused through whole families; in others, though more rarely, the disease has only affected one or two individuals out of a number in the same family, and where they have slept in the same room. With respect to the fatality of the influenza in this town and its vicinity, I believe the cases of this description have been few; and out of a considerable number whom I have attended, only one terminated fatally; this was a person considerably advanced in life, and who had been long afflicted with an asthmatic affection. It will be unnecessary to particularize the mode of treatment in this disease, presuming that it is little different from the general practice adopted by others.

50. *Dr. BARDSLEY, Manchester, June 15, 1803.*

Your plan of prevention, by the means of separation and fumigation, appears to be best calculated, from the evidence of former experience in checking the spread of contagious fever, to obtain this desirable end. I have considerable reliance, from many and repeated trials, on the power of acid fumes to weaken the force of, if not altogether to destroy, febrile contagion; and I am glad to find, that fumigation succeeded in your attempts to stop the progress of influenza. I cannot say it was fairly tried in our House of Recovery, but it certainly formed a part of our customary preventive plan, at the time the nurses fell sick,



sick, when attending upon the patients labouring under influenza. Yet as these nurses were not precluded from associating with the other domestic servants of the house, who were likewise afflicted with the disease, and concerning whom, no plan of fumigation or any other mode of prevention was put in practice; there ought not, perhaps, to be much stress laid on this point. The utility of separation is abundantly manifest. The facts, stated to have occurred in our lunatic hospital, shew this in the clearest point of view. But I proceed to answer your two queries.

I have lately seen more than a solitary instance of the occurrence of the epidemic, since it ceased to be general in this place, at the beginning of May. Other practitioners here have met with a few similar cases. I cannot affirm that the origin of the disorder, in these instances, arose from contagion being communicated through the medium of articles of dress or other families; but I think it not unlikely to be the case, as most of the members of the families, in which these solitary cases happened, had previously undergone the disease; and it was never thought necessary to adopt the usual precautions, (which all families, more or less, put in practice, after the existence of a contagious fever in their dwellings) to secure those who escaped the malady at an early period, from the danger of future infection.

The epidemic appeared in Manchester at an earlier date than in the neighbouring towns. An interval of about ten days elapsed from its spread here to the time of its reaching Bolton and some other populous places, situated at about twelve miles distance. It seemed to diverge from Manchester, as from a centre, to the surrounding country; but certainly appeared in the more crowded and populous towns, placed at the extremities of the circle, than in the intermediate space, which contains a thinner and more scattered population. This may be explained from the greater intercourse subsisting between the larger manufacturing towns and Manchester; and likewise from the consideration, that in towns, where the inhabitants are crowded together, the propagation of contagion is much more favoured than in less populous country villages and detached dwellings.

51. Dr. REDFEARN, Lynn, Norfolk, May 23, 1803.

I have been favoured with your letter, requesting any information I could send you, relative to the late general epidemical catarrhal fever, or influenza.

P 2

From

From the result of my professional experience in this town and its vicinity during the prevalence of the above mentioned epidemic, there have occurred many corroborating proofs of its infectious nature. (viz.) One individual being seized out of five or six in a family, and all the rest having fallen ill in succession. Wherever this has happened, the origin of the disease might in my opinion, be satisfactorily traced to the first person affected. Yet, on the other hand, it must be acknowledged, that I have met with some few exceptions to this statement, and directly the reverse; as, where one or two in the same family have been attacked with strong symptoms of the influenza, and all the rest have escaped; but exceptions of this kind happen in all other febrile infectious disorders, nor do I know that this non-susceptibility, with respect to contagious impressions, can be referred to any particular age.

The influenza raged here in the warm weather, as it did in the other adjoining counties.

I do not know of any instance where it terminated fatally in this town, although few were exempted, more or less, from its attacks.

In reply to your enquiries, that in some parts of Norfolk the soil (naturally light of itself) has been made so loose by the dry winds, that the sown barley was laid bare, and that it was necessary to sow again; I have endeavoured to obtain the most accurate information from some respectable and intelligent farmers in different situations, and find that the case has actually been so; they think the atmosphere has been drier this year than it has been for some years past; and to this they attribute the effects of the wind on the barley-fields being so general.

#### 52. Mr. HADLEY, Derby, June 18, 1803.

The influenza began in this town about the beginning of March, and declined in a great degree about the latter end of April.

It prevailed at Ashbourne, in this county, about a week or ten days sooner than it did in this town, and I heard of a few cases in the north west part of the county still earlier.

Single cases occurred for some time after the disease ceased to be general; I have met with a few so lately as the latter end of May.

I am disposed to think the disease is not very infectious, for although I have seen several patients in the same family with the complaint, I have not been able to ascertain

certain that those servants, and other parts of the family, who have slept with persons labouring under the influenza, have been more liable to it than such as have not been so immediately exposed.

Considering the disease is not very, if at all, infectious, I cannot say that I have known it spread from fomites.

In the treatment, I have found it necessary to bleed only six patients out of 200 or 300, and I have met with only one case which proved fatal, and that was in an old asthmatic patient; the disease in general yielded to the use of mercurial laxatives with antimonials, and the use of blisters, if the cough or pain in the chest were urgent. After the febrile state was removed, the debility and cough in many cases were very great, and which were very much relieved by the use of bitters and the digitalis.

53. **MR. REDDLESDEN**, Ashbourne, Derbyshire, June 28, 1803.

In answer to your queries, I have to inform you, that the influenza appeared in this town the first week in March, and increased rapidly during the whole of that month, and began to decline toward the latter end of April.

It did not visit the neighbouring villages before the 18th of March; all these places have frequent communication with Ashbourne, being their market town.

Some few individuals were attacked with this disease after it had ceased to become general.

I have reason to believe it is strongly contagious, as scarcely one of the family escaped when it invaded a house.

As an example, among many others, I was employed in a school for young ladies, with a family of forty persons, none of whom, to the best of my knowledge, escaped the disease.

P. S. It may not be amiss to observe, that I heard it was at Derby before we had it.

54. **DR. CURRIE**, Chester, July 19, 1803.

1. The first case of influenza I saw, occurred on the 30th of January. The disease gradually increased in frequency during the two first weeks of February; about the middle of the month it became very general, and continued to prevail till the middle of April, when its violence abated considerably. Cases, however, continued to occur during the remainder of this month, nearly, I think, in the same degree of frequency as at its commencement in the two

first weeks of February. The last case I saw was that of a medical friend far advanced in life; he had been busily employed in attendance upon the sick during the whole of this epidemic, but escaped till the first of May, when, having been exposed to considerable fatigue from a long journey, and other circumstances, he was in the evening attacked with the influenza; some slight degree of hæmoptoe afterwards occurred, and he sunk under the disease with all the symptoms of peripneumonia notha. He had for some years had tender lungs, and been subject to catarrhal affections in the winter.

2. In several situations in our neighbourhood the influenza was later in its appearance than in Chester.

3 & 4. I consider the influenza as an infectious disease: this will appear from its progress in my own family. My youngest son, a boy, was attacked with the influenza on the 30th of January; his mother was seized with it upon the night of the 6th of February; my eldest daughter was taken ill upon the 15th of February; and upon the 23d and 24th of the same month, the whole remaining part of my family, twelve persons, were seized. On the 25th of February, the servants being rendered incapable of doing the business of the house, a woman from the neighbourhood was brought in to assist. She remained with us one week, and, on the 8th day from her entering my house, she was seized with the influenza. Her husband was taken ill upon the same day. It is necessary to observe, that she went home every night; this appears as if the husband was infected by fomites.

The following fact appears worthy of observation. At Holywell, a populous town in Flintshire, eighteen miles from Chester, and where there is a large cotton manufactory, a typhus fever of uncommon malignity had prevailed for a considerable time; the manufacturers and inhabitants of the town had not been free from it for more than two years. On the appearance of the influenza the typhus entirely ceased, and only one case of fever has occurred since. I have not for many years known this country so healthy as since the influenza disappeared.

55. Mr. BADDELEY, Newport, Shropshire, June 27, 1803.

I know little of the influenza, except from my own and family's sufferings; seven out of nine of which were at one time, in different degrees, afflicted with it. I have been ill from it, more or less, since January last; my life was in great danger, and though I am much mended, I am  
not



not yet well; every change of the wind, or the weather, renewing my hoarseness and cough, with alarming sensations of suffocation or choaking, which have distressed me from the beginning; the cough is truly spasmodic. My partner, who, from my confinement saw most of the cases, is, with me, of opinion, that it is infectious, as it went through most families where it began; though from the following circumstance we have reason to think, that with care and attention, it may have been prevented; for, in a school for ladies in this town, of near thirty boarders, two of the children had the influenza, but by carefully separating them from the rest, and keeping the fumes of Henry's vinegar constantly in the room, and about the bed, all the rest of the family escaped it; but this is the only instance of prevention I knew practised.

We think the influenza began to make its first appearance among us about the latter end of January last, and became most general in March, since when it abated; but I have seen a solitary case within this fortnight. It appeared to me that the east wind, or any portion of it, increased and aggravated the complaint.

We have not been able to discover any difference in the time of its commencing in this small town and the adjacent country.

We have no instance in our practice by which we can determine the communication of the disease by clothes, or such like.

56. *Mr. Du Gard, Shrewsbury, April 18, 1803.*

1. The first case that I perceived was on the 20th of February, in a little boy at the public grammar school in this town; he was seized with the symptoms of influenza, and was ill a week: his bedfellow was not infected by him, nor were any of the boys in the room, and there were twenty in the same apartment: nor did any one in the house become attacked with the disease till this boy had been well eleven days, at which time five or six were taken ill, and the same number daily, till four-fifths of the school were affected.

At a lady's boarding school the influenza first shewed itself on the eleventh of March, and in the course of the two and three following days between forty and fifty young ladies sickened. In a week they were all well again.

At a thread and linen manufactory, about a quarter of a mile from any part of the town, a house is appropriated for the dwelling of about two hundred apprentice girls.—

The influenza appeared there on the 16th of March, when six or eight were attacked. The disease continued eight or nine days, in which time not more than eighteen had it.

2. The influenza here has been generally accompanied with symptoms which denote inflammatory action.

3. About two-thirds of the patients that I have attended, have complained of an affection of the chest.

4. The pains of the limbs resemble much more those of synochus than those of acute rheumatism.

5. Most of the patients that I have seen, in all about 158, have had some disturbed action of the stomach and bowels; many have had diarrhœa, others vomiting, and some constipation.

6. In young subjects the complaint has generally gone off with very little expectoration. In the middle aged there has frequently been an inability to take a full inspiration; and many old people have died from suffocation, occasioned by the copious secretion of mucus in the chest, and the consequent want of due oxygenation of the blood. In some bad cases the patients have looked very livid for a few days, and yet have recovered.

7. The influenza appears to me to be infectious, and the contagion to operate in about twenty-four hours.

8. Some cases where the pneumonic inflammation has run high, blood-letting has been advantageously employed. In a few instances it has been necessary to repeat the operation, and in some elderly patients, the cake on the surface of the blood has curled in at the edges, quite as much as I ever remember to have seen it in pleurisy. In general, however, the disorder has yielded to the operations of calomel, antimony, and blisters, \* without the aid of the lancet.

9. Gentle perspiration after an emetic was useful—profuse sweats kept up by heat were universally injurious.

10. Copious evacuations by stools, and the repeated employment of calomel, uniformly did good.

11. Opium given at first in large doses, or at all, seems to have done great mischief, which I have had opportunities of witnessing repeatedly. At the decline of the disease in elderly people, where the breathing has been quick

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\* Inflaming the skin very much with mustard cataplasms, has seemed to produce a better effect than blisters, and repeated when the oppression at the præcordia was great.

quick, five drops of laudanum with aq. kali, repeated every four or six hours, has been of great service. In these cases the short breathing I have supposed to be owing to debility and deficient absorption in the lungs.

About January, a great number of cats in Shrewsbury became seized with what is commonly called the *Hoost*, swelled heads, defluxion from the eyes and nose, with vomiting, sometimes purging, and sometimes costiveness. Some died, and others were relieved by means of opening medicines.

At the time the human species became a prey to the influenza, the dogs and horses were evidently affected: a few of the former have been seized with phrenitis, running about the streets biting every thing they met, and were killed as dogs labouring under the hydrophobia. Some persons who were bitten by one of these dogs, could not be satisfied till the part had been extirpated. I believe the disorder to have been simply phrenitis, because some dogs, so affected, have recovered, which favourable termination is supposed never to occur in hydrophobia.

Mr. Du Gard, Shrewsbury, May 9, 1803.

The instances of solitary cases of influenza are very rare. I have not in the course of my practice met with one, nor have any of the profession here; even supposing that there had been such cases, does it argue that the disease was not contagious?

The influenza was certainly sooner over in this town than in the villages around it.

During the Lent assizes the influenza was exceedingly prevalent in Shrewsbury: most of the country gentlemen composing the Grand Jury came to town in health, but very few returned without taking the disease along with them. At these assizes a cause was tried from Clun, twenty-seven miles S.W. of Shrewsbury; most of those who came here on that account were taken ill of the disease on their return, and spread it all over that little retired town.

Have you heard whether it was among the shipping?

The form of our jail is a quadrangle; the disease appeared in it on the 14th of March, and only thirteen prisoners had it out of about seventy, and all those were on the southern side of the prison.

In my former letter, I mentioned that a number of girls at a boarding school in this town had the complaint. I did not then inform you that it was also a day school, and that

that those who lived in town, and came from infected houses, in all probability brought the disorder to the rest of their school-fellows. I have since learnt, that at another school, consisting *entirely of boarders*, not one of the young ladies (in all about twenty-six) had the complaint, owing probably to the care of the governess in not exposing them to infection.

I am told, from good authority, that at the Ketley Iron Works, whenever one person became affected with the influenza, it almost universally spread to all the people employed in that particular department.

It is the opinion of all our physicians and professional men, that the influenza is contagious.

Is it not possible, that when a town becomes filled with infectious matter, a calm atmosphere may, at times, be so far saturated with contagious poison, as to communicate the disorder, without contact, to habits susceptible of morbid action?

Might not light be thrown on the question of contagious and epidemic diseases, by investigating their progress in countries where there is little interior intercourse, compared with the incessant and universal communication through the different parts of this kingdom?

I cannot say that I have known it communicated by the clothes.

The influenza appeared at Welch-pool about the middle of March; it has been very prevalent, but in general not severe. Almost the whole of the Montgomeryshire militia quartered there have had it, and many are still ill.

The debility was the criterion by which I distinguished the influenza from common catarrh.

A cat was attacked with what I supposed to be the influenza; it was caressed by a little boy during the time of its illness, and the child became indisposed in about twenty-four hours; he was removed to another house, where he infected his two attendants in about the same time—these three cases were severe. The cat was costive, and by the advice of one of the family, had an injection; it was held by six people, five of whom were seized in the course of forty-eight hours with the influenza.—Is it probable that these people were infected by the cat, or was it only a coincidence?

Fumigation is employed to purify the air in the Salop infirmary morning and evening, and the floors are mopped with lime-water some hours previous to the first process; it did not, however, prevent the introduction of the influenza;



influenza: indeed, how should it, when the friends of the sick are perpetually visiting them from the town?

58. Dr. THORP, Ludlow, June 2, 1803.

The influenza made its appearance here about the latter end of February, and still continues, although in a trifling degree; it has been gradually declining for more than three weeks. It reigned with considerable violence for more than a week in Worcester, Birmingham, and Shrewsbury, before it made its appearance in Ludlow. Our situation might probably render us less liable to a disease of that nature, than many larger, closer built, and more populous towns; in addition to which I have observed, that those living in low situations have been first affected, and afterwards those on higher ground, and that it even now rages in some of the more mountainous parts of Wales with considerable violence.

It was seldom confined to one individual in a house, except where the acid fumes were used; but no regular certain day could be fixed as to the infectious stage of the disease (if infectious it is), as in some cases two or three were attacked on the same day; in four, five, or six days after another, and so on till generally; at least, often it went through the whole family; neither was having laboured under it once any security, as I know repeated instances of patients having been affected three or even four times, and the last attack (from the previous state of debility) has generally been most violent.

I do not recollect any instance where the disease appeared to have been communicated by articles of apparel.

Having answered your queries, I shall beg leave to state a few circumstances which have occurred to me.

1st. I almost invariably found, that where an emetic was given in the first, or early in the second day, the disease was cut short, and the patient after experiencing a slight degree of debility recovered.

2d. Wherever the lancet was used after the first day, the disease became tedious, debility excessive, almost constant nausea, pain in the head violent, and frequently delirium.

3d. Finding the disease spread rapidly, and that the common routine of practice only tended to abate instead of removing the distressing symptoms, and about this time the weather being close and sultry, I determined upon trying acid fumes, with a view of preventing, at least, the contagion spreading, if not of relieving my patient; in  
both

both which cases it succeeded beyond my most sanguine expectations, as I found that it not only almost immediately proved highly grateful to the patient, but most effectually prevented the spreading of the disease in the family, as I do not, in any one instance, know of a person being infected after it had been made use of, and the cases where I recommended it were very numerous.

4th. Those drinking port wine in moderation, and living much in the open air, appeared less liable to infection.

5th. The weather, about the middle of April, proving hot, vomiting of blood was very common, and the disease, in many respects, put on a very putrid appearance.

6th. Weakly children and old people seem to have suffered most.

I have, as you requested, applied to most of the medical men, within 20 miles of this place. They all agree in this point, that no complaint was ever so prevalent, and that when the lancet was used late in the disease, it generally proved fatal. The measles have prevailed to a greater degree, in this part of the country, within these last two months, than ever was known, and elderly people, who had before escaped, have been very generally affected. I have had one patient of eighty-nine years of age, and great numbers of from fifty to seventy.

I have not heard of any practitioner in this part of the country using acid fumes.

#### 59. Mr. HALL, Bridgnorth, July 1, 1803.

As accurately as I can ascertain, the first genuine case of influenza occurred on the 19th of March; from that time the disorder made rapid progress till the 28th, when we had the greatest quantity of disease. On that day I visited about seventy patients. On the 5th of April the disease put on a more inflammatory form, and I was induced to make pretty free use of the lancet for some days. After this the number of our patients was considerably lessened in the town; but we had still some sick families, at a distance, till the 26th, when the scene closed with us; the last case being as distinctly marked as the first.

Though at first of a contrary opinion, I was soon convinced that the disorder was of a very contagious nature. It appeared very clearly to me, and to the heads of all the numerous families where I attended, that the complaint did pass from person to person; and the proof is very sufficient, no one family having been affected *en masse*, where the disease did not first appear in some individual of it.

60. Mr.

60. Mr. YONGE, Sheffnal, April 27, 1903.

Just before the arrival of your printed letter I was confined to my bed by the disease which is the subject of it; and from the effects of which, I am not yet free. Grafted on my habitual catarrh, the pneumonic affection was severe, and after an illness of three weeks it left me extremely feeble both in body and mind, nor am I yet entirely free from the phthisical symptoms which at one time were considerable; *i. e.* I cough, (as in former times), on every alteration of exposure to warmer or colder atmospheres; and morning sweats, with some expectoration, still occur, more or less, daily. But I am certainly recovering both flesh, strength, and appetite, and doubt not shall soon be perfectly well. This cause, and my limited experience of the disease, disabled me from answering your queries, nor am I now able to do so, with much confidence in my own opinion. In reply to the first, my sentiments correspond with your own, that the disease is infectious, and for the following reasons.

2. In a great majority of those cases which have fallen under my own observation, I have been able to trace previous connection between the patient and some other person or place wherein the disease existed.

In several situations where the residents had little or no communication with infected persons or places, the influenza has appeared late, or not at all.

In both towns and families, the usual progress of the disease has been by such a succession of patients, as seem more naturally the result of contagion than of any cause operating more generally, such as may be ascribed to a specific state of the atmosphere. It has occurred, not unfrequently, that after one member of a family has sickened, all the others have followed in rapid succession; and sometimes three or four persons have, in the first instance, sickened at nearly the same time. In the only case of this kind I have met with, the previous connection of the patients with the infected was certain. I am unacquainted with any instance, where a village, town, or district, has become *at once* generally, or uniformly infected. On the contrary, from all the accounts I have been able to obtain, the progress of the influenza has been so slow and successive, as excludes the probability of any cause more general than contagion, or individual communication. I have not seen acid fumigations fairly tried.

3, 4, 5. Many instances have occurred where the influenza was so mild as not to be distinguished from common catarrh;

catarrh; but, in general, it was distinctly marked, and easy to discriminate. I think, that in the present disease, the fever is much less dependent on, and less proportionate to the pneumonic affection, than in common catarrhal fever. In many cases the fever has been severe and permanent, where the affection of the lungs has been inconsiderable and soon relieved.

2d. The symptoms of fever are different from those which usually present themselves in pneumonia.

1st. In the excessive pain about the loins, hips, knees, and extremities.

2d. In the lassitude and uncommon prostration which accompany or quickly succeed the onset.

3d. The fever, which at first generally appears inflammatory, often degenerates into continued or low fever, nor will bear sometimes, even at the commencement, such treatment as in pneumonia is generally useful. I think I have observed also, both in children and adult patients, more affection about the larynx than is usual in catarrh, and which has produced the appearance of cynanche at the onset, and much aggravation of the cough in later stages of the disease. The first decided case of influenza I saw in the early part of March, but it had then existed in our neighbourhood near a fortnight, and has not yet ceased there.

61. Dr. MORRISON, Wolverhampton, June 26, 1803.

I must confess I did not make a particular memorandum of the exact time of the appearance of the influenza; it was near Midsummer,\* and made such rapid progress, that in a fortnight it arrived at its height, and continued in that state about six weeks, when its force gradually declined. There were several instances of the same person afflicted twice, and the last time in a more severe manner than the former; the old and weakly suffered most, and I have seen several instances in young and delicate females, where the greatest attention was necessary to arrest the alarming symptoms of an incipient phthisis. I did not find any material difference between the town and country as to the attack and continuation, but it certainly appeared first in the town. Notwithstanding there was a great variety in the thermometer during that period, I did not perceive the symptoms increase or decrease, in consequence of cold or heat.

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\* Should not this be Easter, or Lady Day? T. B.



heat. It is difficult to say whether it was caused from a certain constitution in the air, or passed from person to person, though I should incline to the latter opinion, because many in a family were seldom afflicted with this disorder, in the first instance, at the same time, but it regularly passed through a family, with the intermission of several days, and often weeks, from one person to another. I have no particular reason to ascribe it to fomites.

I wish you much success in your undertaking, as it will certainly be of great public utility.

62. Mr. SANDFORD and Mr. FIELD, Worcester.

April 12, 1803.

1st. I am inclined to think the influenza is contagious, because I have observed that, for the most part, it affects persons in succession, living in the same house; and two persons sleeping together seldom or ever fail to communicate the disease. Mr. FIELD says, "this is a difficult question to decide." I am inclined to think it is *not*, because in some large families, where more than single individuals have been affected, it has not been in that regular gradation or period, that marks in general other contagious diseases. This answers the second query also.

3d. That at its *first* seizure, and if it was not known that such a disorder was prevailing, it would not be distinguished (in its first stage) with any peculiar or independent symptoms. This also answers the fourth query.

5th. In *all* the instances I have met with, the depression of strength, languor, &c. commenced in twenty-four hours, and sometimes sooner after the first attack. I have seen less of pneumonia in its progress, than of the disposition to low fevers; in some cases it has been accompanied with relaxation of the tonsils, and in some few the disease has terminated in periodical head-ach, and other characteristics of marked debility.

In answer to this question Mr. Field observes, "The symptoms of debility were unusually great and rapid, and in this instance chiefly was it distinguishable from common catarrh; in many it certainly degenerated into pneumonia and typhus."

6th. I do not recollect when I saw the first well marked case of influenza in this place, I will therefore transcribe Mr. Field's answer to this question, which is more decisive; and in the latter part, perfectly agrees with my almost daily experience,

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"The first distinct instance I saw in the neighbourhood of Worcester, was on the 10th of January, and the second not till the 11th or 12th of February. Fresh cases are now daily occurring, but I think the symptoms are not in general so violent as earlier in the disease."

Scarcely any invalid has escaped *this*, superadded to other complaints, but particularly such as have been labouring under affections of the chest.

63. Dr. SYMONDS, Hereford, June 30, 1803.

I perfectly agree with Drs. Blount and Hughes in every particular, excepting, that I firmly believe the disease *was contagious*; and how it was possible for any one to suppose it otherwise, I cannot conceive. In many cases in this neighbourhood, the attack was very similar to that of typhus fever; and so great was the pain in the head, and prostration of strength, that a few minutes produced delirium, and inability to move.

64. Mr. YEO and Mr. BURROUGHS, Clifton.

1. If the following facts, which have been collected from a very extensive practice, be at all conclusive, we think ourselves authorized to determine that this disease is certainly contagious.

2. First, what must have struck every observer, is the extension of this disease, for in whatever house it appeared, it almost invariably attacked every individual comprising the family, notwithstanding every precaution to guard them against the application of cold, and other causes commonly producing catarrh; and that the complaint appeared to be more prevalent with those using these means of defence, but who were within the influence of infection, than with those who were more frequently, or constantly exposed to the atmosphere, and yet out of the reach of contagion.

3. That it has made its appearance where the subject has not been exposed to the common air for several months, but with whom, others seized with this disorder have had frequent communication. Further, in a family, where the sick were so numerous that it became necessary to call in the assistance of a nurse, the woman, although in perfect health when she commenced her attendance, and during the same, was never exposed to the cold, yet took the complaint, and died.

4. In all cases where we have attended, we have found  
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the accession of the disease accompanied with more shivering, followed with more pyrexia, with a greater affection of the head; in the latter part of the disease, we have found it attended with delirium, and in almost every instance, with a greater degree of pneumonic inflammation than generally takes place in *common* catarrh.

4. Upon the whole, we think this a more violent kind of catarrh, but of a contagious nature; therefore, what has been enumerated in the third division, will appear sufficiently characteristic of this disease, to distinguish it from *common* catarrh.

5. In every instance, where the disease has appeared, even in the mildest manner, it was accompanied with greater debility than we ever knew attend almost any complaint of equal length; and we have it in our power to answer the inquiry, whether the disorder has not appeared in almost all the stages of pneumonia to low fever? by saying that we have a patient at this time, who was attacked with this disease three weeks ago, and who from violent pneumonic inflammation, will shortly die of phthisis pulmonalis and typhus fever.

From visiting houses where the disease had already existed, we have had opportunities of seeing patients on the first day of attack, and have seen others in the same family fall ill in succession; the febrile state for the most part terminates in the first week, unless attended with the more violent symptoms enumerated in the third division, and then it has continued a fortnight or more, and perhaps at length has ended in low fever; but this termination of the disease has occurred to us in two instances only. Although the fever generally subsides in a few days, yet the catarrhal symptoms continue much longer, and oftentimes remain very obstinate, insomuch that we have every reason to believe, that in the phthisically disposed it will be productive of consumption.

65. Mr. TAYLOR, April 10, 1803.

My observations of the late epidemic induces me to think it contagious.

My own family, with the addition of several others, gave the most decisive proofs of this.

The catarrh and influenza have their distinctive characters, which are easily observed.

The disease did not terminate as catarrh usually does, but left a train of low nervous symptoms, with universal debility and total relaxation.

(No. 55.)

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The first person I visited in the complaint, was on the 10th of March; the last, about the end of the month.

66. Mr. TUDOR, Bath.

I am disposed to think it contagious, (though not at any considerable distance) and for the reasons which I shall state in the answer to the next query.

I have generally observed, that as soon as one individual of a family became infected by it, most or all the others soon took the infection; and some cases occurred to me where the person had not, for some months past, been exposed to the atmosphere.

In many cases with great difficulty. In general, however, it is characterized by great depression of strength and spirits.

Mild cases were scarcely distinguishable from common catarrh; but besides the great languor immediately succeeding the febrile stage, the cough I think was peculiar in having a hollow sound; in some cases, almost resembling the whooping cough.

The former part of this question I have already answered in the affirmative; and the different gradations of the complaint were so great, that cases existing in the same house, at the same time, were not always sufficiently characterised to bear the same name.

67. Mr. BOND, Glastonbury, July 15, 1803.

Agreeably to your request, I will endeavour to answer your queries as circumstantially as possible.

1st. The influenza appeared here the beginning of March, became general the latter part of that month, continued so through April and part of May, began to decline about the middle of that month, and finally left us early in June.

2d. I did not remark that it had different appearances or effects in different villages in our vicinity except to the upper part of this town (the highest situation in this neighbourhood) which escaped its influence.

3d. After the disease was general, the instances that occurred assumed an intermittent type.

4th. It appeared to me to be contagious, as it did not seize families all at once; for, first one individual was attacked, and in a few days after more were, and so on until all, susceptible of the disease, had been affected by it. Children under the age of ten years, almost universally escaped its influence.

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The general symptoms of the epidemic were, first, chillness and shivering, alternating with flushes of heat; spontaneous languor and debility were the grand characteristics; transient flying pains of the head, breast, shoulders, back, knees, &c. succeeded until the pain fixed on some part more particularly, when it became very distressing; and in all, the mucous membrane lining the mouth, lungs, nose, &c. were more or less affected; in the lungs it produced a tickling cough, attended with soreness of the breast, and expectoration of thin, sharp mucus; others had the throat more affected; and in others, the eyes were the organs most affected; in some an intolerable head ach was the most distressing symptom. The pulse was generally weak and quick, from 100 to 120 in a minute; the tongue moist, and covered with a white mucous; the urine high coloured and clear. Those who had a predisposition to pulmonary complaints suffered severely, as did those who were afflicted with dyspepsia; in fact, all those who died might be referred to one or other of those classes. There were two or three instances of dyspeptics who were carried off by it, even before their friends thought them in so much danger as to require medical assistance; they seemed, from what I could learn afterwards, to have been carried off from excessive debility. The general remedies made use of, when the disease was pure and unmixed, were pediluvia, neutralized ammonia, sp. æther. nitr. wheys, cool air, &c. and as I remarked that those who had angry eruptions uniformly recovered, it led me to the use of blisters (which were of great service); opiates, if had recourse to when the cough was incessant and attended with a thin defluxion from the lungs, were found of great benefit. Though no friend to phlebotomy in this disease, yet particular instances occurred, *in the young and robust*, where the lungs were much affected, that made it absolutely necessary; in one instance, to the extent of three times in 36 hours; and I believe the patient owes his life to the free use of the lancet. The high degree of inflammation in this case arose from his getting wet through two or three times on the day that he was first attacked.

The dyspeptic patients labouring under the disease, were obliged to be treated in a different manner. The contents of the stomach, &c. were obliged to be evacuated by gentle emetics, and doses of calomel and jalap, and afterwards the *vis vitæ* was assiduously supported. When the disease assumed the intermitting type, recourse was had to red bark as soon as the intermission was compleat, and if taken

228. *Mr. Symes and Mr. Steel, on the Influenza.*

to the extent of half an ounce in sixteen hours, never failed to prevent the recurrence of the fit.

68. Mr. SYMES, Bridgewater, April 9, 1803.

Having been absent from Bridgewater the greatest part of the months of February and March, I have not had it in my power to make such observations on the prevailing influenza, so as to answer your questions with any degree of accuracy.

The influenza had not made its appearance at this place on the 12th of February, at which time a considerable number of the inhabitants went to London, where many of them were immediately seized with the disorder; and as far as I can learn from the report of others, it did not appear at Bridgewater, until the return of some of the people from London, who either then were or had been affected with it. There are many places in the neighbourhood of Bridgewater with which the inhabitants have no intercourse, where the influenza has not yet made its appearance.

August 4, 1803, Mr. Symes, in conversation, assured the Editor of these papers, that from inquiry among his medical brethren, he ascertained the exactness of the above statement.

69. Mr. STEEL, Abergavenny, July 6, 1803.

1. The first person that applied to me was seized with influenza in the market on March 14. As the attack was sudden, and the symptoms violent, she had great difficulty in getting home; she appeared, when I saw her, to labour under violent spasmodic asthma. I had no fresh case after April 20.

2. The disease did not appear in the country before the 20th of March; near this time I observed it at Bleanavon iron works, where are about 1200 people.

3. In some situations I believe that infection was communicated from the sick to the healthy.

At the iron works above mentioned, the epidemic was particularly violent, and in several instances fatal to young men; in these cases the patients were carried off by typhus fever. They were first attacked with pain in the head and back, and had no symptoms of thoracic inflammation; indeed I know of no young man dying who had pulmonary disease, except it existed before.

I observed also, that if a person was attacked in a house where another died, or where the complaint terminated in typhus,

typhus, the symptoms were more severe than where the complaint had not (may I say) degenerated to that state.

Whether influenza was contagious in its common form or not, I am convinced it was when it terminated in typhus fever.

4. I did not observe the men attacked in classes at Blea-navon; but those employed about the fire were generally sufferers from pneumonia, and the colliers and miners from pain in the back, &c.

Every woman I attended in child-bed was greatly distressed with cough and fever.

A gentleman who had been in the north of England, came home perfectly well, when his family were ill of the complaint; in less than three hours after he went into the house, he was taken ill in the same manner as his wife and servants.

70. Mr. REECE, Cardiff, June 11, 1803.

With regard to my opinion, if influenza be contagious, I answer: I firmly believe it is contagious, though I also believe a particular state of atmosphere or a particular disposition in the habit, or both, first produced it, and might continue to produce it a short time, till the wind changed from and to every point of the compass, which it did during the reign of influenza. Surely *then* influenza was kept up by contagion. I have known many in a family ill, and some in a very slight degree in comparison to the others. It began here, as far as I know professionally, on February 18. Sometimes only one in a family was affected, sometimes it began with one, and ran through the whole house. I have had five or six, or even more in one house, where the mistress first had it, her sister next, the waiting maid, the nurse, the footman, the groom, house maid, and cook. The husband (who drinks full enough) had it in so slight a degree as to require no assistance. I do not recollect any person ill within six weeks ago. In my midnight midwifery gossipings, I made many inquiries of the old women who attended them. The constant result has been, "It came in the air to one person in the village, and then most of us who went to see her or him caught it." I asked if they found it more catching when the sick person was confined to a close room; but I could get little satisfaction in that inquiry, as in this country the doors of the cottagers fit the frames so badly that there is plenty of air coming in; and the windows, as I have often experienced to my sorrow, have admitted too much, from being generally

rally in a shattered condition. As to the treatment I used, (and here I feel myself on the brink of a precipice) I generally gave a saline mixture in a state of effervescence with emetic tartar, sometimes with camphor, opium, emetics or laxatives, according to circumstances. I do not recollect any thing further, but will feel happy in answering any questions you shall put.

71. Mr. WILLIAMS, Bridge-end, Glamorganshire, April 11, 1803.

As far as I am enabled to judge from my own observations, I am undoubtedly of opinion, that the prevailing disorder, which has been generally termed influenza or catarrhal fever, is in its nature truly contagious, and communicable, like the poison of typhus, measles, or small-pox, either in a gaseous state or in the form of infectious effluvia.

That the changes of the atmosphere have a very great influence over the human system is undoubted; that these variations combined with moisture have a tendency to produce catarrhal and pneumonic disorders is equally certain; but why a whole family should experience the effects of a disorder which a neighbouring one has not at all suffered from, appears to me inexplicable upon any other principle of reasoning, than that whatever might have been the cause or wherever the origin of the disorder, its increase was owing to the diffusion of a poison and the active operation of some kind of morbid particles. This could not have been the case had it merely depended on the variations either in the weight or temperature of the atmosphere, for why should an effect be partial, and at different times produced, where the influence of a cause had been contemporaneously and universally operating? I have known an instance where several persons (who had lived in a situation, which had remained free from the disorder) upon leaving it, and passing through a country and mixing with people among whom the epidemic was very rife, return with all the marked symptoms of the influenza. From circumstances, I am convinced they could not all have been affected with cold, and, excepting the prevailing epidemic, the country was healthful. How then could this have happened, unless that in one situation they subjected themselves to exposure to some contagious influence? If you suppose a marked predisposition in one person to catarrh from the slightest cause, it can scarcely be deemed probable



probable that the same cause could have operated generally upon several others. These are the grounds I form my opinion upon.

I think a general comparison of cases enables us to distinguish between the two diseases, though undoubtedly in many instances, the commencement, the pyrexia, coryza, want of appetite, as well as the symptoms of amendment, (where an increase and freedom of expectoration seem to have removed the disorder, or perhaps as frequently a diaphoresis) have bore so striking a resemblance to those generally produced by catarrh, as scarcely to allow the nosologist reason and opportunity for discriminating.

Had I seen a solitary case only, I would have denominated the disease catarrh, though here I should be at a loss to account for appearances in some degree anomalous; but far from conceiving the disorder to have originated from any infectious miasma, I would refer the protraction of it to something idiopathic in the constitution of my patient, or suppose nature might have been thwarted in her operations from terminating catarrh in the usual manner. In elderly people, I have observed a considerable suffusion of bile, so much so, that the tunica conjunctiva of the eye has been nearly as much coloured as in jaundice. In such cases I should attribute the slow progress towards recovery to something wrong in the hepatic system and its secretions.

It is under this head I should form my diagnosis, for scarcely in any catarrh have I observed so great and so immediate a depression, or the pain in the back and limbs so violent; and at the decline of the disorder, the lassitude, the total incapacity for exertion, with the great disposition to profuse perspiration from the slightest cause, appear to me to distinguish the influenza from catarrh. The loss of appetite, even after the removal of all febrile symptoms, was very marked and particular, and I have observed that a week or nearly a fortnight elapsed ere the stomach became reconciled to usual habits of diet. I have seen many cases where pneumonia accompanied the catarrhal fever, and indeed others where cordials and a generous regimen seemed to have proved highly beneficial towards removing the disorder.

The first case I saw was about the beginning of the second week in March, and the last attack on the third of April.

[ To be continued. ]

OBSERVATIONS

OBSERVATIONS ON THE INFLUENZA; *communicated by*  
 Mr. T. PEAL, of Aberdeen.

THE Influenza, or epidemic catarrhal fever, appeared first in Aberdeen towards the latter end of February; it seized those who were affected with it in the same manner as the continued fever, which generally prevails here, described by Dr. Ferguson in his Essay on Fever. It could be easily distinguished from it by the patient not being so violently affected, and by the disorder of the lungs and catarrhal spit. The patients complained of a violent pain in their head, accompanied with languor and soreness of their bones. In some, the affection of the lungs was very violent, attended with pain in the breast, cough, dyspnoea, and catarrhal spit, not unlike pneumonia; while in others, the cough, expectoration, &c. were but slight. The pulse was small and quick in most of the cases. A great many, who were affected with influenza, did not apply for medical advice; with them, for a considerable time, it went by the name of a cold, and was not considered as a species of catarrhal fever until it appeared as an epidemic in other places. It is a general custom with many in Aberdeen and its vicinity to bleed in the month of March, whether they are ill or not, with a view (as I suppose) to prevent inflammatory disorders, which generally ensue in the spring after hard work. I made it an object of inquiry to ask whether those who were bled in this month had the disease milder, or escaped it altogether; so satisfactory was my inquiry in this particular, that all who were bled, and not previously affected with influenza, generally escaped it. I bled about fifty, and nearly the same number affected with influenza applied to me for medical advice, who had not been bled. The greater part of these patients were men, and none under ten years of age. I bled the most of them, and found it very servicable in moderating all the symptoms. I was called about this time to some young children in fever, but could not distinguish whether it was influenza or fever from cold. Towards the latter end of March, the influenza was at its height. Vomits were generally applied by the patients themselves. In some cases, where the pain in the head and fever were violent, temporal blisters and the saline mixture were had recourse to. Where the affection of the lungs was severe, a fomentation of warm vinegar and spirits applied to the pained part, at the same time using the mucilaginous mixture with tincture  
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of opium internally, seldom failed to make the patient soon better. The influenza was remarkably mild, and after the third or fourth day, the patients generally felt an alleviation of all the symptoms, excepting in cases where it was combined with chronic cough and catarrh. Catarrh is very common in Aberdeen, and not unfrequently chronic, returning and affecting those of a weakly habit who are much exposed to the coldness of the atmospheric air; it is to be distinguished from influenza, by its not being contagious, but generally proceeding from atmospheric influence, and by its duration. The present and former epidemic influenzas would appear to be very infectious, from the number so suddenly affected, from the rapidity of its propagation, and from its preserving its form amidst the different states of temperature, climate, and different habits of life.

Most of the epidemic exanthemata are infectious, and affect persons but once in their lives. Query, were those affected with the influenza, when it raged last in 1788, exempted from it at this time? I was for three or four days very ill with it in 1788, but have escaped the late epidemic. All those who have applied to me at this time, were not affected with the influenza when it prevailed last. Those who were violently affected, continued to have a little expectoration in the morning, after all the other symptoms were gone; the weather becoming warm, has tended much to restore the mucous glands to their healthy state.

The measles are the present epidemic in Aberdeen, they are affecting a great many children, and seem to be more violent than the influenza. The fever attending them is particularly severe. Bleeding with the lancet or leeches; gentle laxatives, and mucilaginous drinks, are the common agents employed in the cure.

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*To the Editors of the Medical and Physical Journal.*

GENTLEMEN,

**I**F you think the following remarks on Influenza worthy a place in your Journal, they are at your service.

The disease made its first appearance here about the beginning of April, and spread with astonishing rapidity; the three last weeks of March had been rainy and chill, the wind

wind generally west or south west; the mean height of the barometer nearly 29.5, the thermometer about 42, but frequently, during the night, it fell as low as 30; the quantity of rain during that period 1.127 inches.

Its symptoms, in general, were shiverings, severe pain in the head, nausea, frequently vomiting, hard dry cough, compression of the breast, and a sense of soreness about the throat and fauces, as if the skin was off; the breathing was difficult, pulse quick and full at the beginning; and in every case that I saw, the debility was much greater than could have been expected, either from the duration of the disease, or from the severity of the symptoms; no running from the nose or eyes took place in any of my patients, but a number of them were affected in the latter stages of the disease, and some even in the beginning with severe griping pains in the belly, tenesmus, and considerable discharge of slimy matter tinged with blood; in some instances, affection of the joints resembling acute rheumatism took place, which went on from joint to joint, till it affected in its course almost every joint; those were all young people, and the recovery was very tedious.

When the disease was protracted beyond the tenth day, the pulse became gradually weaker and quicker, and brought on a typhus state.

My mode of practice, at the commencement of the disease, was to give a solution of antimon. tart. in small quantity, repeated till it produced vomiting; in this way it frequently caused a few loose stools; after vomiting, the feet were bathed, and perspiration promoted by inhaling the steams of warm water and vinegar; if the antimonial had not procured passage of the belly, laxatives were given; and when stitches and difficulty of breathing were troublesome, blisters were freely used; if the cough was very distressing, sometimes recourse was had to opium. I had pursued this plan for some time, when accident brought me acquainted with a remedy which I think was productive of very beneficial effects.

A young man who had been affected with influenza for twelve days, had been advised by some acquaintance to drink a considerable quantity of whisky; this had exasperated all his symptoms, and brought on so severe a vomiting, that every thing he took was instantaneously rejected; his belly was bound, skin dry, and his pulse 130, weak and intermitting. Before I saw him, a number of injections had been given, some of them very stimulant, but without effect; I ordered an injection of nicotiana ʒij.  
infus.



infus. in aq. bullient.  $\mathfrak{z}$ xij. to be given; it produced an immediate evacuation of a considerable quantity of indurated fæces, caused severe vertigo, faintishness, and at last a copious perspiration, followed by sound and refreshing sleep; when he awoke his fever was greatly diminished, and the vomiting did not again come on; and without any other application, except a plentiful use of wine, in which a small quantity of rad. gentian was infused, he quickly recovered.

As this remedy had been so useful in this case, I determined to try it in others: and as in the beginning of the disease costiveness was frequent, I began by giving the injection of a strength in proportion to the state of the patient, but always wished, that besides emptying the bowels, nausea, or even vomiting might be excited; whenever this took place, it was followed by a profuse sweat and sound sleep.

After having found the beneficial effects of the medicine in injections, its internal use by the mouth was tried; the preparation made use of was the vinum nicotianæ, given at first in small doses, frequently repeated, combined with some aromatic water or tincture; it was always pushed so far as to produce giddiness of the head, or nausea, and when carried this length, it almost in every instance brought on a large discharge by the skin and kidneys, and sound sleep; it also caused a considerable increase of expectoration, and relieved the cough; indeed, in my opinion, its anodyne effects were equal to those of opium; and as it aided the discharge from the breast, which the other retarded, it was undoubtedly preferable.

Since I first became acquainted with the sudorific and narcotic powers of the nicotiana, it has been used in every case that came under my management, except those where gripes and bloody, slimy stools took place, and always with evident advantage; nor did I see, in any one instance, the least disagreeable circumstance arise from its use.

When, after the first exhibition of the medicine, any fever remained, and the cough was troublesome, a second dose was given in the course of two or three days after the first, and managed just in the same way; the operation was equally successful as before, and the symptoms proportionally diminished; a third application I never had occasion to make.

I wish however to remark, that during the course of a month that the medicines, as mentioned in the beginning of this paper, were used, my practice was tolerably successful, but not equal to what it was afterwards, as my patients

tients both recovered with less pain, and in a much shorter period, by the use of nicotiana, than by all the other remedies formerly employed.

At the same time, however powerful this medicine might appear to be, when stitches existed, blisters were always employed, and frequently the use of steam, by way of fomentation, to the fauces and bronchia.

In those cases which affected the joints, an external application of *ol. terebinthæ et sp. cornu cervi, p. æ.* was applied every night, and the parts afterwards covered with flannel, but the utility of the external application was much aided by the sudorific effects of the nicotiana.

When diarrhœa, with gripes and slimy stools tinged with blood, took place, *pulv. jallapæ comp.* was used, solutions of the neutral purging salts, and *tinct. theb.* in proportion to the pain; after free evacuation, cordials and stomachic bitters with wine.

I may probably have thought more of the medicine mentioned above than it deserves, it may not be so successful in another situation as here; but from all I have observed of its mode of action, no ill effects can happen from giving it a trial; even in cases of catarrh, where copious perspiration is required, it will probably have considerable success.

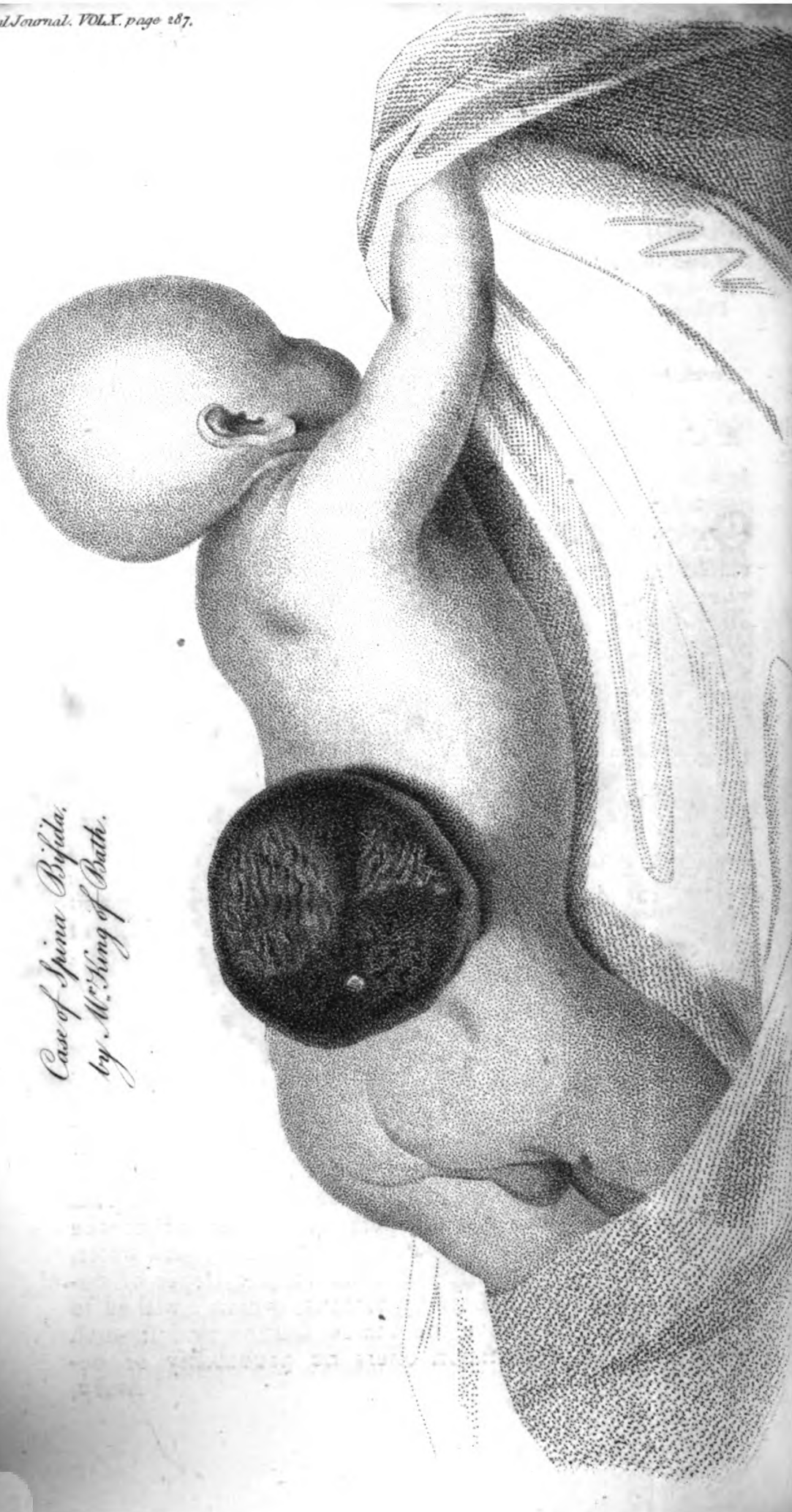
In two cases that occurred here, the influenza was undoubtedly produced by animal infection; one of the persons was a farmer, who went to sow corn for a neighbour that had the disease; to hold the seed they gave him a sheet upon which a sick man had lain, and perspired during the night; it was scarcely tied round his neck, when he found the effluvia produce squeamishness; he was seized with shiverings before he left the field, and his symptoms were nearly the same as those of the person from whom he received the infection.

The second was a young man in perfect health, who came to visit his brother labouring under influenza; he lay that night on a bed which his brother had recently quitted; he found the smell so disagreeable that he could not sleep; in twenty-four hours he was seized with the disease, and his symptoms were nearly similar to those of his brother.

In Vol. ix. No. 48, Page 173, you inserted a case of mine, where a very large quantity of *cerussa acetata* had been taken without producing any ill effects; since that time I have used it in a few cases of hæmorrhage, both external and internal, and have given it to the extent of two drachms a day without any inconvenience; but although



*Case of Spina Bifida.  
by W. King of Bath.*





it may be given with safety, yet in every trial its effects were far inferior to the solutions of sal. mart. of alum, &c. or even to dilute vitrollic acid. I intend trying the subject still further, in order to establish the comparative merits of the acetata.

I am, &c.

Dumbarton, July 11, 1803.

ALEX. HUNTER.

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A CASE OF SPINA BIFIDA; *communicated by Mr. JOHN KING, of Bath.*

[ With an Engraving. ]

ON the morning of the second of March last, I was called to a poor woman in Bath to attend her in labour, when I found the patient in the regular progress; the os uteri dilated, and the membranes not ruptured; the pains, or what is analogous, the contractions, frequent, though not strong or lasting; the os externum relaxed, and the pelvis appeared to be well formed. I encouraged the recurrence of pain by stimuli (as she had remained a long time in this situation without any signal advantage from the pains); in a few hours the child descended into the pelvis. The bag of waters became ruptured, yet I was not satisfied as to the presentation, and I soon found it was a breech case; for as the parts came to wedge in the pelvis, the scrotum of the child was squeezed out and swoln. On conducting my finger along the sacrum of the child, till I reached the lumber vertebræ, I found a considerable fossa in the loins, covered with a loose membrane, with the bones of the spine bifurcated; I then apprehended a delay to the farther progress of the labour, because it appeared probable that the diameter of the child's pelvis might be preternaturally enlarged, owing to the bony parietes formed by the division of the spine; but I determined in a well-formed pelvis not to turn, but to risk the extraction in statu quo. In this instance I never more strongly saw the good effects resulting from the plan I adopted in promoting the parturient exertions of the woman, by plying her repeatedly with brandy and water, without which I could have had no farther hopes of delivering the patient, unless by turning, which I wished to avoid; but I would have the utmost caution used in such cases, as their presentation offers no probability of delivery,

livery, or where the presentation is not clearly ascertained, as it would certainly induce too much tone on the uterus, and thereby exclude the benefit of turning, which can only arise from a uterus of moderate tone, bordering on relaxation. By fixing my finger in the groins of the child, and by strong lateral motion, I at length extracted the lower extremities, and terminated the labour successfully; but I am very confident, that under circumstances of defective stimulation from the fatigue the woman had endured, and the inutility of some hours pains, that the case must otherwise have come to a turning.

The child, on its birth, did not assume the respiratory function, so that we all thought it was what is termed still born, and as it was much longer than usual we were a little surprized when the respiration commenced. I shall leave more able physiologists to determine what relation the spina bifida bore to this circumstance, as I do not wish to occupy too much of your valuable though limited pages.

The tumour, on the first day, resembled a bag or bladder, half filled with fluid, excessively thin and diaphanous, so that it appeared a most simple substance either epidermial or membranous; but though the organism of this covering was so fine as to elude the passage of red blood, yet it appeared to retain much excitability, and accommodate itself to the circulation of the infant, by which day after day it approximated more and more to the nature of the cutis vera. On the first day, by holding a strong light on one side, and viewing it on the opposite, I could not discover the ramifications of the vessels. The next day the red blood was forced into them, presenting the most exquisite vascularity, and the most beautiful retiform distribution I ever beheld. The diameter of the tumour was increased as well as the excitement, and thus it proceeded till it arrived at the appearance depicted in the drawing. Ulcerative inflammation at last commenced, and about the eighteenth day from the birth, the child died from the rupture of the cyst and evacuation of its contents.

The lower extremities, though in so infantine a state as our patient, yet bore a strong resemblance to the palsy of the lower limbs, described by Mr. Pott as arising from a scrophulous disease in the vertebræ, and though the causes of the two diseases may vary, their effects may be analogous on the spinal marrow; but why might not the same cause operate on the ossification of the vertebræ of a child *in utero*, and therefore be attended with analogous effects? for the infant never used the lower extremities, and they evidently wasted more than the rest of the body.

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The drawing represents the tumour in the middle stage of its progress, inflamed, red, thickened, hot, excessively vascular, and scarcely transparent, with incipient ulceration in its outer surface, attended with slight oozing between the lamina of the membrane, or otherwise by secreting surface. It ought to be noticed that the skin ascended on the tumour in narrow lines, though very partially; whether therefore it imparted a similar structure to the rest of the tumour, is a question.

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DESCRIPTION OF AN IMPROVED TREPHINE; *by Mr. RICHARD SMITH, of Chertsey, Surry, Member of the College of Surgeons.*

[ With an Engraving. ]

THE application of the trephine, in cases of affection of the brain, has been considered as hazardous by most gentlemen of the profession, from the danger attending its sudden pressure through the dura mater into the substance of the brain,\* either by an improper use of the instrument or an unusual slight texture of the cranium, of which the operator cannot be too well aware.

An instrument to prevent this serious circumstance taking place is described in the Journal for December last, as invented by Mr. Jardine. It appears to me much too complex to get into general practice, and is not so portable as to be convenient for the pocket, particularly when attended with the necessary appendages for the operation. The instrument I am about to describe, will, I presume, possess the advantages wished for, without being attended by any inconvenience; it is very simple, may be added to most modern instruments, and cannot easily be put out of order. As its construction may not be readily understood by the figure, I shall be explicit in my description.

Fig. 1, is a trephine of the modern size and construction, having a moveable rim A. about one-quarter of an inch broad, and one-eighth of an inch thick round the crown, fitted so as to move with ease; it is connected by the elbow shank B. to the collar C. which by means of the thumb-screw

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\* I have known this circumstance occur on the dead subject to a surgeon of some eminence, although attended with every precaution thought necessary on the living body; it was performed for the purpose of instructing some young pupils in the operation.

screw D. is fixed firm to any part of the stem of the trephine; thus the rim being gradually removed upwards, as the teeth advance in the operation, will effectually prevent the instrument slipping inadvertently into the brain.

The rim on the first application should be fixed very near the teeth, and not removed more than the eighth or the tenth of an inch at each time; for the more accurate performance of which, the stem may be graduated as in the figure.

Another advantage this instrument appears to possess, is its immediate removal and re-application, when it is found necessary to try with a probe, quill, &c. the depth of groove formed by it; which cannot be done so conveniently by Mr. Jardine's, on account of its contingent apparatus.

I do not conceive the necessity of having any instrument similar to Mr. Jardine's for making a circle in the first instance, the trephine with its obtuse spear-point, as now usually made, appearing to answer the purpose effectually, at least so far as I have had opportunities of observing, during a considerable period of hospital practice, it being a material object in every art to simplify and lessen the number of instruments appertaining to it; and I sincerely wish, with Mr. Savigny, that surgeons would attend to the mechanical application of their instruments, which would give them greater confidence and success than can easily be imagined.

I beg to add what may with some reason be connected with the above subject, being Fig. 2, a sketch of an extraordinary thick cranium, which is in my collection, from a female about forty years of age; it is remarkably solid without deploe. Fig. 3, is the part of the frontal bone from which the section was taken. I saw the poor woman fall down dead, opposite the Middlesex Hospital; having an opportunity of inspecting the body the next day, I found an aneurism of the descending aorta to have been ruptured just below the arch; the other part of the vessel was aneurismal in various places.

TO MR. BLAIR.

SIR,

**T**HE interesting and impartial manner in which you seemed to examine the different instruments, which I lately proposed as improvements in the different operations for  
which



which they were intended, persuade me, that the following description of the form of an instrument I have sent you, which I thought of for extracting of teeth, will not be unacceptable; and if you think it worthy of a place in the work you intend so soon to favour the world with, or in the *Medical Journal of London*, you will do me a favour in forwarding it to the Editors, or acquaint me by what means I may, myself, get it inserted in that periodical work.

I am rather doubtful you have not received all the satisfaction you may have expected, in reading the case of a collapsed brain of the man I trepanned on board the *Victorious*. I suspect it was very incorrect, and perhaps too prolix. I had not time, before I left London, to revise it; however, if you wish for a more correct and abridged copy, I will endeavour to send it you as soon as possible, and if you wish for a model of the tooth instrument I mentioned, I will likewise send it you by the first opportunity.

The descriptions of the instruments you saw, I find, have not yet been offered to public notice, in the *Medical Journal of London*, agreeably to Mr. Savigney's promise to me before I left town, and in a letter since to me at Dumfries. Indeed it was with much difficulty, since I came here, I could so much as procure an answer to the different letters I had occasion to write to him upon the subject.

The principal objection, I find, against the instruments alluded to, is the great expence they are likely to be to the purchasers. On that account, I mean to have them formed upon such a simple, and, as I think, on such an improved plan, as will not only reduce the price considerably, but make them more generally useful.

All the different instruments I have seen for extracting teeth, act upon such similar principles, and differ so little from one another, except in the shape or direction of the bolster, that it is difficult to judge which should have the preference.

It appears to me that the principal defect, in all the attempts to improve that instrument, has originated from the mistaken position of the claw on the top of the bolster, in preference to the position on the side. In that situation of the claw, (on the top of the bolster) it is very evident, that in turning the handle of the instrument, for extracting the tooth,  $90^{\circ}$ , the tooth must be lowered that much; whereas, if the claw is fixed on the side, supposing the bolster circular, or  $90^{\circ}$  from the top of the circumference, the shank being exactly in the centre of the bolster, the handle in

being turned 90° in that operation, will raise the tooth as much, or the vertical height between the centre of the shank and pen of the claw: Wherefore, the nearer a right angle the claw, when fixed, makes with the top of the bolster, the higher the tooth will be raised.

Upon these principles I have directed an instrument to be made (*see plate*) with a bolster of a semicircular form, to receive the claw in its side, and to move in a slide, which will keep it up in its place when turned.

The slide is semicircular, except at the upper part that rests against the gum, when the instrument is fixed, which on the outside is flat, and it is attached to the bolster by a ring on each side, which the shank passes through. The bolster and slide are moveable upon the shank, that the instrument may be occasionally applied to either side of the mouth.

If the operator wishes to cover the face of the slide, in defence of the gum, there are two pins on each side of it, by which either cloth or leather may be tied to it.

I am afraid the enclosed draughts will not give you such satisfaction as I wish; they are very far from being what I expected, however, I have endeavoured, as well as I can with a pencil, to shew you the bolster detached, which is the principal part, and the most likely to give you the best idea of my intention.

I forgot to mention, in a former letter, that Mr. Rae a celebrated dentist in Edinburgh, made two successful trials of an instrument upon the same principle which I had sent him for that purpose, and that he meant to have one made for himself upon the same plan.

I might have acquainted you too, that I received a letter from Dr. Monro, since I arrived in Dumfries, acquainting me, that Mr. Fyfe, his assistant, had extracted a pin, which had stuck in the throat, with one of the same kind of instruments I had left with you for such a purpose.

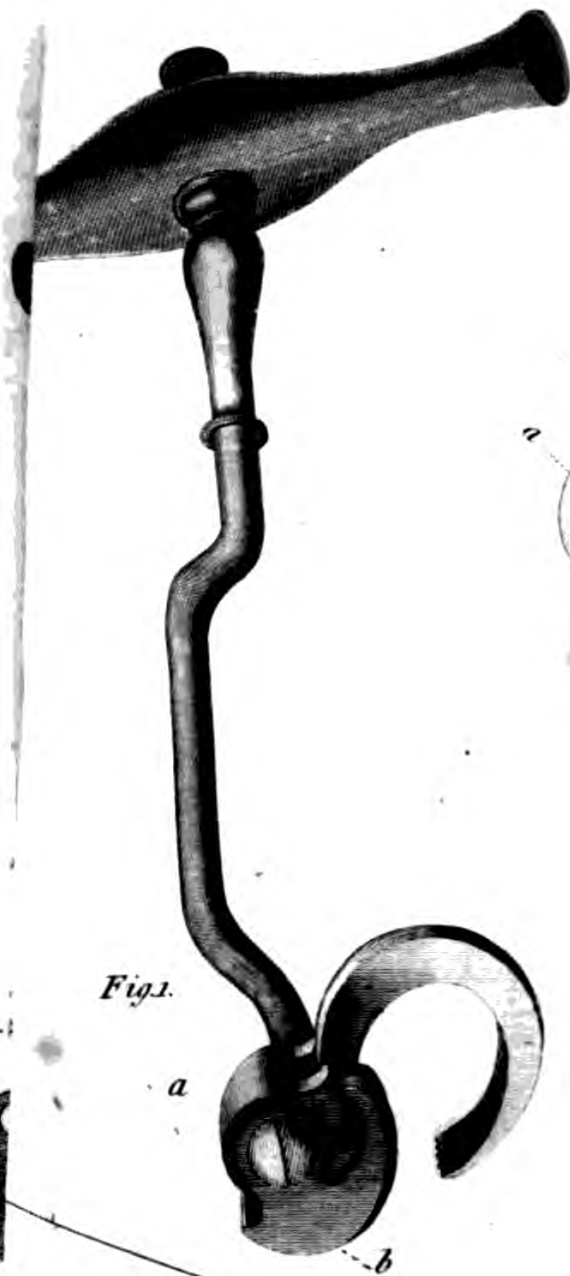
Dumfries,  
January 20, 1803.

I am, &c.

WILLIAM JARDINE,

EXTRACT OF A LETTER FROM DR. DE CARRO, OF VIENNA,  
TO DR. MARCET, OF LONDON.

“THE comparative statement of the Jennerian Society, drawn up by Mr. Addington, has already fallen into my hands.



*Fig. 2.*



*Fig. 1.*

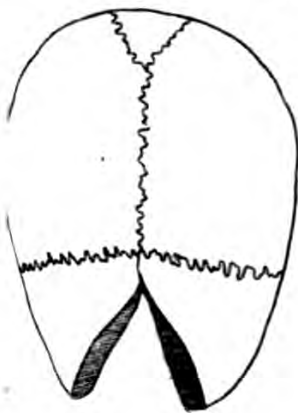
*Fig. 2.*



*a*

*b*

*Fig. 3.*



*nc—Fig. 2. and 3. p. 240.*





hands. Count Harrach, of this city, (who is passionately fond of the science of physic, to the study of which he has devoted himself for these twelve years, and who has just gone through his examination for the degree of Doctor), has caused this statement to be translated, and distributed gratis. The regency has undertaken to get it distributed in all the parishes, and to have it posted up on the gates of churches, and other public places. All the children of soldiers are now subjected to vaccination. What a difference between this and the time when I was compelled to appear before the police; when vaccination was prohibited within the walls of Vienna, and confounded with the inoculation for the small pox; when I was prohibited giving public notice of my intention of vaccinating the poor gratis; when they had nearly turned out of the city a lady come from Hungary to have her three children vaccinated; when I was prohibited publishing, in the Gazette, the satisfactory result of twenty-one variolic inoculations, tried after vaccination; when the Court, the Ministry, the Police, all conspired against vaccination, whilst the Faculty was doing nothing for its defence! it is under such auspices that I have at last succeeded in introducing the vaccine into this capital, and from hence into all the provinces. At Vienna, we no longer hear of the small-pox. For these two years and a half, I have not met with a single instance of it, and many other physicians will say the same. Pray inform Dr. Jenner, that one of the first oculists of Vienna, Dr. Beer, has assured me, that for these two years, he has not met with a single case of the variolic ophthalmia, whilst he used to reckon annually, at least fifty such cases in his practice! And the doctor's authority is so much the more to be trusted, as he is by no means the gainer in this disappearance of his ophthalmic nosology.

"It gives me sincere pleasure to have afforded some satisfaction to Dr. Jenner, by communicating to him the experiments of Dr. Sacco. Indeed, I had presumed that this account would be particularly agreeable to him; and for that reason, I have transmitted to him further details which I have since received from Sacco. With regard to the nosological innovation proposed, I have already taken some steps to guard vaccinators against the danger of introducing a nomenclature, in which the word *equus* should be used as radical. I have developed the inutility and danger of such an innovation in some Journals, and I have lately sent a letter to the *Bibliothèque Britannique*, which

contains all that can be said upon that subject. My chief objection to this change of name, is the confusion which could not fail to arise from it in the minds of uninformed people, who could not understand why a new name should be given to a thing in which they could not perceive the least difference; and this might also have the inconvenience of reviving ideas on the morbid origin of the preservative, which have long been done away. Besides, as the quantity of vaccine matter, now spread over the surface of the globe, is such that it would be impracticable to substitute every where the *virus equinus*, even if there was any advantage in doing it, there would be a sort of competition between *equination* and vaccination. To which of the two would uninformed people give the preference? What an embarrassing dilemma! If there be no real difference between the two methods, why should the names be changed? And the vaccinators themselves, what nomenclature would they adopt, since they never can be able to determine the origin of the matter used, unless they have taken it themselves from the heel of the horse or the teat of the cow?—In one word, the thing is more important than it may at first appear, and I am particularly flattered, once more, to see my opinion coincide with that of Dr. Jenner.”

*Vienna, June 18, 1803.*

A CASE OF FISSURE OF THE CRANIUM, *attended with apparent Extravasation, successfully treated without the Use of the Trephine; to which are added, a few Observations. Communicated by Mr. ALDIS, Surgeon, of New Surry Street, Blackfriars Road.*

AS the brain is the seat of sensation, and consequently less able to resist an injury done to it, it is therefore more liable to be affected, and is attended with more danger from external violence than any other part of the body, the lungs perhaps excepted.

Much study and attention have been employed to ascertain the best means of affording relief in injuries of the head from external violence; yet many discoveries remain to be made before we can arrive at the acme of knowledge in this branch of the profession.

The only means of relief usually employed till of late years, for every species of injury done to the head, attended

ed with fracture, fissure, or depression of a portion of bone, was the trephine, in order to raise the depressed part to its natural level, or to remove any matter that might be collected beneath the cranium and *dura mater*.

Surgeons, till very lately, were totally unacquainted with the good effects which would accrue from omitting the operation of perforating the cranium; an operation which I should think every judicious practitioner must admit of being attended with considerable danger in any part of the head, but more particularly so in the course of the sinuses, that it was not till within these few years, comparatively speaking, that patients were known to recover without the assistance of the trephine, in cases of fracture, attended with all the alarming symptoms of sickness, vertigo, stertorous breathing, dilated pupils, &c. &c.

Among those who are against the too frequent use of the trephine, may be reckoned Mr. John Bell, and particularly Mr. Abernethy, whose abilities and extensive practice rank him among the first of those who have declaimed against this practice. Indeed, it was principally from the perusal some few years since of a truly valuable publication of his, entitled, an Essay on Injuries of the Head, which first gave rise to the opinion I now entertain. He there points out several dreadful cases which were successfully treated by bleedings, and pursuing the anti-phlogistic regimen, without having recourse to any operation.

You will not infer from what I have written, that there are no cases which occur wherein I suppose the assistance of the trephine would be unnecessary; by no means. What I would wish to inculcate is, that I firmly believe a great number of fractures of the cranium, attended with depression or extravasation, would do well without the use of the trephine, which is often unnecessarily applied. From all the accounts which I have ever heard of, and I have taken some pains to ascertain the surgical treatment of injuries of this kind done to the head, the trephine for the most part, nay, almost always, has been used. I think I may venture to assert therefore that, especially among country medical gentleman, this instrument is frequently had recourse to, when, had they pursued the same treatment which I have done in the following case, they would, in all probability, have been equally as successful.

On the tenth of June last, I was requested to visit Thomas Cann, a servant of Mr. Gill, of New Surry Street, who I was told had just received a kick from a horse. On my arrival, I found him lying on a bed to all appearance lifeless;

but on taking hold of his hand, I could just feel his pulse, which beat small and irregular; at this instant he started, and continued to breathe with great difficulty and stertor. The pupils were dilated, and sickness ensued. Examining his head, a wound was discovered to be partly on the frontal, parietal, and temporal bones, which could be distinctly seen by the division of the integuments to the extent of four inches and an half, with the cranium denuded an inch every way. The fissure appeared to be about an inch and an half in length. The wound I immediately cleaned with a sponge and some warm water, then brought the edges in contact, by making three sutures; and by means of slips of sticking plaster, endeavoured to promote adhesion, as also to prevent the access of air to the wound. This being done, and the part secured by a proper bandage, I asked him how he felt himself; but having no answer, I repeated my question in a more loud tone of voice, to which he was equally insensible. I then left him, and desired the nurse not to give him any thing but barley water or a little tea, and that I should again visit him in the space of two hours. On repeating my visit, I found, what I expected, that a re-action of the pulse had taken place, and that it was much stronger than when first I saw him. The sickness had considerably abated, his respiration less stertorous; and he answered, though with great reluctance, any question which was put to him. I now copiously bled him, and sent him a saline mixture to take, as also the next morning ordered him a cathartic.

11th, I found my patient quite relieved from those symptoms which before had distressed him; that what remained now was only a smarting of the wound, and a degree of pain on the occiput.

12th, As the pain of the head continued, and his pulse permitted it, I repeated the bleeding and cathartic, and continued the mixture and same spare diet as at first.

13th, This morning he was not so well as yesterday. He had some degree of fever, and also complained more of his head. I did not in this instance again bleed him, but ordered him three grains of the pulv. antimon. to be taken every three or four hours with the saline mixture. I now thought proper to remove the dressings and examine the wound, which, to my great satisfaction, was in a state of doing extremely well. On removing the plasters, a small discharge of healthy pus issued from the wound, the surrounding scalp appeared free from inflammation,



mation, and had perfectly united to the cranium. The adhesive dressings were repeated.

14th, The powders had brought on a gentle perspiration, and greatly relieved the febrile symptoms of yesterday.

15th, The fever being subsided, and as he expressed a wish to leave his bed, I told him, if he remained so well till the next day he should be permitted to rise, as also to have his diet a little altered.

16th, As every thing went on agreeably to my wishes, my patient left his bed; I repeated his cathartic, omitted the antimonial powders, and renewed the dressings.

17th, Every circumstance bade fair for a speedy recovery: all pain had left him, he slept well, was free from fever. In short, nothing now remained but a desire of the patient to follow his usual occupation, which latter could not at present be complied with; but I requested him to come to my house every other morning, to have his head dressed; which he did, and continued regularly so to do till the second of July, when it was perfectly healed.

Although in the preceding case the lancet was only used twice, as circumstances did not require a repetition; yet, should there be any apprehension of great inflammation, I would recommend venesection to be used more frequently at the very commencement of the complaint, as the effects would be much greater in checking the inflammatory symptoms; for when it is deferred to a later period, the patient would be too low to admit of such active means, and his recovery from such a state would be rendered extremely precarious. While the absorption of the extravasated matter is going on, pain or stupor will continue more or less possibly; but not so as to excite alarm, unless in particular circumstances. The same space of time generally elapses before the brain can accommodate itself to its new situation, in cases of depressed portions of bone, during which the same symptoms may be expected to occur.

Should it be objected by some, that the above was not a case of extravasation, but merely of simple concussion of the brain; to such objections I could only reply, that as those symptoms occurred, which are evident marks to the contrary, such as stertor, dilatation of the pupils, &c. &c. I was led to suppose otherwise.

It is now known, and I hope soon it will be generally so, that the brain will retain its functions when considerably compressed, without injury to the person; but to what degree it is perhaps difficult to say, as it appears to be

more affected in some constitutions than in others, according to the susceptibility of that organ, which varies in different subjects. Several cases are related by authors, of the brain accommodating itself to portions of bone when considerably beaten in. Others again have had cases of depressed portions of bone in young subjects, when they have of themselves regained their natural level, and what extravasated blood there was soon became absorbed after it was rendered fit to be taken up, by having undergone a chemico-animal process.

If by mentioning the above medical gentlemen, whose opinions go to corroborate what I have asserted, and by relating the above case, it should in any degree tend to arrest the practice which I have attempted to oppose, this little paper will have amply answered its intended purpose.

*OBSERVATIONS on the CASE of a HERNIA, where STRANGULATION was produced by INFLAMMATION, and which continued after the OPERATION; by M. RENOULT, first Surgeon in the Army.*

A Young officer had a hernia, which he retained in place for a considerable time by means of a bandage. While encamped in the Low Countries, he was thrown from his horse, after a long continued restiveness and leaping, which forced the intestine out, attended with much pain. The patient made immediate and fruitless efforts to reduce it, and was brought back to his hut, where many trials were made unsuccessfully with the same intent, during ten hours; after which he was sent to the military hospital, under the direction of the author. To the means already employed, the warm bath was added, but the great sensibility of the tumour precluded the possibility of recurring to the operation of the taxis. As the patient got hourly worse, the operation appeared to M. R. the only means by which relief could be expected, and which was performed six hours after his entrance into the hospital, and sixteen from his accident. The intestine, which alone formed the hernia, was of a deep red colour, and had adhered but in a trifling degree to the surrounding parts. The portion of the intestine was considerable, and the omentum seemed to have no share whatever in the formation of the tumour; after disengaging the ring, and finding

finding no contra-indication to the reduction of the intestine, the operator gently drew out a larger portion of the intestine, with a view of facilitating the reduction of the protruded part, which was considerably distended. On the most trifling effort the intestine slipped into the abdomen. The operator counted on the disappearance of the symptoms, and the patient did experience some relief for a few hours, after which, hiccup and vomiting came on; the belly was tense, the pulse feeble, and the patient died eleven hours after the operation. Considering death to have been produced by gangrene of the intestine, the author wished to assure himself by examining the body. He found the omentum rolled on itself, and embracing tightly the ileum, and which formed a noose, both extremities of which adhered strongly to the mesentery and the middle of the intestine, so that the continuity of the intestinal tube was interrupted by this kind of ligature. The author thinks it probable that, originally, the omentum formed in part, perhaps wholly, the hernia, and that this viscus, long dragged down, became lengthened, and floated in the abdomen. He conceives it equally probable, that in the fall which the deceased experienced, the intestine first protruded, closing completely the ring, so that the omentum, which at this moment was found to tie it in some measure, was only engaged in its curvature to a small degree, and consequently did not a little contribute to its strangulation. Hence the rapid adhesions which were formed between them, and which escaped into the abdomen as soon as the opposition at the ring was removed; but that which was produced by the omentum always exerting, perhaps too increased by the position of the parts after reduction, kept up the symptoms, and caused the fatal termination. The author tells us, that if he had been aware of this state of the parts he would have prevented their return till he had freed the intestine from its adhesions; but the omentum was not nor could not be perceived; the appearance of the intestine was favourable to its return, and there was no reason whatever for suspecting the state of the parts within the ring. This case deserves attention, in as far as it adds to the instances, not very numerous, of strangulation produced by the omentum or mesentery within the ring, and which shews the necessity for the most scrupulous examination into the state of the parts before their return.

June 10, 1803,

CASE

*CASE of a WOUND penetrating the ABDOMEN and THORAX; read at the Medical Society of Montpellier, by M. BARTHE, Professor in that University.*

**A** Boy received, 25 March, a wound with a long cook's knife, and which had been thrown at him by one of his comrades, at the distance of eight steps; it penetrated the left side, between the sixth and seventh ribs, three fingers breadth from this cartilaginous extremity, and which went half way, nearly in a perpendicular direction. The boy remained for some seconds in the position in which he had received it, that is, standing; and seeing himself abandoned by his comrades, who were affrighted at the accident, he determined to withdraw himself the knife. The author saw the young man soon after, together with M. Combes, and were astonished to find the exterior of the wound covered by a fatty mass, which, on examination, proved to be the omentum. The external opening was not more than four or five lines in extent, and the omentum which protruded was in a state of strangulation. M. Combes determined to extend the opening for the purpose of freeing the omentum, but which resisted his efforts to reduce it; he confined himself, therefore, to making a simple dressing. The wound was obviously extremely complicated, as it penetrated the two cavities; yet as the instrument had passed through the muscular portion of the diaphragm, the degree of danger was in some measure lessened. It was agreed immediately to bleed him, and confine him to a tisane, made of barley water and syrup of violets. The day passed tolerably calm, but towards evening the patient complained of a sense of pain in the epigastric region, extending to the left hypochondrium, with some difficulty in respiration; and although bled a second time, the patient continued much agitated all night, and in the morning the pains already described were much increased, as well as the difficulty of breathing. It was agreed to bleed a third time, after which these symptoms diminished considerably, but increased towards evening, which induced us to recur to a fourth bleeding; the night was passed somewhat easier than the preceding. The third Prof. Pantignon, was called in, who agreed with the author and M. Combes on the nature of the wound. It was decided, that no effort should be made to return the omentum, which, though it were practicable, was not desirable, as it would pass into the cavity of the chest; since it appeared



peared most improbable that it could be made to repass through the wounded diaphragm into the abdomen, so that this body remaining in the thorax, would necessarily impede the motion of the lungs; when, on the contrary, by attaching it to the edges of the wound, there were hopes it might adhere to the edges of the pleura and fixed to the cicatrix, that it could not impede the motion of the thoracic viscera. A ligature was, in consequence, thrown round to prevent its return, and the regimen was continued. The evening of this day the patient appearing to suffer much, and to have much difficulty in respiring, he was bled once more. This remedy was indicated as well by the age, by the temperament of the young man, as by the beneficial effects which, at each repetition, were observed to follow. On the fourth day the symptoms were much diminished; no pain, and hardly tension of the epigastric region; heat was less; respiration easy; but the motions of inspiration and expiration succeeded each other with unnatural quickness. The patient was allowed the use of light broth.

On the fifth day suppuration commenced, and increased on the following days, without, however, exceeding the quantity which might be expected from the size of the wound. All the symptoms declined the 6th, 7th, 8th, and 9th days. Nothing particular occurred till the 16th day, when the protruded portion of omentum separated, which was in size equal to a large filbert nut; the patient was allowed greater latitude of diet, and the 30th day he was perfectly well. The author has since learned, that this young man enjoys the most perfect health, and fulfils the duties of a country life, which he has adopted instead of that of a cook, his original profession.—This case appears to us as extraordinary in its nature, as well as in its results. It is obvious that the knife must have penetrated the two cavities, without touching either the apex of the heart, or great extremity of the stomach, both in the neighbourhood of the part where the diaphragm was pierced. It must also have happened, that no artery of any size was divided, as the intercostal, phrenic, or any branch of the gastric; the perpendicular direction in which the knife passed, is the probable cause of these parts having escaped. It appears that the omentum was forced out by expiration. With respect to the result, this case offers the remarkable instance of a ligature of the omentum under these peculiar circumstances. It is not easy to imagine what change took place in that part, pushed through the diaphragm, but

but lying within the wound. An isolated fact of this sort, certainly does not destroy what practice has already established on the dangerous nature of wounds of this kind, but affords the truth of this consequence, really philosophical, that, on every point of doctrine, even those best founded and most firmly established, we should admit exceptions from which practical advantages may be sometimes drawn.

*On the CAUSES of IRRITABILITY and EXCITABILITY;  
by M. DE LA MELHERE.*

[ Continued from p. 25. — 29. ]

**O**THER physiologists have imagined they found in the structure of nerves the cause of irritability and excitability. All the mechanical theories founded on the distention by fluids are abandoned, and we may add, that the fibrine, which cannot be said to possess either nerve, nervous fluid, or muscles, possesses excitability. We must, therefore, look for some other cause of contraction; and the author supposes, that it is the same which produces the contraction of a piece of leather, on which acid or fire acts; he thinks that it is a real crisping caused by the electric fluid, and which acts on it in the same way that the pile of Volta does when it oxydates metals; but he asks, How does the electric or Galvanic spark produce this crisping of the fibre or the oxydation of metals? We must, says he, consider the animal fibre as composed of a glutinous matter, which becomes thinner and shorter on being dried, and which swells and becomes longer on being moistened. The electric or Galvanic spark produces sufficient heat to crisp and contract the fibre, since it can oxydate metal, Rumford has proved, that fluids were bad conductors of heat; from which he concludes that a strong heat may exist even where it is not procured; he thinks, for instance, that a ray of light striking in the middle of water, a body which is a conductor of heat, such as muriate of silver, will produce on each of its particles heat sufficient to disengage its oxygen. He has also found, that when the rays of the sun fall on a solution of gold, that the metal is revived; here we must suppose the production of heat. These facts, the author thinks, authorize us to conclude, that in Galvanism, the spark which penetrates the body of the animal,

animal, acts only on the solid parts, and that the heat is strong enough to crisp and produce contraction of the fibre. We have further seen that the nerves, muscles, and viscera of animals, form a Galvanic pile, in which continual discharges are made of electric fluid, from nerves to muscles, to the viscera, and from muscles to nerves; these discharges are accompanied by heat, as in the electric discharge. The heat being surrounded by fluids, which are non-conductors, is determined to the solid parts, i. e. the fibre, on which it produces a momentaneous crispation, as it oxydates metals in the pile of Volta, although it be placed in water, or surrounded with cloths. In this way only, M. De la Melhere thinks can be explained the contraction of the fibrine of the blood, when it is submitted to the positive and negative poles of the pile, for it is found to crisp as if exposed to heat.\*

The nervous fluid, and the structure of nerves, also produce a peculiar action on the phenomena just now mentioned. Let us suppose with Reil, the nerve made up of nerves, making infractuosities, and in which is lodged the medullary substance; let us also suppose this substance to contain a quantity of Galvanic fluid; this medullary substance, and the fluid which it contains, will furnish a considerable quantity of electric fluid to act on the nerves. Their structure will increase this contraction. It is conceived in this hypothesis, that the nerves are absolutely necessary to the motions and sensibility of animals, since it is they which carry to the muscles and viscera this substance impregnated with Galvanic fluid, without which the animal would experience a momentaneous excitement only, as we find to be the case in the detached parts of animals. The circulation becomes necessary by keeping up vital heat, which is necessary to Galvanism.

#### *Of the Cause of Motion and Sensation in Animals.*

From what has been just said we may suppose, that in the natural state of an animal there is a state of equilibrium.

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\* This I think a very probable explanation of this, otherwise very singular, phenomenon. Having been present at the experiments, from which the irritability of the fibrine was inferred, I can affirm that the contractions or motions which were perceivable, resembled extremely those which heat does produce on similar substances; in giving testimony, however, to this fact, it is not intended either to admit the analogy between the phenomena produced by electricity on the fibrine and muscular contraction, nor to assent in any manner to his explanation of that property in animal matter.

brium between the Galvanism of the nerves and that of the muscles and other parts, as in the Leyden phial charged. The following is the manner in which the author thinks of the mechanism of motion and sensation. A sensation is produced only when a substance strikes the surface of the body, as in the sense of touch. The skin of the animal being compressed, as it contains many nerves, dispersed on a kind of aponeurotic substance, the equilibrium is destroyed by this contact, exactly as takes place when the torpedo is touched; the consequence is a Galvanic discharge. Under common circumstances the discharge is too slight to produce a commotion similar to what takes place in the torpedo, yet it is sufficiently strong to produce a commotion in the nerve to its very origin in the brain, where we suppose the sensitive principle exists. This impression continues, as in the Galvanic pile, as long as the body, which touched, remains on the skin. As often as this discharge affects the sensitive principle, a sensation is produced. This electric discharge bringing into play the excitability of the nerves, crimps and contracts them as well as the muscles to which they are distributed, and the animal is moved by the same cause which moves frogs and other animals submitted to Galvanic experiment.

The phenomena which the discoveries on Galvanism have developed, and the interest which the subject, from its novelty excites, are the motives which have induced us to deviate from our usual plan of confining our communications to practical subjects, or at least such as have a less visionary foundation. It may not be thought unimportant to know the speculations of a man who ranks extremely high among the philosophic men of France.

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*To the Editors of the Medical and Physical Journal.*

GENTLEMEN,

SEVERAL instances of the beneficial effects of reduced temperature for the removal of gouty complaints, which have appeared in the Medical and Physical Journal, and Dr. Kinglake's request to medical men, to make known their intelligence on the subject, have induced me to communicate the following case.

Moses



Moses Simons, aged 54, accustomed to a very liberal use of spirituous liquors, had been afflicted with gout generally three or four times a year for ten years, sometimes in his hands, at other times in his knees, but his ancles and toes chiefly suffered; when those parts were attacked they swelled, inflamed, and had a glossy appearance, attended with a burning sensation, sometimes his head and stomach were also affected with pains, and the latter with nausea and dyspepsia.

About two years ago, when his toes happened to be affected with gout, a neighbour of his, (not a medical man) called to see him, and advised him to hold his foot under a cock of cold water; by the help of a stick he with difficulty walked about 100 yards, and kept his foot for ten minutes under a large cock, from which cold water was poured with great force, during which time he heard a crackling noise issuing from his foot, and found such immediate relief, that he threw aside his stick and walked to his house with ease, and has not since had any return of gout, or symptoms of it, unless an extensive livid coloured inflammation with very little tumour, which took place a year ago in his left hypochondriac region, may be considered as of that nature. As this inflammation remained stationary several days, he sent for me; I thought it might not suppurate, and after he had taken some laxatives it subsided without disquamation of the cuticle; a fortnight afterwards another inflammation took place in his arm, which soon became hard and pointed as a phlegmon; warm poultices were applied and it suppurated, forming several deep holes, which as soon as he could be prevailed upon, I laid open into one wound, and it healed in two months time; the use of his arm is quite restored and he is very well in every respect, and continues in his employment at the copper-works, where he has been for ten years exposed to great heat, and the sudden application of cold when in perspiration, and inhaling the most noisome effluvia proceeding from the furnace.

I am, &c.

R. O. MILLETT, JUN.,

*Hayle, Cornwall, July 28, 1803.*

*To the Editors of the Medical and Physical Journal.*

GENTLEMEN,

**T**HROUGH the medium of your excellent publication I learnt the successful result of the practice of Dr. Kinglake in arthritic complaints, by diminished temperature; I have therefore taken the liberty of submitting the following case of rheumatism for your consideration, treated in a similar manner.

F. G. a seaman of one of his Majesty's ships, aged 23, while cruising on the coast of France in very hazy weather, was attacked in the evening of the 2d of last June, with general acute pains in the limbs and head; great heat and thirst; pulse quick and full. I immediately took sixteen ounces of blood from the arm, and administered the following bolus:

R. Pulv. antim. (P. L.) gr. iij. calom. gr. v. confect. damoc. q. s. ft. bol. h. som. sumend.

3d. A profuse perspiration in the course of the night relieved, in a tolerable degree, the pains in the upper extremities; but those of the lower ones were augmented, together with one ankle and knee swoln, and considerably inflamed. Head easy, thirst and general indisposition continued, proceeding, I imagined, from the excruciating pain which existed in the lower extremities. I enveloped them in cloths well wet with cold salt water, which, from the excessive temperature reigning, I was obliged to get renewed about every fifteen minutes, as the moisture evaporated as quick as if they had been exposed to a fire. Administered pulv. ipecac. c. h. som.

4th. Upper extremities perfectly easy, and lower ones considerably relieved; inflammation of knee and ankle very much diminished; skin moist, pulse soft, bowels regular, &c. Continued the cold water as before, and repeated the pulv. ipecac. c. at bed-time.

5th. Rested well during the night; phlegmon removed; and tumefaction nearly so. Pains in lower extremities were very trifling; pulse regular, appetite good. I persevered in the use of the same remedies.

6th. Lower extremities perfectly free from pain. Rep. remedia.

7th. In the morning was free from complaint excepting debility; but in the course of the day his wrists became painful, tumefied, and inflamed. I immediately enveloped  
them

them in the same manner I had done the knees and ancles.

Rep. pulv. ipecac. c. ut antea.

8th. Pains in the wrists relieved, and the inflammation and swelling almost disappeared. Persevered in the use of the cold water and powder. It is necessary to observe that I continued the cold applications to the knees and ancles, in order to prevent a sympathetic return.

9th. Free from complaints excepting debility and a stiffness in the lower limbs, which I ordered to be rubbed gently with a flesh-brush, and gave him half a drachm of powdered bark mixed with wine four times a day. From this time he began to recover his health and strength, and on the 16th returned to his duty.

I beg leave to observe, that this man about two years ago was attacked in a similar way, and was confined to his bed for six weeks, unable to raise either *hand* or *foot*; and I have every reason to believe, from the violence of *this* attack, that I should have had him confined for the same length of time, if not longer, had I pursued the usual method of cure practised on these occasions; but the sensible and judicious *practice* of Dr. Kinglake in arthritic complaints, pointed out to me a remedy at once effectual, speedy, and *cheap*, for the relief of one of the most painful and tedious complaints incident to the human body; and a complaint that is extremely prevalent in his Majesty's navy, particularly when employed in the channel service.

Before I had an opportunity, owing to an unavoidable absence from my native country, of reading any of your well conducted Journals, I had been in the habit of making use of cold water in local affections of the joints with considerable advantage; I therefore, with a tolerable confidence, hesitated not applying it in the above case.

If you think this single testimony will tend in the smallest degree to corroborate the evidence of your able correspondent in the safety and propriety of using diminished temperature for the relief of painful and inflammatory affections of the joints, whether called by the name of *rheumatism* or *gout*, you are perfectly at liberty to make what use of it you may deem fit; and if *perchance* it should merit your notice, it will amply satisfy your attentive reader.

E. O.

MR. CHAMBERLAINE, *on the AMENDMENTS of the  
MEDICINE ACT.*

[ Continued from pp. 165—170. ]

IT was a fortunate circumstance that these informations were laid, as it afforded to the Commissioners of the Stamps additional and striking proof of the mischiefs that, to an incalculable extent, might befall innocent people from the introduction into the schedule of so many articles which had no right to a place there; nor would it have been very difficult to prove, what I, at a very early period of the business told them would be the case, and what I can declare to my own certain knowledge *has happened*, that many respectable apothecaries who kept retail shops, *have lost from one half to three-fourths of their retail, and others have entirely given it up through FEAR?* If then, such have been the losses to individuals in the metropolis, how great must have been the losses, on this account, when we take in the whole kingdom!

During the recess of Parliament, the Committee were employed in drawing up petitions to the Legislature, and in waiting on the different members of the House of Commons, who were accessible, for their assistance.

As it was not improbable, that certain circumstances might take place, which might render it necessary to petition parliament to be heard by counsel at the bar, and as such a step, if taken, might be attended with very considerable expence; to defray this, and various other expences of the Committee, for meetings, printing circular letters, advertisements, &c. a subscription was set on foot, and a liberal sum in the first instance subscribed.

But, although every apothecary, and every surgeon practising pharmacy, was liable to be implicated in the dangers to be dreaded from the Act, as it stood before the amendments took place, (the possibility of which danger I have clearly shewn in my former observations on the act\*); yet there seemed an almost general apathy to prevail among the profession; for, of the numerous body of practising apothecaries in and within seven miles of the metropolis, there were not so many as twenty-four; and in the whole kingdom, not thirty to be found in the list of sub-



subscribers; and of the members of the College of Surgeons, notwithstanding so many of them keep shops, and even retail shops, not more than thirteen in all, including country practitioners.

Left as they were, to fight both the apothecaries battle and their own, it is no wonder if the druggists, who are a body of men materially interested in the sale of quack nostrums, (many individuals having concern in the exportation trade, and country orders, to the amount of from six to twenty thousand pounds per annum) should, into the body of their petitions, throw in a prayer for that most improbable of all improbable things, a total repeal of the act. Finding this object unattainable, the Committee then directed their fullest attention to the obtaining of such modifications of the act as should be best calculated to render the law as little burthensome as the nature of the case would admit of. With this view, a deputation from the Committee had several conferences with the Lord Mayor and the other members for the city of London, whose easiness of access, politeness and attention, on all occasions, so justly entitle them to the affection and praise of their fellow citizens.

When the Committee were favoured by the Minister with a printed copy of the amendments of the act of June 3d, 1802, a general meeting was called on the 23d of May last; the leading features of which were, a new schedule, and the addition of three new clauses.

I am well aware, that by entering into so minute a detail of *the history* of the Medicine Act, I shall be likely to incur the censure of some of your Readers who have nothing to do with it, for taking up so many pages. If none but medical men were readers of the Medical and Physical Journal, there would be just ground for blame; but I have some reason to know, that this Journal has a very extensive circulation among that description of persons who, above all others, are most affected by the act and is very generally read by them; I mean, *the druggists*: I therefore hope I shall stand excused by my professional brethren, if I enlarge a little on points which do not concern those who are not dealers in medicine, but materially import those who are.

I was particularly happy to see in the new schedule, that every article, which, by the desire of the gentleman who consulted me, I had struck my pen through, in the former schedule, as objectionable and improper to be in-

serted, was omitted, except lozenges; and that from and after passing of the act which received the royal assent July the 4th, the apothecary, &c. is completely liberated from the restraint, which for near a twelvemonth he lay under; and may now vend, without fear of information, and without the expence of taking out a licence, all those articles of the pharmacopœia, which were unshackled previous to the passing of the late act of the 3d of June, viz. Turkey rhubarb, Indian arrow-root, Huxham's tincture of bark, Spanish juice, refined liquorice, syrup of Tolu, and several other matters enumerated in the 128th page of the 8th vol. of the Medical Journal.

Lozenges, lip-salves, issue plasters, and tooth powders had been proscribed in the lump, by the addition of the words "*of all sorts*;" but in the new schedules a modification is given, and none of these articles (lozenges excepted) are brought within the meaning of the act, unless they are sold as the invention, or secret preparation of some particular person; in that case they are liable, either with or without a printed bill or direction.

With regard to lozenges, an article of very great consumption, in the making of which, it is computed that in Great Britain only, a quantity of *refined* sugar, to the amount of not less than one hundred and seventy tons weight, is annually used, a very ample discussion took place; the issue of which discussion will appear when we come to speak of that article in our remarks on the reformed schedule.

The most regular way will be, to take the different clauses of the late act in numerical order; and collate them with those clauses in the "*act to amend said act*" which refer to them.

The 1st and 2d clauses remain as they were.

The first clause of the "*AMENDMENT*," after reciting the former act, states the expediency of repealing the schedule of said act, (of which there was great need) and of enacting another schedule in lieu thereof, and enacts that, "*from and after passing said amended act, viz. (July 4) said erroneous schedule, and so much of said recited act as relates thereto, shall be repealed, and the new schedule to be deemed a part of the said recited act.*"

Clause 3d. *Duties to be paid by the owners and proprietors, or makers and compounders of medicines before exposure to sale; and these duties attach, not only to articles intended for home consumption, but also for EXPORTATION.*

This

This clause was not in the old act of 25 GEO. III. and was introduced on account of the defalcations in the revenue from the practices of country dealers and their town correspondents, it being known to the commissioners that large quantities of quack medicines, (such for instance as Godfrey's cordial, by the kilderkin or whole barrel) have been sent to the country, all of which has been sold in small quantities by those who, not having the fear of the Stamp Office before their eyes, have not troubled either themselves or their customers with the payment of his Majesty's duty.

However conducive it may be towards the increase of revenue to enjoin the stamping of articles in large as well as small quantities, for HOME consumption, it is a question hereafter to be decided, how far it may be policy, to charge with the *stamp duty* articles intended for EXPORTATION. Every one acquainted with finance, knows the very great repugnance all descriptions of people testify towards that particular mode of taxation. A very trifling stamp duty, attempted to be laid on in America, first laid the foundation of those discontents, which afterwards rose to so great a height, as ultimately to cause the loss of the American dominions to the crown of Great Britain.

England seems to be the grand emporium of quackery, and, poison or not poison, English quack medicines form an article of the export trade to the amount of a great many thousand pounds per annum; and of course, the consumption of articles of which they are composed, is very great; from many of which articles the revenue derives large supplies, particularly by the duties on the spirits, sugar, cochineal, gums, and various other ingredients, also on glass, paper, &c. &c. &c. used in the preparing and uttering them.

Now, if once those countries which take from Britain the largest cargoes of quack medicines, begin to shew an unwillingness or disgust at paying the additional expence of the stamps, there will not be wanting ingenious people to take advantage of that disgust, and turn it to their own account. Already have they begun to send from the continent of America, large orders to this country for the different sorts of moulded bottles, such as various quack medicines are sent abroad in, with the names of the original maker, or of the medicine itself; devices, coats of arms, &c. blown in the glass. One house only, in the drug line, in this city, exported, between the passing of the act in

June, 1802, and Christmas, three hundred gross of *empty* moulded bottles of different sorts, and, if one house alone sent out so large a consignment, to how great an amount may we not suppose the orders to have been given, when we take into consideration the very great number of houses, both druggists and glass-houses, there are in the metropolis? And for what purpose are these orders for empty bottles given? The answer is obvious. They will be filled, with imitations of British nostrums, prepared by persons employed to counterfeit them, in America and elsewhere; and the very great dealers in quack nostrums in this country, who were the persons to suggest to the minister the expediency of the measure of stamping articles for exportation, will find themselves deceived if they expect that the British stamped label will always be looked for as the infallible criterion of the genuineness of the medicine. It is far more easy to forge British stamps for quack medicines, than French assignats or American paper dollars. There are thirty-six stamps in a sheet; of course, a sheet of stamps, of the nominal value of half-a-crown each, costs the purchaser, in this country, four pounds ten shillings; whereas, in France or America, according to the price of other prints in those countries, we may suppose an engraver could afford to sell a whole sheet for sixpence or a shilling, and it would be as easy for an engraver to forge a plate of thirty-six ten-shilling stamps, as a plate of thirty-six three-halfpenny stamps; and if once this kind of traffic takes place, the revenue derived from the exportation of patent and proprietary medicines, if not entirely lost to this country, will at least suffer material diminution.

Superadded to the provisions enacted by this clause, the third clause of the "AMENDMENT" contains a new, and still stronger expedient for securing the duties; viz. "*Any person receiving from proprietors, first venders, or their agents, &c. articles subject to duty, for the purpose of selling again, without having proper stamps on each article, who shall not within ten days return the same to the person from whom such articles were received, or within the same space of time send information to the Commissioners at SOMERSET PLACE, and deposit such unstamped articles with the nearest DISTRIBUTORS of stamps, shall forfeit twenty pounds.*"

The third clause of the AMENDMENT, being connected with the foregoing, comes properly under consideration in this place.

By



By the kindness of the Chancellor of the Exchequer, the Committee were favoured with a copy of the *new act* for amending the one so much complained of, and we were indulged with fourteen days notice to state our objections to any parts of it.

There never was an instance where the propriety of consulting persons, concerned in any particular trade or calling, before laws are made for them, was more evident, than in the *Medicine Act*. That of last year was the *third*, and still more exceptionable than the two former; which would not have been the case, had some respectable persons in the drug trade, aided by one or two well-informed apothecaries, been called into consultation, in the first instance, to contribute their advice and abilities in drawing a fair line between the preparations of the regular practitioner and the pretended arcana of charlatans and nostrum-mongers. Peculiarly fortunate was it for the gentlemen in the drug trade, who are in the habit of sending very large consignments of patent and proprietary medicines to different parts of the kingdom, and of the world, that the Committee were indulged with a sight of the new clauses before they were passed into a law.

The third clause originally stood thus. "*And be it further enacted, that upon the outside of all packages, containing TWELVE or more bottles, boxes, or other enclosures, sent from one dealer to another by any public conveyance; or to the Custom House for exportation, the word "MEDICINES" shall be written; and it shall be lawful for any officer of customs or excise, or of the stamp office, to open such packages, and examine if the proper labels be duly affixed to the articles; and, if found not duly stamped, to seize the same, &c. Officer to be rewarded for such seizure.*"

By this clause, a cask or package containing three or four hundred pounds worth of drugs, and sent to an inn to go by a stage coach or waggon to the country, or to the Custom House to go by a ship, was liable to be ransacked and rummaged, if it contained so few as a dozen boxes of Scot's pills or peppermint lozenges.

This the Committee represented to the Minister; and urged, that if the clause were suffered to remain so, it would oblige them to send a servant to every inn, or to the Custom House, with every package, there to wait until an officer should come and search, in order to re-pack the goods after examination. They urged, that no officer could, or would take the pains in re-packing, necessary to

secure their goods from damage, and that packing of drugs, especially such as are contained in bottles, was so nice a business, that it is not every one of their own porters who understand it properly, and that of course, the trouble, and the damage to their goods, would be incalculable.

These representations had their proper weight with Mr. Estcourt and Mr. Vansittart, and the Committee had the pleasure to find, that in the act which received the royal assent, a material alteration was made in the clause; namely, that the right of searching packages, by excise, stamp, or custom house officers, should be restricted to cases, "*wherein information on oath shall have been given before a magistrate of there being actually unstamped articles in the package, and obtaining such magistrate's warrant in writing to authorize the search.*"

The fourth section or clause, which enacts that "*Duties are not to extend to articles mentioned in the book of rates, nor to unmixed drugs, sold by regular surgeons,*" remains without alteration, as to words, but there is this difference in effect, that the 19th clause does not now militate against it, as before; inasmuch as several drugs, which though *unmixed*, were rendered liable to the duty, by being named in the former schedule, (such as *Turkey rhubarb, Spanish juice, arrow root, &c.*) are now omitted in the new schedule, and exempted from the stamp duty.

The 5th and 19th clauses, stand without any alteration; and a person who should content himself with only reading the marginal reference or brief statements of the contents of these clauses, might reasonably suppose that it was impossible that this act could touch any thing that was not actually a nostrum; but, LATET ANGUIS IN HERBA. We are told, Sect. 5, that "*Nothing in this act shall extend or be construed to extend, to charge with stamp duties, medicines, prepared by regular surgeons, or apothecaries, not claiming the secret, or exclusive right to the preparing the same; and not sold as patent or proprietary medicines, nor at any time HERETOFORE, now, or in future, shall be by any public notice, or printed paper, affixed to or delivered with such packet, held out or recommended by the proprietors, or original or first vendors thereof, as nostrums, or proprietary medicines, for the cure, relief, or prevention of complaints.*"

So far, so good. No person whatever can reasonably find fault with the wording of the clauses, as far as this goes. Tax quackery with all my heart: It is but right that

that they who place greater confidence in the unknown hodge podge of a stone mason or a gingerbread-baker, than in the skill of an honest and able regular practitioner, should pay a tax *ad valorem*, over and above the price of the stuff, for their folly and credulity; but mark the concluding paragraph of each of these clauses—"or as SPECIFICS, or as BENEFICIAL FOR the prevention, cure, or relief of any such distemper, malady, or complaint, as aforesaid."

Now, here every one must see, that the act goes farther than, I believe, was intended; for, if I understand this aright, it appears to mean, that not only every proprietary medicine trumpeted forth as a secret composition of great virtue by quacks and their agents; but that every medicine whatever, that ever "*was in the beginning, is now, or ever shall be,*" either publicly advertized, or sold, or dispensed, with a PRINTED DESCRIPTION of its properties, and the manner of using it, *be it* NOSTRUM or NO nostrum, must be ornamented with the quack-doctors red striped livery! This would appear as if intended as a tax upon science; because there is a possibility that there may be found particular preparations, promulgated by men of liberal principles, who would detest nothing so much as quackery, which preparations might require such cautions and instructions as to their use, as could not well be committed to memory, nor very conveniently, on account of their length, &c. given in writing. Such as these, on account of the printed instructions, it must appear very hard to include in the general mass of quack nostrums; but so I apprehend must be the case, as long as the concluding words of the clauses above alluded to, make a part of the act.

The 6th, and from thence to the 20th, relate to the rates of duties on licences and stamps; to the modes to be observed by vendors, penalties for fraudulent dealings, &c. but the rigours of the 21st, 22d, 25th, and 28th clauses of the act, are much mitigated by the mild and judicious alterations which are made by the fourth and fifth clauses of the new act, or "AMENDMENT."

For, whereas by the act of the 3d of June, the shops of medical men and druggists were laid open to the mercy of informers of every description, the 4th clause of the "AMENDMENT," enacts, that "*No person shall commence any action, or proceed before any justice in a summary way, for any penalties under the recited act, unless in the name*  
of

*of the Attorney-General, or some persons appointed by the Commissioners of Stamps; and every action commenced by or in the name of any other person, not so authorized, are declared null and void."*

This is an important clause, inasmuch as it secures the fair dealer from the intrusion of every vagabond who either is, or pretends to be, an informer; and as the Commissioners of Stamps are gentlemen of humanity and liberality, I trust we may safely confide in the assurances communicated through their solicitor, Mr. Estcourt, that they will not prosecute on every trifling and unintentional offence against the act; and where it evidently shall appear that the party offending is innocent of every real intention of fraud, or EVASION.

And it is very necessary this clause should be made known, that all who are concerned may understand, that while the Commissioners are determined to exercise lenity on the one hand, so on the contrary they will hold the rod of correction in the other, over the wilful defrauder of the revenue, who will have a stronger power to contend with than the pocket of the common informer, as he will have the purse of the nation to combat. It may be also of use for many persons in the country, to know that none but persons acting under the jurisdiction of the stamp office have any right to molest them; as there are many wretches going about, who pretend to be informers, and who threaten timid and law-ignorant apothecaries, and their widows, and also shopkeepers who deal a little in drugs, with expensive law processes, whose only object is to terrify these poor people into a compliance with their exorbitant demands; and pretend to compound their sham actions for a few guineas.

[To be continued.]

*A SHORT HISTORY of the YELLOW FEVER which prevailed at Norfolk in the Months of August, September, and October, 1801; with some Account of the Diseases that preceded and followed its Appearance. Communicated by Drs. SELDEN and WHITEHEAD, in a Letter to Dr. MILLER, of New York, dated Norfolk, July 15, 1802.*

THE great influence of the weather and climate over the health of man, especially when combined, in places of crowded population, with the agency of local causes, is universally



universally allowed. At no time has the truth of this observation been more conspicuously verified than during the summer and autumn of the year 1801, in most parts of Virginia, and in a particular manner at Norfolk.

The spring was extremely cold, and the progress of vegetation consequently very slow. The first week in May had elapsed before the trees were completely covered with foliage. The 25th of June had arrived before we began to feel any inconvenience from the heat of the weather, being sheltered from that degree of it, usual at this season, by frequent falls of rain, and a cloudy sky, which had hitherto prevailed. The thermometer had varied from the 70th to the 87th of Fahrenheit, which it had never exceeded, in the hottest part of the day, previous to the last six days in the month of June. But, from this time to the beginning of July, the weather was serene and intensely hot; yet no sensible effect was observed to result from it, either on the health or prevailing diseases of Norfolk, as it was immediately followed by occasional falls of rain, and that cloudy sky which had obtained so generally in the months of May and June. This state of the weather continued, with little variation, till the 23d of August.

Early in June, numbers began to be affected with intestinal fever, under the different forms of diarrhoea, or of dysentery. In most instances these complaints ran a tedious course, exhibiting symptoms of severity or mildness corresponding exactly with the variations of the weather. Nor was it in Norfolk only that febrile diseases, at this time, seemed to fall chiefly on the intestines; throughout the State similar complaints prevailed; but the attacks were more frequent, as well as more violent, in this town, Richmond and Petersburg. The number of those affected with this form of disease increased gradually as the summer advanced; and though, in some cases, great distress was experienced, and dangerous symptoms sometimes made their appearance, yet instances of death were rare; and the greatest part were neither confined in their apartments, nor compelled to relinquish their ordinary pursuits. The town was, in other respects, during the whole summer, uncommonly healthy; and as those affected with bowel complaints were generally of the old inhabitants, who had been proof against the attack of the much-dreaded epidemic of the United States, this circumstance was regarded by some as affording reasonable grounds of belief that the atmosphere of Norfolk was free from those causes necessary to the production of yellow fever, and that, for this year,

year, we should escape the ravages of this direful calamity. But these flattering hopes were speedily cut off.

During the whole of the month of August, and particularly after the 23d, some sporadic cases of yellow fever were reported to have occurred; but these were almost entirely confined to the shipping and Marine Hospital, and obtained neither the name of an epidemic, nor caused any alarm or uneasiness among the inhabitants of the town. On the 1st of September, however, the weather became extremely hot, calm, and serene. Not a cloud was to be seen, for eleven days, to afford shelter from the scorching rays of the sun, which, for that time, were poured upon us with increasing violence. By a thermometer, fixed in a passage with free circulation of air, eleven feet above the level of the street, and twelve from a door fronting the south, in a part of the town well ventilated, and not crowded with houses, the mercury frequently rose to 94, and was seldom below 90, in the hottest part of the day, from the 1st to the 11th of September. At ten o'clock in the night, during the same space of time, the mercury was found several times standing at 90 degrees of Fahrenheit.\*

This extreme change of weather, in the beginning of September, was, as might have been expected, followed by one not less remarkable in the form of the diseases of Norfolk. The intestinal fever entirely disappeared, and, by the 7th or 9th of the month, the cases of yellow fever had become so numerous as to deserve the name of an epidemic, and rouse public apprehension; while those persons (as far as our observation extended) who had laboured under the former affection, were found generally not subject to an attack of the latter disease. On the 10th and 11th the number of the sick increased greatly; but, on the afternoon of the last of these days, the mercury fell to the 71st of Fahrenheit, and the wind, which had blown from the S.W. since the beginning of the month, veered about to north-

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\* No very accurate idea of the temperature of the atmosphere in which the inhabitants of Norfolk lived, and transacted business, can readily be collected from the thermometer, during the first three or four days after this change of weather commenced. The earth, the houses, and the air contained in them, had been so cooled by the rains and cloudy weather immediately preceding, that several days elapsed before these instruments were completely under the influence of the heat which pervaded the atmosphere of the place. To this cause is to be ascribed the very considerable variations of the mercury observed at this period in Norfolk.

north-east, with a cloudy sky, and some rain. But this change did not stop or check the progress of the epidemic: on the contrary, so much more frequent did the attacks of this form of fever become, from the 11th till the 15th of the month, that the mind was strongly impressed with the belief, that the rapid increase of disease had, in some measure, arisen from the sudden change of the weather which then took place, although such as is generally supposed favourable to health. We believe this will generally happen in situations favourable to the generation of yellow fever, when the change of temperature from heat to cold is sudden, but not sufficiently great to check, or extinguish wholly, the seeds of the disease.\* Whether the cold, on this occasion, acted, according to the opinion of Dr. Rush, by accumulating excitability, and thereby rendering the system more sensible to the stimulus of the disease; or whether, by checking powerfully sensible and insensible perspiration, and detaining within the body secretions which Nature, under the influence of an unusually powerful stimulus of heat, finds necessary to eliminate, this sudden fall of the temperature overthrew the equilibrium and healthy actions of the system, in corrupting, in some measure, the whole mass of circulating fluids, and thereby disturbing and altering the various secretions formed from them.

We shall not here enter into a detail of those causes, unfriendly to health, which may be considered as arising from the situation and state of our town. Such an account would differ but little from that given in the 4th volume of the *Medical Repository*, p. 329, and to it we refer in this particular. But others, besides atmospherical and the local causes of Norfolk, combined to augment the spreading of the yellow fever. On account of the high price given for American produce in England, all the ships fit for the purpose that could be procured, had been constantly dispatched, during the summer, for that market; so that, in the months of July and August, the harbour was almost entirely clear of shipping, and very few sailors remained in the place. Previous to the commencement of the hot weather in September, several vessels, at different times, had arrived from Europe, with a great many passengers on board. Those who remained in town had hitherto suffered little from sickness; but, after being exposed to the extreme heat

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\* Vide Rush on the Yellow Fever of 1793, p. 30 et seq.

heat in the beginning of this month, many of them were taken sick; and being generally, from their indigent circumstances, badly lodged and attended, numbers of them fell victims to the disease. The wind, which, on the 11th, changed from south-west to north-east, brought in a vast number of vessels; so that, by the 15th, our harbour was crowded with ships, chiefly from Europe. The fever now spread rapidly, and increased in malignity; and many of the sailors and passengers of those newly arrived ships were among the number of the sick. It was, no doubt, unfriendly to the health of the seamen to be employed in discharging so many cargoes, near one place, at the same time. To unlock so many reservoirs of air, which had been so long pent up, and rendered impure by the circumstances of a long voyage, was not only prejudicial to the health of those who, in the presence of a prevailing epidemic, were compelled, in some measure, to live in it; but, when wafted into the adjacent parts of the town, by the wind blowing from that quarter, might contribute to augment the malignity of the disease which already existed there. About the 20th of September the disease was at its height, but it continued to the end of the month, with very little abatement of its violence; the cool weather, which came on the 27th, producing little alteration, either as to the frequency of the attacks, or the course and severity of the symptoms. It gradually declined during the month of October; and, by the 1st of November, scarce a vestige of it was to be found.

But, in proportion as the yellow fever subsided, the intestinal complaints that preceded its first attack began to re-appear. Towards the end of October, many recoveries from the fever were rendered tedious by a dysenteric affection supervening; and some who had resisted the violence of the former, sunk under the wasting influence of the latter disease. The dysentery was, however, confined to no particular class of the community, like the fever; nor was it marked with that character of malignity which often attends it when it appears as an epidemic.

The number of deaths, during the present epidemic, was fully as great, for some weeks, as in that of 1800; although, during the continuance of the fever, fewer died in this than in the former year. The deaths occasioned by the fever we are now describing, were evidently greatly augmented by the accidental arrival of vast crowds of emigrants from Great Britain and Ireland, during the violence of the fever; who, being mostly of the laborious poor, and  
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with large families, without the means of comfortable subsistence, were placed in the most unfavourable circumstances for recovery; and their whole families thus fell a sacrifice to the ravages of the prevailing distemper.

The plan of treatment pursued this year was, in many respects, similar to that adopted in 1800, of which we have formerly given some account. The lancet, however, was more sparingly employed, as symptoms indicating its use seemed less to require it. Calomel, in all cases, was liberally exhibited, both with a view to produce, in the commencement, a full and speedy evacuation, and afterwards, also, in such forms as have been found to bring on most readily a salivation; which, in every instance, with us, as has been often noticed by others, was followed by the certain recovery of our patient. Where topical affections occurred we had recourse to local remedies. Cupping and vesication, when early employed, afforded, in such cases, very frequently, great relief. Neither theory nor experience warranted the early exhibition of bark; we always deferred it till some change in the febrile symptoms began to appear, and the irritability of the stomach had abated: But, under every form of treatment, numbers fell victims to the disease. In this juncture, being desirous of making every effort that promised any advantage, we had recourse to a remedy we had last year tried in a few cases with some benefit, and now found attended, as far as it was carried, with unequivocal success. This was the liberal affusion of cold water; not on the plan prescribed by some of the writers of the West-Indies, but in a mode similar to that recommended by Dr. Currie, of Liverpool.

The first trials were made on young robust British seamen; and the good effects of the remedy equalled our most sanguine expectation. The pulse often, after the affusion of the cold water, was thereby reduced thirty strokes in a minute; the burning heat of the skin was greatly lessened, and the thirst, head-ach, and other uneasy symptoms, were much alleviated. The patient generally found himself so much relieved and refreshed after the cold bath, that he submitted, not only without reluctance, but with pleasure, to a repetition of it. If called in on the first or second day of the attack, we first directed a strong dose of calomel and jalap, in order to procure a full evacuation from the bowels; after which the patient was ordered to be carried on deck, with only a great coat thrown loosely around him, and three or four buckets of salt water from the river to be poured on his head and naked body. This operation was

was repeated, when the febrile symptoms threatened to return with their former violence. Three times a day was usually sufficient. We rarely found it necessary to continue the use of the cold water longer than the fourth day; during which time the bowels were generally kept open by the occasional exhibition of a bolus of calomel.

From the great benefit experienced in the two or three first trials, we proceeded to recommend it with confidence. Of all those patients to whom we had an opportunity of exhibiting this remedy, on or before the second day of the attack, we had the good fortune not to lose one; but after this period, when the fever had begun to subside, without symptoms of amendment, the affusion of cold water seemed to serve only to hasten the fatal catastrophe. In no instance was it used without the exhibition of calomel at the same time; and we might have been inclined to ascribe to the last mentioned medicine the sole merit of the cure that was accomplished, had it not failed, with us, sometimes under the fairest trials.

No disagreeable effect was produced by combining the use of calomel with the affusion of cold water; nor, in a single instance, did the mercury occasion salivation, although the discharge from the bowels was scarcely as great as when it was used alone in the cure of the disease. But, in almost every instance which terminated favourably, when the cure was trusted to calomel alone, without the cold bath, some degree of salivation came on, and the appearance of this discharge was beheld with pleasure, being regarded as an infallible mark of safety.

It is with the fullest conviction of the superiority of this plan of treatment to any we have yet tried, that we venture to record its effects. The subjects of our experiments were those in whom we found the disease to attack with the greatest violence in the commencement, and to act with the most fatal force on their constitutions. We shall attempt no theory of the manner in which the salutary effects of cold bathing in yellow fever are produced, nor venture to recommend it as a certain remedy; but we think that, in the hands of a skilful and judicious physician, it may often prove a powerful auxiliary, in enabling him to combat the fatal effects of that direful calamity we have been describing.

ADDITIONAL REMARKS on Mr. CRUIKSHANK'S EXPERIMENTS on FINERY CINDER and CHARCOAL. Communicated to the Editors of the Medical Repository of New York, by Dr. JOSEPH PRIESTLEY, in a Letter dated Northumberland, November 15, 1802.

THOUGH I have sent you several remarks on Mr. Cruikshank's observation on my argument for the doctrine of phlogiston, from the experiment with finery cinder and charcoal; yet as he has replied, and the French chemists, the great patrons of the new theory, acquiesce in and applaud his answer, I have been led to give more attention to the subject; and this has suggested further proofs, as they appear to me, of the fallacy of his hypothesis. That the chemists in this part of the world may have an early opportunity of forming a judgement on the state of the controversy, which is certainly of considerable importance, I send you the following distinct statement of my objections to the *principle* which Mr. Cruikshank has assumed which is entirely different from that of Mr. Berthollet, or that of Dr. Woodhouse, and in my opinion more exceptionable than either of them.

1. Mr. Cruikshank's hypothesis requires, that in the process of heating finery cinder and charcoal, the oxygen in the finery cinder should quit that substance, and unite with carbon in the charcoal, in order to form *fixed air*. Since, however, this fixed air is to be decomposed, the oxygen which it has got from the finery cinder must be separated from it, and enter into the same calx again. But while the heat continues the same, I deem these contrary effects to be impossible. If the degree of heat that is applied expel oxygen from the calx, it will certainly prevent its return; consequently, if fixed air could be formed, it could not be decomposed, in these circumstances.

2. If the oxygen should quit the fixed air, nothing would remain of it but carbon, as before their union; and this is a solid substance, incapable, without the aid of oxygen, of assuming the form of *air*. Whence then comes the inflammable air in this process, which so nearly resembles that from charcoal and water, that they must have the same origin? And in this case Mr. Lavoisier himself decides that whatever is *inflammable* in it must come from *water*.

8. Admitting all that Mr. Cruikshank alleges, concerning the difference in the specific gravity, and other circumstances, between the air from finery cinder and charcoal; and

that from water and charcoal, it is not so great as the difference between this latter and the light inflammable air from the metals with acids or water. Different as they may be in other respects, they are all *inflammable*, from their affinity to oxygen, and their property of uniting with it in a certain degree of heat; in consequence of which they are alike the reverse of *oxyds*, and must be classed among *combustible substances*, equally with sulphur and phosphorus.

4. If the oxygen, after quitting the finery cinder, entered into it again, it would make it finery cinder as at the first, or at least in some degree. But the calx is completely revived in this process; the iron so revived being as soluble in acids as any iron whatever.

5. If the iron should be completely revived in the former part of this process, by the oxygen wholly leaving it, I maintain that it could not by any degree of heat decompose fixed air; since this cannot be effected by the heat of a burning lens of sixteen inches diameter, in the space of several hours, in only a very few ounce measures of the air. Mr. Cruikshank's process with *bladders and a gun barrel*, I have frequently used, but I never had any satisfactory result. The scale he found on the iron, I have no doubt, came from moisture in the air or the bladders.

6. Mr. Cruikshank seems to think that charcoal cannot contain any oxygen; but Mr. Tennant's fine experiment decisively proves that it does. For where are we to look for the oxygen (which we all acknowledge to be a component part of the fixed air) which is separated from the marble, but in the charcoal that is produced? And in that it makes part of a solid substance, and does not take the form of air.

7. Since oxygen and all combustible substances unite and explode, in a certain degree of heat, the oxygen expelled from the finery cinder uniting with carbon from the charcoal when red hot must enable it to burn; and therefore, in these circumstances, there ought to be an explosion, or at least a gradual combustion of them in the course of the process, as there is when oxygen is put to the same substance and heated with it afterwards.

It is now near twenty years since this new theory was advanced, and from that time to the present I have not ceased to express my opinion of its fallacy, and to give my reasons for that opinion; but I have not till very lately been able to draw much attention to the subject. Now, however, that I have succeeded in this, I flatter myself that the controversy will come to a speedy termination.



## MONTHLY REPORTS.

*Cases admitted under the Care of the Surgeon of the Finsbury Dispensary, St. John's Square, Clerkenwell, from July 10, to August 10, 1803.*

|                        |    |                        |    |
|------------------------|----|------------------------|----|
| Phlegmone Artuum - - - | 2  | Gonorrhœa - - - -      | 1  |
| Hernia Humoralis - - - | 1  | Hydrarthrus Ischii - - | 1  |
| Ophthalmia - - - - -   | 1  | Eruptio - - - - -      | 1  |
| Erysipelas - - - - -   | 3  | Tinea - - - - -        | 2  |
| Abscessus Axillæ - - - | 1  | Varices - - - - -      | 2  |
| Mortificationes - - -  | 3  | Scrophula - - - - -    | 1  |
| Ulcera Cruris - - - -  | 13 | Rachitis - - - - -     | 1  |
| Contusiones - - - - -  | 6  | Steatoma - - - - -     | 1  |
| Vulnus - - - - -       | 1  |                        |    |
| Fractura Brachii - - - | 1  | Total -                | 47 |
| Lues - - - - -         | 5  |                        |    |

Nearly about the present season of the last year, during the most intense heat of the summer, I had occasion to observe that the diseases which created most alarm, and which were extremely frequent, were Gangrenes; the same remark pertains to the present season; during the month which this Report includes, there have been several cases of the kind, two of which have arisen spontaneously, have advanced in the most rapid manner, and have every appearance of a fatal termination.

The trivial nature of the origin of these diseases, and their rapid progress, seem to indicate a very peculiarly languid state of corporeal energy; which, in some measure, may be attributed to the excessive heat of the season, acting on constitutions, perhaps, not previously of the soundest stamina, and on persons rather advanced in life.

The subject of the first of these cases is a woman of 60 years of age, of a delicate habit; some weeks since a small pimple appeared under her right breast, which she rubbed off by accident; the edges inflamed and the centre assumed a gangrenous aspect; this centre very speedily enlarged, spreading in every direction. When I first saw it, it was about as large as a half-crown piece; I directed fermenting cataplasms, and internally cinchona and opium; no interruption to the progress of the disease was, however, produced; the integuments and cellular membrane sloughed; and as it continued to separate in the centre, the mortification proceeded along the circumference; the whole of the right breast sloughed away; and at the present time, the extent of the disease is from the axilla upwards to the

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groin

276 *Account of Diseases in an Eastern District of London.*

groin downward, and from the centre of the sternum and linea alba forward, nearly to the spine, in a posterior direction.

The other case is in an aged man; the disease proceeded from irritation produced by scratching the foot; gangrene commenced, and destroyed nearly the whole of the foot to the ankle-joint; the progress of the disease has however ceased, and a separation has commenced, but in all probability amputation of the limb will be required, as Nature appears sinking, and unable to support the length of exertion requisite to throw off parts of such small degree of vitality as the tendons and ligaments, which occupy so large a part of the foot.

No. 68, Hatton Garden.

J. RICARDS.

*Account of Diseases in an Eastern District of London,  
from July 20, to August 20, 1803.*

|                         |    |                        |   |
|-------------------------|----|------------------------|---|
| ACUTE DISEASES.         |    | Paralysis - - - - -    | 2 |
| Scarlatina - - - - -    | 4  | Vertigo - - - - -      | 2 |
| Scarlatina Anginosa - - | 3  | Cephalæa - - - - -     | 7 |
| Rheumatismus Acutus -   | 5  | Hypochondriasis - - -  | 3 |
| CHRONIC DISEASES.       |    | Hæmorrhoids - - - - -  | 5 |
| Tussis - - - - -        | 12 | Prolapsus Ani - - - -  | 1 |
| Tussis cum Dyspnœa - -  | 6  | Rheumatismus Chronicus | 8 |
| Phthisis Pulmonalis - - | 2  | PUERPERAL DISEASES.    |   |
| Hydrops Pectoris - - -  | 5  | Ephemera - - - - -     | 4 |
| Dyspepsia - - - - -     | 8  | Dolores Post Partum -  | 6 |
| Enterodynia - - - - -   | 9  | Mastodynia - - - - -   | 4 |
| Diarrhœa - - - - -      | 7  | INFANTILE DISEASES.    |   |
| Ascites - - - - -       | 3  | Ophthalmia - - - - -   | 2 |
| Anasarca - - - - -      | 5  | Ophthalmia Purulenta - | 1 |
| Apoplexia - - - - -     | 1  | Aphthæ - - - - -       | 6 |

During the last few weeks there has been much less disease than has been experienced for a considerable time. The weather has been uncommonly fine, and, whilst we rejoice in it as peculiarly favourable to the different productions of the vegetable kingdom, and highly gratifying to the views of the husbandman, we feel no diminution of this pleasure from the fear of its appearing unfavourable in any other point of view. The animal as well as the vegetable kingdom exhibits signs of health and vigour. Although, however, it has been a season of pretty general health, there have been some instances of disease. Numerous cases

cases of Scarlatina have occurred. Several of these have appeared in the simple form, unattended with any affection of the throat. The shivering by which the disease is generally introduced was slight, and the other symptoms of pyrexia were such as not to occasion any alarm. Nor in the instances of Scarlatina Anginosa did the soreness of the throat, or the fever accompanying it, put on any alarming appearance. In some of the patients, slight anasarca succeeded the other symptoms, but in others there was no appearance of this kind.

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## CRITICAL ANALYSIS

OF THE

## RECENT PUBLICATIONS

ON THE

DIFFERENT BRANCHES OF PHYSIC, SURGERY,  
AND MEDICAL PHILOSOPHY.

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*The Edinburgh Practice of Physic, Surgery, and Midwifery, continued.*

Vol. 3 and 4, Surgery. Vol. 5, Midwifery.

Two volumes of this very respectable Compilation are devoted to Surgery, a proportion of the whole adequate to the importance of the subject. The Editor has executed his task with the same industry and fidelity as in the former volumes, and, indeed, we think this part of the work in some respects superior to the former, a greater variety of authorities having been consulted, and the selection being more extensive. This indeed may be owing to the circumstance that no author in Surgery takes so decided a lead, and is resorted to with so preponderating authority as Cullen still retains in Physic. This obliges the Compiler to take a more extensive range, and enables him to enrich his work with much valuable matter that might have been lost or neglected if he had had before him a single compleat system, which the public had been in the habit of considering as standard authority. Still we must remark that the books which the Editor has consulted are all of easy access, almost all in the English language, and such as have a place in the commonest library. A quotation from Mr. Hunter, is followed by another from Mr. Bell, to which succeeds a page from Mr. Latta; and a communication from one of the valued Correspondents of our

**Journal.** In scarcely a single instance has the Editor thought proper to abbreviate and condense, still less has he indulged himself in comparing opinions, approving, or condemning.

We observe with pleasure, that those parts of Surgery which are of the most general use, and concern, more or less, every practitioner, are described with particular amplitude. Of this kind is the chapter on ulcers, burns, and the lues venerea. We shall not enumerate the leading contents of these volumes; suffice it to say, that every species of injury or disease requiring the assistance of the surgeon is noticed with considerable minuteness, nor have we discovered any omission of material importance in the execution.

The appendix contains a chapter on the important art of recovering suspended animation after drowning, and the plain, intelligible directions circulated by the Humane Society, are added with due commendation. It would have been of advantage if some notice had been taken of the other species of asphyxia, as that from hanging, and from noxious vapours. The medical application of electricity, and the more recent discovery of Galvanism, also make a part of the appendix. Seven plates, exhibiting different kinds of surgical instruments and apparatus, are given at the end of the volume. They are executed in a very respectable style.

**Vol. 5. Midwifery.** The style of execution of this volume resembles that of the preceding; but, we think, not with so much propriety of selection. High as Dr. Smellie's authority stands, it can hardly be considered as superseding every other; but the work of this eminent accoucheur is here quoted with such profuse liberality, that the work of the scissors in a great degree supersedes that of the pen. This observation however only applies to a part of the volume, the remainder is given with more selection.

The chapter on Hysterotomy contains the unfortunate and much disputed Manchester case, but the Compiler appears in the history of this operation to be ignorant of the supposed extra-uterine cases, and of the general state of opinion on this subject. We do not even meet with the name of Dr. Osborne, nor any notice of his valuable observations on some important points of Midwifery.

The chapter on the diseases of children concludes with a short sketch of Vaccination by Mr. Ring.

Thirteen plates are added to illustrate the contents of this volume.

As the present work is a library in itself, (limited indeed, but containing little that will not prove of utility to the practitioner) the Editor has with great propriety given a copious index, a reference to the cases, a posological table, and other helps to the reader, the advantage of which every one in the habit of consulting books must be fully sensible of, and cannot easily overrate.



*Observations on Diarrhœa and Dysentery, as those Diseases appeared in the British Army during the Campaign in Egypt, in 1801; to which are prefixed a Description of the Climate of Egypt, and a Sketch of the Medical History of the Campaign.* By HENRY DEWAR, late Assistant Surgeon to the Thirtieth, or Cambridgeshire Regiment of Foot. London, 1803, pp. 161, 8vo.

THE late campaign in Egypt, and the circumstance of its having been the seat of European war for some years, have made us pretty well acquainted with the medical topography of this singularly interesting country. Whatever be the event of military operations between European armies, medical science is uniformly enriched by them; for which, without going beyond our own country for examples, we may instance the labours of Lind, Huxham, and Cleg-horn. The diseases of Egypt have something as peculiar in their character, as the climate exhibits; the bilious, remittent, and destructive fevers of the tropical countries with which we are the best acquainted, appear to be much less frequent in the equally sultry country watered by the Nile; but the formidable diseases of the eyes, and the more terrible scourge of the country, the plague, make a weighty balance against the African or West-Indian fevers. Diseases of the bowels, however, appear to be equally frequent and destructive to Europeans in both situations, and to require much of the attention of the medical resident. The principal physician to the French army of Egypt, Desgenettes, makes the same observation as to the liability to bowel complaints, and it proved to be often severe, harassing, and not unfrequently fatal.

The introduction of the work before us, is short and not very interesting; it is a very partial sketch of the medical history, as it gives only an account of the circumstances which appeared to predispose the troops to the complaints which are afterwards described more at large. The author begins with diarrhœa. Here we must observe, that as these diseases have been so often and so well described, and as these symptoms in Egypt were not attended with any peculiar circumstances, it is chiefly in the plan of treatment, either for cure or prevention, that we can meet with any thing particularly worthy of attention, though the whole does credit to the author's abilities and observation. On the much agitated question of fruit being a cause of diarrhœa in hot countries, the author makes the following pertinent observations:

"It is a common thing, in table conversation, to discuss the comparative merits of different fruits, as well as of other articles of diet; and to ask any medical man who is present, his opinion of their tendency on the constitution. But it is seldom that an answer can be given to such questions, that will admit of universal application. Prompt and decisive replies are either the offspring of conceited ignorance, or are thrown out carelessly to fill up conversation, and satisfy the company at the time, while we are sensible that the

opinion we give has no weight in our serious practice. - I have heard it on such an occasion confidently asserted, that the most abundant use of water-melons never can do harm. Many who have eaten them freely in warm climates for a number of years, are ready to attest their innocence, and therefore treat the fears of others with ridicule. But I have known several cases in which this fruit has produced the most distressing complaints of the bowels. In these cases, a doubt could not exist of the cause of the complaint; because it commenced with a heavy sensation in the stomach, bearing a near resemblance to the taste of the fruit that had been eaten: a reluctance to this fruit was one attendant symptom of the disease; and if at any time, during convalescence, the patient was in the smallest degree betrayed into the farther use of water-melons, it was followed by a marked exacerbation of all his complaints.

"In the march to Cairo, when bowel complaints were most prevalent, the only fruits we had access to were cucumbers, melons, and apricots, with a few peaches. The apricots were often unripe, and sometimes they were soft and spoiled. The cucumbers and melons were seldom ripe, and were eaten by far too freely. These articles proved frequently exciting causes of diarrhœa. Their pernicious qualities might have been corrected by seasoning them with vinegar and pepper, particularly the latter. Every French soldier, I believe, kept a box of spices in his pocket. The same regulation among our troops would have more influence on the preservation of health in a warm climate, than such abundant supplies of animal food, without which an Englishman too often conceives himself starved."

The description of dysentery follows; and we may remark, that it is drawn up with great clearness, good sense, and accuracy. The author has indeed freely consulted Huxham and Sydenham, but he has, in several instances, very properly adapted the observations of these excellent writers to the circumstances of the Egyptian campaign, as in the following instance:

"It is necessary for Europeans, on removing to a hot climate, to employ a few simple precautions against this and other diseases. They ought, above all things, to avoid exposure to the immediate rays of the sun. They ought to conduct all their business through the day under a shade, and choose the cool of the evening, or rather the morning, after the fogs are dissipated, for walking abroad. If forced to go out at all in the middle of the day, they ought to use a very thick umbrella, forming a complete shade. The covering of the head should be of some thick white substance, and the European black hat should be laid aside. The white turban of the Turks is excellently adapted to a hot climate. Its white colour absorbs less of the heat of the sun than any other, and its numerous folds prevent the heat absorbed from penetrating to the head. In this country, indeed, such a covering would prove unpleasantly warm, as it would confine round the head the heat generated by the animal process. Here were find the external air agreeably cool, and feel  
rather

rather oppressed, when much loaded with clothes on any part of the body. But, in such a climate as that of Egypt, the external heat so much exceeds any that is generated by the body itself, that a greater coolness is sometimes preserved, by confining the heat of our own bodies, than by exposing them to the external air. Those Oriental travellers, who exchange their hat for the turban, experience it to be a much cooler and more agreeable covering. The Turks and Egyptians, besides, keep their heads comfortable by constant shaving, and washing with cold water. Strangers have much greater occasion than the natives, for using such precautions. If they do not, the intense heat of the sun, oppressing the head, produces a debility which affects the whole body, and renders it liable to many other diseases as well as dysentery."

In the cure of this formidable disease, the author appears to lay much stress on flannel bandages applied to the abdomen. The advantage of this practice has often been experienced; and few practitioners have appeared to rely more on it than the author. As we chiefly wish to present to our readers what bears the sanction of actual experience, we shall extract some of the author's remarks.

"Warmth is not a secondary object. It is the very first that should be thought of. I shall give a particular account of what I reckon the best mode of covering the patient, and the mode which I followed in Egypt.

"Four or five folds of fine flannel, or a large piece of thick fleecy hosiery, ought to be laid over the abdomen, and, over this, a flannel bandage should be bound, rather tight, and in a uniform manner, from the groin, nearly to the arm-pits and back again. This mode of applying, or rather of confining, a certain degree of heat over that part of the body which is the seat of disease, is to be persisted in as long as the disease continues. When begun early, and well attended to, not neglecting the usual collateral means, it seldom fails to effect a cure. In whatever stage it is begun, with the exception of the very last, it produces a speedy amelioration of the symptoms, and cures many dysenteries that would otherwise be hopeless.

"The immediate effects of this swathing are, 1. The removal of that local torpor of the abdomen, under which a dysenteric patient often labours. Before its application, he feels as if he had no bowels, but when it is applied, the pressure which it makes restores over the whole abdomen those sensations which were deficient. 2. It obviates rawness and griping. Before applying it, the torpor which exists in the bowels is only interrupted by occasional gnawing sensations, which, on going off, leave him more torpid than before. The flannel bandage, by preventing those impressions of cold which form the chief cause of this uneasiness, does not fail to correct it. 3. It removes dejection and languor; the patient soon feels himself invigorated, and better fitted to relish the enjoyments of life. 4. It corrects that dyspnœa which is so often the consequence

consequence of dysenteric debility. The support which it gives to the action of the abdominal muscles, and consequently of the diaphragm, enables the patient to respire with much less fatigue. This effect is experienced on the first application of the bandage; but if very tight, it will in a little time create a different sort of dyspnœa, of a less languid but more stifling nature, by preventing the full expansion of the lungs. In this case it must be made a little easier. The ultimate good effects of the flannel bandage are, an increase of general strength, and a healing process in the intestines, proceeding from an improved state of the sensation in those organs. Its good effects ought to be experienced very soon after it is applied. If, in two or three days it should produce no change, we must conclude, either that the symptoms proceed from such a fixed state of disease as requires other powerful remedies, or that the disease differs from the greater part of chronic dysenteries, which certainly owe their continuance and progress in a great measure to hurtful alternations of temperature.

“When the bandage is first applied, much of its efficacy arises from its pressure. Pressure, even with the palm of the hand, often gives a temporary relief to the bowels. But after it has been continued for a week or a fortnight, the pressure is sometimes of less service, and may be diminished. In some old dysenteries the bowels are so tender, that little or no pressure can be borne. But the warmth produced by the fur or fleecy wool under the bandage, is of more lasting benefit, and should be kept up without intermission till the dysentery is cured. Though the bandage should be applied very lightly over them, the elasticity of the soft wool makes them adhere so close as to exclude all cold, in a manner that cannot be effected by the mere use of a flannel shirt.

“In order to secure the good effects of the bandage, care must be taken that it be properly applied. In serious cases, I made a point of applying it myself, trusting most to its efficacy when I thus determined the exact degree of pressure that was made. Sometimes it was apt to loosen, and especially to move upward, so as to uncover the lower part of the abdomen. To prevent this, I first made it firm round one of the thighs, and after putting it once or twice about the body, brought it round to the opposite thigh, proceeding afterwards to apply it fully round the body. It was often necessary, especially when I was obliged to employ old bandages, to keep them together with pins in convenient places, after they were applied. But the bandages used, ought, if possible, to be of new flannel, for, after they are some time wore, they lose a great part of their elasticity. With these precautions, I always found them stay on as well as I could wish. But in private practice, where we meet with some corpulent subjects, this will often be more difficult. In such cases, an elastic jacket made of strong flannel, lined with soft wool over the abdomen, and fitted with elastic wires across the back, might answer all the purposes of the bandage. It should also have a strap fixed to the front part, to  
pass



pass betwixt the thighs, and button again at the small of the back, in order to keep the jacket well down over the abdomen, and to protect the lower end of the rectum from cold, where that part is affected with morbid sensibility. The patent fleecy hosiery jackets sold in the shops, have not in general a thickness of wool on the part covering the abdomen, sufficient to answer the purpose; they are also too easy. Though elastic enough to apply closely to the body, I suspect they would not produce that degree of pressure on the abdomen which proves so useful, when coverings are first put on. When a jacket of this kind is to be used, an additional quantity of wool should be sewed to the inner part of the front, and the same kind of strap that I have mentioned, employed to keep it down over the belly. However, as this jacket produces but little sensible pressure, I should not altogether trust to it, without applying a roller over it, which might be pinned to the jacket, to prevent it from shifting.

This species of covering, in whatever form it is applied, ought to be kept on, even when the symptoms of dysentery begin to disappear; and, after they are gone, it ought to be laid aside with caution, and by slow degrees."

On the whole, we may consider this treatise as another instance of the excellent field of observation which the military hospital service furnishes, to those who have been rendered adequate to it by previous study.

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## MEDICAL AND PHYSICAL I N T E L L I G E N C E.

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*Violent Effects of Oxygenated Muriat of Mercury; communicated to the Medical Repository of New York, by Dr. JAMES S. STRINGHAM.*

I lately had occasion to have recourse to Mr. Addington's manner of curing gonorrhœa, a particular account of which I met with in the sixth volume of the Medical and Chirurgical Review. A married gentleman in this city had (during the absence of his wife) been attacked with symptoms of this disease. A few days afterwards he applied to me for a remedy which would remove it in the shortest time possible, as he was in daily expectation of his wife's return. He added, that should this take place before his complaint was entirely cured, his domestic comfort would be for ever destroyed. Placing some confidence in the assertions of Mr. Addington, I informed him that I did not despair of being able to accomplish his wishes in the course of a week; but that the remedies

dies I should employ were such as I had never before used; and that, as they were violent, nothing but the peculiarity of situation could induce me even to give them a trial. On his declaring himself perfectly willing to encounter every hazard, I immediately prepared for him three grains of corrosive sublimate, dissolved in one ounce of rectified spirit of wine. Of this solution he was to take one-half at bed-time, and on the succeeding morning one ounce of Glauber's salts. On the next evening but one he was to repeat the remaining portion, with the salts as formerly. He punctually complied with these directions, and called upon me on the fifth day from the time he had taken the first dose, in no respect better than before. Considering him a proper subject for prosecuting the experiment, and wishing to satisfy myself as to the efficacy of the remedy, I ordered him, two days afterwards, to repeat the solution in the same way as before, taking the salts between each interval. On the night after having swallowed the second dose I was called upon to visit him. He had a profuse salivation, violent retching of the stomach, griping pains in the bowels, with great uneasiness in the head and throat, attended with delirium. He continued in this situation during the whole of the night; the same remedies were prescribed as though he had been poisoned by corrosive sublimate. On the next day the violence of his symptoms was considerably mitigated, and in about twenty-four hours afterwards they entirely disappeared. His gonorrhœa, however, continued precisely the same, and, in three weeks afterwards, was cured by the plan generally adopted.

From this single trial, I have no hesitation to conclude, that the method of curing gonorrhœa, as proposed by Mr. Addington, is both dangerous and uncertain. The same objections will not apply here that were urged against the surgeon who denied the efficacy of this mode of treatment. The directions of Mr. Addington were in this case literally pursued, so far as common humanity would permit; but without producing the smallest benefit to the patient.

I wish to make this case public through the medium of your useful work, with the hope that it may be the mean of preventing any other practitioner being placed in the same unpleasant dilemma from which I have been so lately extricated.

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*Curious Analogy between the Motion of the Blood in the Arteries, and of Water in Troughs and Conduits; in a Letter from MOSES YOUNGLOVE, Esq. to Dr. MITCHELL, dated New-Lebanon Springs, January 15, 1803.*

The ingenious and profound Dr. E. Darwin, in his *Zoonomia*, vol. i. § 12, 1 et seq. and elsewhere in his work, very rationally, and perhaps demonstratively, accounts for the systole and diastole of the heart and arteries, as well as for the alternation of muscular exertion and quiescence in other parts, by the mere principle of animation; but it is a curious fact, that, from some physical or chemical

chemical cause beyond my comprehension, something similar to pulsation occurs in the running of water in an aqueduct. I have observed it in several, but most frequently and particularly in the one which accommodates my kitchen, barn-yard and hog-pen. There is an uninterrupted descent of perhaps twelve degrees below the level of the horizon in the whole distance from the fountain to my house (66 rods), in which the rapid current is only broken by a watering-post, which, in a dry time, waters several fields bordering on it. As the water ascends in a bored channel on one side of the post, to the height of seven or eight feet, and descends in a like channel on its other side, I at first imagined it might be partly or wholly owing to this ascent the flow of water in the duct is sometimes very small, slow and still, and then swift and full, with a roaring noise, and that in regular alternations of about five minutes; but I have since found that the same regular vicissitudes of flowing occur above as well as below the post.

The fountain does not afford a sufficient stream to fill the duct except in great rains; but when it runs fullest, and when it runs most scantily, the same regular succession in flowing continues.

Suppose, then, that I could construct my aqueduct anew, of some substance as flexible and elastic as a human artery, bored smaller, to fit the ordinary stream from my fountain, would not these regular alternations of flowing in it occasion a dilatation and contraction of it somewhat similar to arterial pulsation?

The above phenomenon I do not remember ever to have heard or read of; and, trivial as it seems, it may, perhaps, form a link in some important chain of research. If you think it merits publication, it is offered to the service of yourself and the public.

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The Winter Courses of Lectures given at the adjoining Hospitals of St. Thomas's and Guy's, will commence in the following order: At St. Thomas's Hospital, Anatomy, and the Operations of Surgery, by Mr. CLINE and Mr. ASTLEY COOPER, on Saturday, October 1, at one o'clock.—At Guy's Hospital, Practice of Medicine, by Dr. BABINGTON and Dr. CURRY, on Monday, October 3, at ten in the morning.—Principles and Practice of Chemistry, by Dr. BABINGTON and Mr. ALLEN, on Tuesday, October 4, at ten in the morning.—Theory of Medicine and Materia Medica, by Dr. CURRY, on Tuesday, October 4, at seven in the evening.—Midwifery and Diseases of Women and Children, by Dr. HAIGHTON, on Wednesday, October 5, at eight in the morning.—Physiology, or Laws of the Animal Economy, by Dr. HAIGHTON, on Monday, October 10, at a quarter before seven in the evening.—Principles and Practice of Surgery, by Mr. ASTLEY COOPER, illustrated by select cases under his care in Guy's Hospital, on Monday, October 10, at eight in the evening. The above lectures given at these two hospitals, are so arranged, that no two of them interfere with each other in the hours of attendance, and the whole

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s calculated to form a *complete course of medical and chirurgical instruction*. The terms and other particulars to be learned by applying to Mr. Stocker, apothecary to Guy's Hospital; who is also empowered to enter gentlemen as Pupils to such Lectures as are delivered at Guy's.

The Autumnal Course of Lectures will begin at the Medical Theatre, St. Bartholomew's Hospital, in the following order:

On the Theory and Practice of Medicine, by Dr. ROBERTS and Dr. POWELL. — Clinical Lectures on select Cases occurring in the Hospital, will be occasionally given by Dr. ROBERTS. — On Anatomy and Physiology, by Mr. ABERNETHY. — On Comparative Anatomy and Physiology, by Mr. MACARTNEY. — On the Theory and Practice of Surgery, by Mr. ABERNETHY. — On Chemistry and the Materia Medica, by Dr. POWELL. — On Midwifery and the Diseases of Women and Children, by Dr. THYNNE. — The Anatomical Lectures will begin on Saturday, Oct. 1, at two o'clock, and the other Lectures will begin in the following week. Further Particulars may be known by applying to Mr. Nicholson, at the apothecary's shop, St. Bartholomew's Hospital.

**THEATRE, LONDON HOSPITAL.** On Saturday, October 1, at two o'clock, Mr. HEADINGTON and Mr. FRAMPTON will commence their Lectures on Anatomy, Physiology, and the Principles and Operations of Surgery. Demonstrations as usual by Mr. ARMIGER.

The Lectures of Dr. PEARSON will commence in Leicester-square, the second week in October next. A lecture is given on Therapeutics from a quarter before to a quarter past eight o'clock; on the Practice of Physic, from a quarter past eight to about nine o'clock; and on Chemistry, from a quarter after nine to ten o'clock, every morning except Saturdays, on which days a Lecture is delivered on the Practice of Physic from eight to nine, and on the Cases of Patients from nine to ten o'clock.

Dr. BRADLEY will commence his Course of Lectures on the Theory and Practice of Medicine, in the first Week in October. Particulars may be had at his house, No. 25, Parliament Street.

Dr. BATTY's Course of Lectures on the Theory and Practice of Midwifery, and on the Diseases of Women and Children, will commence on Monday, October 10, at his house in Great Marlborough Street.

Dr. DENNISON and Dr. SQUIRE, on Saturday, October 1, will begin a Course of Lectures on the Theory and Practice of Midwifery, and the Diseases of Women and Children.

Dr. CLARKE will begin a Course of his Lectures on the Practice of Midwifery and the Diseases of Women and Children, on Tuesday, October 4, at a quarter past ten o'clock. These Lectures are given in the winter season, only, at the house of Dr. Clarke, No. 1, New Burlington Street.



**MR. BLAIR'S PHYSIOLOGICAL LECTURES**, will commence at the Bloomsbury Dispensary, Great Russel Street, on Tuesday evening, October 4, at eight o'clock precisely.

A printed Syllabus, price five shillings, may be had at the Lecture Room.

**MR. WILSON** and **MR. THOMAS**, of the Theatre of Anatomy, Great Windmill Street, will begin their Winter Course of Lectures on Anatomy, Physiology, Pathology, and Surgery, on Monday, October 3, at two o'clock. Practical Anatomy will be continued as usual. A plan of the Course may be had by applying to Mr. Wilson, in Great Windmill Street, or to Mr. Thomas, in Leicester Square.

**MR. TAUNTON** will commence his Lectures on Anatomy, Physiology, and Surgery, in the beginning of October. The general objects of them are to explain the structure and functions of the human body; to shew the situation and connection of the different organs with each other; and to take some notice of their transitions from health to disease, which will be demonstrated by preparations of the parts, drawings, and recent dissections, for the information of medical students, professional men, and scientific persons; and will be given nearly in the following order: Some general Lectures, explaining the structure and economy of the component parts of an animal body; then, Osteology, or the skeleton, will be explained, and the separate bones described, their different modes of union, including ligaments, joints, and luxations. Thoracic viscera, including the heart and lungs, with the laws of circulation and respiration. Abdominal viscera, stomach, alimentary canal, and digestion. Organs of generation, male and female. Arteries, veins, and lymphatics. Brain and nerves. The organs of the different senses, the ear, eye, nose, mouth, and common integuments. The art of making anatomical preparations. Particulars may be known by applying to Mr. Bartlet, Finsbury Dispensary, St. John's Square, Clerkenwell.

**MR. CHEVALIER**, Surgeon of the Westminster General Dispensary, will commence his next Course of Lectures on the Principles and Operations of Surgery, on Wednesday the 5th of October, at seven o'clock in the evening, at his house in South Audley Street, Grosvenor Square, where a printed Prospectus may be had.

**MR. CARPUE**, Surgeon to the Forces, will commence his Lectures on Anatomy and Surgery, at his Theatre, Broad Street, Golden Square, on Monday, September 26. Mr. C's plan prevents him from taking more than ten pupils each course. The dissecting room will be open from seven o'clock in the morning till the evening. Particulars may be known by applying to Mr. Carpue, Leicester Square.

## TO CORRESPONDENTS.

Some of our Readers have signified that the concluding paragraph of the Review of the *Report of the Vaccine Pock Institution near Golden Square*, (page 190 of our last number) may admit of an interpretation injurious to both the parties alluded to; we have therefore given the whole passage from the Report, that our readers may put their own construction upon it.

"The Public have been told, even in terms of invective, and reports have been industriously propagated, that the Founders have been guilty of a flagrant act of injustice in excluding Dr. Jenner from this Institution. If our adversaries had but been thoughtful, candid, and judicious enough to have ascertained the truth of the supposed fact, to which their censures were imputed, they would have spared themselves the trouble of going further, granting (which we are not required in propriety to do) that it was an act of injustice to do what was asserted. The truth is, that Dr. Jenner was invited by one of your Reporters, Dr. Pearson, in a letter addressed to him at Berkely, his place of residence, December 10, 1799, to belong to the Institution, under the most honourable title then deemed consistent, that of consulting or corresponding physician. This proposal was declined, without intimating that any other situation would be more agreeable. Subsequently, in order to shew due respect and deference to some friends of the Institution, Mr. Brande was deputed by the Vaccine Medical Committee to wait upon Dr. Jenner, then in town, and assure him of the willingness of each and all the medical department to make any arrangement agreeable to induce him to be attached to the Institution; the Committee even went so far as to authorise Mr. Brande to say, Dr. Jenner might make what alterations he pleased in the plan of the Institution, and that if any of the officers were not agreeable to him, there was not one who was not willing to resign. After repeated applications and much delay in the spring 1800, all the proposals were declined, it being at last said, it was thought best, that there should be no Institution."

We have received from Mr. Moor, surgeon dentist, some Strictures on Mr. Fox's work on the Teeth. The object of the Writer is to controvert Mr. F's opinion respecting the vascularity of the teeth; but on comparing some of the quotations with Mr. F's book, we did not think them sufficiently correct for publication, and request Mr. M. to send for his paper from the publisher's, for revision.

The Editors have frequently informed their Correspondents, that anonymous answers to, or criticisms on, papers signed by the Authors, cannot be admitted, unless the Writer's address accompanies them in a postscript, or some other manner. It should hardly seem necessary to observe, that medical facts without the name of the Practitioner who observed them, are no facts whatever to the Public. They regret to see so many of their Correspondents disregard these often repeated hints; every month brings them many valuable Observations and Cases, which cannot be published for want of proper Signatures.

## A D D E N D A.

*Description of Mr. Jardine's Tooth Instrument, (p. 241.)*

- PLATE I. Fig. 1, The instrument complete; *a.* the bolster, *b.* the slide.  
 Fig. 2, The bolster detached; *a.* the hole for receiving the shank, *b.* the pin-hole of the claw.
- PLATE II. Fig. 1, A bad representation of the bolster and shank.  
 Fig. 2, The slide detached; *aa.* the holes on each side of the slide through which the shank passes, *b.* the flat side of the slide that is placed against the gum.

THE  
Medical and Physical Journal.

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VOL. X.]      OCTOBER 1, 1803.      [NO. LVI.

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*Printed for R. PHILLIPS, by W. Thorne, Red Lion Court, Fleet Street, London.*

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DR. BEDDOES'S COLLECTION OF PAPERS ON
THE INFLUENZA.

PART II. continued.

72. Mr. WILLIAMS, Merthyr, Glamorganshire, June 7,
1803.

NO facts have occurred to me to enable me to form a *decisive* opinion, whether the influenza is infectious or otherwise; but I am inclined to think that it is contagious, for the following reasons: Whenever one in a family was attacked with it, in general the major part or the whole of that family caught it; the great and sudden depression which so constantly attended it, bears strong affinity to other contagious diseases, and also its general progress. The disease appeared at Surowy iron-works, eight miles from Merthyr, about the 20th of February, and in a few days after at Merthyr, and it has not yet entirely disappeared. I did not observe that the men were attacked in sets or classes at Merthyr iron-works or the neighbouring iron-works. This is the sum of what I have had opportunities of remarking.

73. Dr. HOBBS, Swansea, April 15, 1803.

The few observations I have made respecting the influenza, lead me to judge that it is contagious.

I was induced to form this opinion from remarking that the influenza had travelled (if I may be allowed to use the expression) from the east to this place. For we heard of a complaint which attacked whole families in the neighbourhood of Cowbridge, Pyle, and between Pyle and Briton Ferry, before the influenza was known here. I have also been credibly informed, that the influenza did not

(No. 56.) U reach

reach that part of Carmarthenshire which is near to this place, until after it had made its appearance at Swansea. The following fact likewise disposed me to consider the complaint as contagious: A gentleman and lady came in the beginning of March, upon a visit to a gentleman's house in the neighbourhood of Briton Ferry, where some of the family were labouring under the influenza. They came from a part of Carmarthenshire where the disease had not shewed itself. The lady was seized in the course of a few days after her arrival, and the gentleman a few days afterwards.

On comparing a number of cases, I do think the influenza distinguishable from common catarrh. I cannot, however, myself, call to mind a case (although other medical men seem to think they have seen such) where catarrhal symptoms of some description or other did not take place. But they could not, in my opinion, determine the disorder to be merely common catarrh. For example, a lady was teased with incessant cough, which lasted from four o'clock in the evening until four o'clock the next morning, it then left her; she had no more of it, nor had she any other symptom of catarrh; fever however continued with pain of the back for some days. Others have been seized with running at the nose, which lasted several hours without any other catarrhal symptom; fever, with pain of the back, then succeeded, and lasted some days.

In those instances, where the chest was much affected, and symptoms of pneumonia took place (which mostly happened when people advanced in years were attacked) it might be doubtful whether the symptoms belonged to common catarrh or the influenza.

The depression in this complaint, is certainly greater and more sudden than is ever observed in common catarrh. Indeed, the depression has always appeared to me a distinguishable and leading symptom of the complaint. I have seen the disorder gradually proceed to the most formidable and fatal stage of pneumonia, and I have now a case where it has ended in low fever with extreme debility, but without any affection of the chest whatever.

The first case of well-marked influenza, I think, I saw on the 7th of March. The last case, on the 10th of April.

Last week I heard of the whole of a large family in the country being recently attacked. I do not hear this week of many fresh seizures.

74. Mr. HARNESS, Tavistock, July, 1803.

The influenza first appeared in this neighbourhood about the middle of March, and went off the latter end of May.

It appeared in the town three weeks earlier than in the adjacent county, except in one instance.

After being general, I did not meet with *single* instances.

It certainly seemed to *me* to pass from person to person for the following reasons.

Two ladies of this place spent a few days at Exeter, and slept at a friend's house, where the family had been ill of the influenza (and indeed some part of it then laboured under the complaint); one of them was seized as she was returning, and the other two days after, and the whole of the family where they lodged had the complaint within ten days. About the same time, a person coming from Plymouth Dock, (where the influenza was very prevalent) was seized at a friend's house at a different part of the town from the ladies just mentioned, the family of this house likewise soon became infected; these were the first instances of the complaint in this town, but it soon became general.

I have not had any reason to suspect the contagion conveyed by articles of dress.

Several cases have occurred of a violent ardor urinæ (in women more particularly), this however soon gave way to the usual medicine,

Postscript from D. GEDDES, Esq,

Mr. Harness desires me to add, that Mr. Carpenter's coachman returned very ill of the influenza from Bath, nearly about the same time, and communicated the disorder to his family, who live a mile from the town.

75. Dr. VAUGHAN MAY, Plymouth Dock, June 7, 1803.

During the months of November and December last, the winds prevailed in the eastern quarter, which continued in January and part of February of the present year. In this period, diarrhœa and cholera were very prevalent; so nearly similar to that preceding the influenza of 1788, that to many of my friends, I hazarded a pretty confident opinion of an expected return. In this I was not deceived, for about the latter end of February, it began its course. About the middle of March, I believe it was most prevalent, at least I found it so; and the last well-marked case I was called to on the 30th of April.

The symptoms were nearly similar to those I described
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in 1788, but I observed the debility in general was more considerable. Pneumonia in some cases prevailed so as to threaten danger, but I met with no loss of patients, nor did any of my medical brethren, excepting in a few instances of advanced age. Those who were attacked, excepting as above, recovered in proportion to their early or late applications for assistance; and I found no difficulty in speedily removing their complaints, by vomiting with tart. antim. & ipecac. which in general, if exhibited on the first or second day, totally removed every complaint. In other cases antimonial powder in small doses, combined with opiates and diluents, proved highly useful. In no case did I find it necessary to bleed; for though, in many instances, pneumonia was carried to a great height, yet, in my opinion, the pulse and general and excessive debility forbade it. In some few cases, after the fever had left the patients, and they were again about, I met with a violent, dry, spasmodic cough, which did not give way to opiates; but when combined with digitalis in the dose of a grain of each night and morning, it completely answered my most sanguine wishes, after a very few doses.

Blistering was had recourse to in some instances, and I think with advantage; more particularly so, in those cases resembling low fever, of which there were many; and here I found the greatest advantage from bark and wine, after premising an emetic and laxative.

I am inclined to consider the influenza contagious, for when it first made its appearance, it certainly attacked individuals; and I have observed many instances where the children in families were first affected, and afterwards their parents; and in other instances, vice versa.

It certainly was no uncommon thing for many of a family to be seized together, and this has operated on the minds of many against contagion, and in favour of diffusion of pestilence through the atmosphere. Has this not been the case with the epidemic measles and small-pox, as described by Sydenham and others?

I know but of few exceptions where it has entered a family, and there was certainly no difference from exceptions in measles, &c. In many instances, undoubtedly, the resemblance to common catarrh was such as to make the decision doubtful. I think the only symptom which decided the complaint in such cases, was debility, and it certainly did appear in all gradations from pneumonia to low fever.

I never observed that any particular classes were exempt,
but

but the soldiers in the ordnance department were certainly not so generally affected as in the influenza of 1788.

It seems to me there was pretty much regularity in the rout of the disease. I believe there can be no doubt of this being the same with that of Paris, and which we have understood carried off such a number of people. From Paris it broke out in London, taking a western course until it reached this place; from hence it went into Cornwall, where it now rages, as well as in Ireland. This has been urged to me in favour of diffusion of pestilence through the atmosphere! In that case, how is it that it did not prevail in two neighbouring counties, viz. Devon and Cornwall, at the same time? which it certainly did not. This appears to me a strong point in favour of contagion.

As this is a matter of some importance, I shall be happy to see your opinion at large on the subject; and if these observations are of any use to you, they are quite at your service.

76. Mr. WHITLOCK, Ottery St. Mary, July 15, 1803.

I attended many patients in the latter part of the month of February, whose symptoms were not sufficiently marked for me to say decidedly whether they were cases of common catarrh or influenza. In the beginning of March, however, the characteristic symptoms of influenza were too apparent to be mistaken, and its distinctive character was never completely lost until its total disappearance, which, in my practice, took place about the first week in June.

The date of its commencement *was* different in different situations. I did not attend any patient out of the parish of Ottery, until the end of March.

I attended but few *solitary* cases during the time of its being rife in this neighbourhood, and those *solely* in the early part of its progress.

As far as my observations go, the disease was most decidedly *contagious*, and *readily* communicable from one person to another. Many had second attacks in consequence of their attendance on sick relatives.

I will take the liberty of adding, that very young infants appeared less susceptible of the infection than adults; nor did I see one case where they did not resist the disease altogether, until many of the persons, to whose care they were committed, had been attacked by the complaint in succession.

77. Mr. GIDELY, Penzance, July 10, 1803.

The influenza began first in the parishes nearest the Land's End, about the beginning of March, and was prevalent there at least a week or ten days before its appearance in this town, which was on the 25th of March, and then it was general over the whole neighbourhood, and did not cease to be so until the middle or latter end of April. Single instances occurred for a long time after, and cases till very lately have appeared in different places.

I thought it evidently infectious, and Mr. Borlace says he has no doubt of its being so, having marked the progress of it in his own family, himself having caught it during his visiting some patients confined with it, and those who were most with him following in succession.

Whether conveyed by articles of dress, I cannot answer, as I never observed it.

A family now residing here, but who belong to Essex, and for particular reasons had to dread the disease, used every means of prevention, as avoiding communication or converse with infected houses, wearing camphor, using vinegar, &c. and were fortunate enough all to escape. I believe it was the only house where some or all of the family were not attacked; not one medical man escaped.

It was mortal only in a few instances, and the subject was either consumptive or asthmatic, and its course to a fatal termination was then very rapid.

The disease appeared at Helston about a fortnight after its being general here, but was so slight a disease that the surgeons can give no account of it.

78. Mr. WILLIAMS, Aberystwyth, July 8, 1803.

The influenza appeared here about the 17th or 18th of March, exerted its greatest influence from the 1st to the 13th of April, and did not entirely leave us till the second week in May.

It appeared in different places at different dates. My practice takes in a circuit of about twenty miles. It was known twenty miles south of this place, ten or twelve days before it was here, and was upwards of a fortnight before it extended the same distance north.

The symptoms were nearly the same in all, but much more severe in those who had asthmatic affections; it proved fatal in this neighbourhood in one instance, and that was an elderly lady who had for some years been subject to severe paroxysms of asthma.

I have

I have some reason to think, that persons of a scrophulous consumptive habit, and who were liable to hæmoptysis, escaped this epidemic. If such is the fact, it cannot have escaped Dr. B's observation, and I shall be glad to know it.

I always thought it contagious, and have had no reasons to think otherwise.

79. Dr. BLACK, Newry, May 28, 1803.

I have seen a great deal of the influenza for more than two months past, and at no time have I entertained a doubt of its contagious nature. In general, it diffused itself through all the members of a family in which it once got a footing; and though many negative instances might be quoted, yet I am very far from thinking that these ought to overturn the affirmative proposition obviously resulting from a full induction of particulars. I do firmly believe that the negative examples in the most highly contagious diseases, of which we have any knowledge, plague for instance, and small-pox, are to the full as numerous and as remarkable as they have been in influenza. As far as I have been able to learn, its first appearance in this kingdom was in Dublin, the latter end of February or beginning of March, whence it gradually and not very rapidly diffused itself northwards, until it reached us the beginning of April, and so on in a regular progress. I will mention to you one circumstance which, I think, well illustrates its slow propagation from one district to another in the ordinary way of contagious diseases. At the time that the disease was raging at its height in this town, when scarcely a family was free from it, my friend, Dr. Crawford (brother to the late Adair Crawford) who resides at Lisburn, a town twenty-three miles north of this, was, on the 23d of April, called hither to my assistance in a case of another kind. He was much surprized when I informed him how very general this disease was with us, and how severe. He said, at Lisburn they were, *as yet*, unacquainted with it. But I understand that the town and neighbourhood of Lisburn have since that time suffered as much as other districts.

There was a circumstance observable in the nature of the disease itself, which appeared to me to convey strong evidence of its contagious nature. In a great number of instances, when the patient on the first seizure took a brisk purge of calomel and scammony, and instantly after that had operated, a sudorific medicine, he was free from all

fever on the third day. Yet, under these circumstances, there remained often for a week or longer, a debility, lassitude, prostration of strength and spirits, and loathing of animal food, which I was utterly at a loss to account for, except on the principle that a febrile contagion had been introduced into the system, and though its virulence or activity was mitigated or subdued, yet the effects enumerated (which are its ordinary effects) remained for some time.

It was very mortal in this country both in the higher and the lower classes, but on a different principle in these respectively. My opportunities of observation among the lower classes were not numerous; but I had reason to be satisfied that one great cause of its fatality was improper treatment, and more especially a liberal use of their panacea, whiskey. In the better ranks, the chief sufferers were persons advanced in years, of full habits, and who had any weakness of the lungs, or afflux of fluids to that viscus, and more especially those who had been free livers. In many such the disease terminated by an effusion into the bronchiæ, for the elimination of which, the powers of expectoration were inadequate. I observed that emetics had a favourable effect on the expectoration, and opiates a most pernicious one.

80. Dr. RYAN, Kilkenny, July 1803.

The influenza, which has so lately extended its influence all over the united kingdom, first made its appearance in this city the beginning of April last. Before it reached this quarter, or as far as I can learn, any other interior part of the country, it raged with great violence for many days in the principal sea port towns, as in Dublin, Cork, and Waterford; so that the probability is, it was imported on board of ship by passengers from England, Scotland, or some other country trading with us.

The first intimation I had of its approach was in the following way. A gentleman residing about eight miles from this place, on the high road from Cork, came to consult me about the state of his health, and during our conversation, thought it incumbent on him to inform me that he and his whole family had just recovered from the influenza. The day immediately preceding this, I was called upon to visit a patient, whom I considered to labour under a bilious fever, attended by a catarrhal affection, (a very usual combination in this part of the country) and treated it accordingly.

About

About the fourth day the febrile symptoms being evidently on the retreat, while the cough continued more troublesome than before, I began to reflect on the conversation I had with my patient; and taking into consideration the circumstance of the influenza, (according to the reports of the newspapers) having prevailed in Cork for three weeks past, I now ventured to pronounce, that what I took for a bilious fever was in reality the influenza, which had got footing in different parts of this island. The event justified my opinion; the disorder, in less than a fortnight, having spread itself all over this city.

In some country places, isolated and detached from any adjacent dwelling, I have known the whole family continue exempt from the influenza until one of them happened to come to town, bring it home, and after a few days confinement, communicate it to the remainder. Though this epidemic diffused itself very extensively through all ranks and descriptions of people, I have, notwithstanding, observed many entire families to escape, that must have been constantly exposed to infection, supposing it to exist; nay, I have remarked that some who acted in quality of nurse-tenders in the family way, did not take it; but these were few indeed, when compared with the immense numbers who caught it by their attendance on the sick.

One source of error on this subject ought not to be passed by unnoticed; sometimes the symptoms were so slight, trivial, and evanescent, that many supposed they were fortunate enough to have escaped, who, in fact, had passed through the ordeal, but in such a way as scarcely to be conscious of any indisposition. From all this you will readily perceive that I am among the number of those who suppose the influenza to be contagious; and I really am so, but the limits of this letter prevent me from investigating the subject more in detail, and enumerating the various motives that determine me to this belief.

Before I enter upon a description of the disease in question, you may not probably think it irrelevant to the present enquiry, that I should transcribe, verbatim, from my book of reports, a note which I preserved of an epidemic catarrh, that prevailed very generally here in December, 1800.

Kilkenny, Jan. 1, 1801.

An epidemic catarrh or influenza has been very prevalent in this city and its neighbourhood for three weeks past
and

and more, and was ushered in with the usual symptoms of pains in the limbs, a sense of cold or chilliness, cough, and coryza, with more or less of fever. In many instances, a considerable degree of inflammation of the lungs accompanied this disorder, which required copious bleeding and blistering, much more, indeed, than I ever found necessary in any similar epidemic. While this complaint was at its height, several cases of strongly marked pleuritis occurred at the same time. Whether they originated altogether in the reigning epidemic or no, it was not an easy matter at times to determine, but on some occasions such a connection was apparent; for though the characteristic symptoms of pleuritis were all present, still the softness of the pulse clearly pointed out a difference between it and the common pleurisy, to be met with every day. Moreover, the former did not by any means bear a repetition of blood-letting, as well as the latter usually does, except a relapse was brought on by exposing the body too soon after recovery to cold air, when it became necessary to use the lancet with as much freedom as in any other case whatsoever. In general the complaint was of a mild nature, and for the most part required no medical aid; abstaining from animal food and wine for a few days, and lying a bed were sufficient to accomplish a cure.—But to return to the immediate subject of my letter.

Children were not so liable to be attacked as grown-up persons, and with the former it was comparatively a mild disease; I saw but two children seriously ill, and they were relieved by the application of blisters between the shoulders, and a plentiful use of squills. Some, after having been inoculated with the vaccine pock, caught the influenza; but neither complaint seemed to have been aggravated by the complication.

The epidemic, as it occurred in this city, may be properly enough divided into two varieties; the one a very mild, though often a tedious disease; the other a highly distressing, and sometimes a formidable malady. The former resembled in no small degree the common and usual effects of change of temperature on the human body; but the latter, particularly in its aggravated form, was, *toto cælo*, a different complaint, and had nothing in common with catarrh, except the cough and coryza. In the one, lassitude, pains in the joints and muscles, frequent cough, unusual sensibility to cold, and some slight degree of a febrile state, were the predominant symptoms, but not so intense as to necessitate the patient's confinement to bed; in the other, the

the paroxysm of fever was similar to that of synochus or typhus, and could not be distinguished from them at the first onset. The patient, after a shivering fit, complained of sickness at stomach, frequently vomited, and threw up some bilious sordes, the bowels at the same time being attacked with a dysentric kind of purging, though sometimes they suffered severely from pain without any accompanying evacuation.

A cough seemed to be a necessary constituent part of the disease, and was seldom absent; and next to it in frequency of occurrence, were a severe pain in the forehead and soreness of the throat; bleeding from the nose was by no means rare, and I met with one case of it which endangered the life of the patient.

In the accounts of this epidemic already published, some have considered it as connected with debility, and others with increased systematic excitement. The truth lies in the middle between these two opposite extremes. The pulse was in general rather full, soft, and easily compressible, nearly similar to that of the bilious fever of this country in its earlier stage; I have witnessed many protracted cases without any striking mark of debility, and no tendency to putrefaction. On the other hand, it could not, in strictness of medical language, be denominated an inflammatory disease, as no instance of it whatever, unless mismanaged, in all my practice, demanded venesection; it is but fair, however, to acknowledge, that when appearances became alarming, they were very generally the consequence of an inflammatory affection of the lungs, superinduced by a heating and improper regimen, or by an unseasonable exposure of the body to cold, before recovery was complete. On these occasions the blood threw up as large a portion of coagulable lymph, and was as completely cupped as in genuine cases of pneumonia or pleuritis. The fever attending the influenza most commonly began to subside about the fourth or fifth day, but in many cases it was lengthened out to a period of seven, nine, or twelve days; and in this continued form, a delirium of the phrenitic kind was occasionally to be met with, which excited no small degree of interest and alarm.

In a small town, named Callan, within eight miles of this city, most of those who were attacked with the influenza had an eruption so exactly resembling the scarlatina, that it became a difficult matter to distinguish the one from the other, particularly from this circumstance, that an inflammatory affection of the uvula and velum pendulum palati

palati was a constant attendant on this variety of the epidemic. An intelligent apothecary of the place, from the observations he had made, considered the eruption a critical effect, as he found that an evident change for the better was perceptible immediately on the eruptive matter being thrown out on the surface. I interrogated him minutely as to the existence of any other epidemic, more especially the scarlatina anginosa, and he positively affirmed that no such disorder as this had shewed itself in the town or neighbourhood thereof for several months past, but from the first appearance of the influenza he had met with cases of measles, and that it has from that period to this prevailed very generally all over the district.

The first and most essential step in the cure, according to my observations, was clearing the stomach and bowels by an emetic, and some gentle laxative medicine; after this it was usual with me to administer small doses of James's powder, washed down with a spoonful or two of the ammonia acetata, or a solution of some other neutral salt, every four or six hours, until some irritation took place in the stomach or bowels, or symptoms of convalescence began to appear. The urgency of coughing, and labour of respiration being so frequently combined, at first rendered me doubtful whether or no I should fly for relief to the use of the lancet. But a little time, and further acquaintance with the nature of the epidemic, tranquilised my mind on this point, and obliged me to abandon every idea of blood-letting, except in particular cases, where, from the previous condition of the lungs, or an ill-judged and inappropriate use of stimulants, such a measure had become necessary and unavoidable. In three or four instances of this kind, the utility of venesection was unquestionable, and the blood (as before observed) was equally buffy and cupped, as in genuine cases of inflammation of the lungs. Blistering between the shoulders was the remedy in general resorted to, when the breathing was oppressed and difficult, and it was found decidedly beneficial in removing this symptom, as well as the delirium which was constantly found to accompany it. When the delirium continued obstinate, blisters were applied to the legs and other parts, and the head was shaved and bathed with cold water and vinegar; but if these likewise were found to fail, recourse was had to laudanum, and most commonly with very signal success.

One of the most striking peculiarities attending this complaint, was the slowness with which almost every person,

son, who was severely attacked, advanced towards recovery, the functions of the stomach continuing in a state of derangement, with symptoms of dyspepsia and hypochondriasis, long after the disappearance of the fever. The pulmonary organs in like manner remained a length of time delicate and irritable, suffering from the most trivial irregularity, or any sudden change of temperature in the atmosphere. There cannot be a doubt but it has laid the foundation of phthisis pulmonalis in many habits, particularly in those predisposed to this disorder. I have under my care this moment, three cases of it in the incipient stage, evidently originating in this source, and not the slightest tendency to pulmonary consumption appeared in any one of them previous to the appearance of the influenza.

81. Dr. HALLIDAY, Belfast, May 30, 1803.

The influenza has been so slight here that physicians have not been much applied to on account of it. My own observations are too limited to be worth detailing, but sufficient to convince me, that however the disease may in some instances depend on the influence of the atmosphere, yet in the greatest number of cases I have met with, it could only be accounted for by the supposition of contagion. It prevailed very generally in Dublin several weeks before it appeared here. The first case we had of it, (as far as I can learn), was in a house, in which a Dublin gentleman was on a visit; two or three days after, two or three of the family became affected. Its progress in one house in the country, where I attended, was remarkable. Mr. P. and his family were first attacked, then the female servants, and after them the men servants; of twenty-one in that house three only escaped it. In another house, not far from that, not one has had the disease. In Belfast many houses have escaped; whilst, in many others, not one of the inhabitants has escaped. The medical men here have, in general, been exempt. In my own house it has not affected an individual.

82. Mr. H. EDGEWORTH, Edgeworth Town, June 19, 1803.

It was the expectation of hearing from Dublin that prevented me from writing sooner; but as such delay may be inconvenient, I send you the opinion of Mr. Dubourdieu, surgeon to the infirmary in this county.

He

He distinguishes the influenza from a common catarrh, by the suddenness with which a person is seized, the violent pains in the calves of the legs, muscular parts of the thighs, between the shoulders and back of the neck; pulse full, and difficulty of breathing very great. Great bleeding sunk the pulse considerably, but the breathing became more oppressed, and considerable debility was occasioned, which brought on delirium and often death, an instance of which happened yesterday; notwithstanding this, very gentle bleeding has been found of service.

All those who went to bed were seized with perspiration for twenty-four hours.

The influenza appeared here about three months ago; it appeared some time in Dublin before this period.

Although the air seemed infected with contagion, Dubourdieu is convinced that the influenza was communicated from one person to another. I have the same opinion from another practitioner in this neighbourhood.

It appears, as I suppose you have constantly observed, that those who died of the influenza, were those who were old and infirm, or the very young; and lastly, those who had some previous disorder.

The influenza is still prevalent in this country, particularly amongst the poor. I am happy to give you an instance, where the influenza was brought from Dublin by parcels, which were made up by a person very ill of that disorder, and sent to a lady of quality here. As soon as the parcels were unpacked, the person who unpacked them was first seized, then the lady herself, and the whole family were infected, as was the neighbourhood. The influenza seizes people more than once. I know of an instance where a person had it three times.

In a subsequent letter, dated Callan, July 19, Mr. Henry Edgeworth makes the following reply to my inquiries concerning the authenticity of the fact, related at the close of his first letter.

Respecting the influenza being conveyed by articles of apparel, I cannot vouch more for the authenticity of the fact, than that it was communicated by a letter from the lady herself, who lives nine miles from us, and also that it was the opinion of Mr. Dubourdieu, the surgeon, that it was from those parcels the persons who unpacked them received the infection.

To

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

I Send you a few more Reports. I had good reason to expect information from remote parts of Ireland, which to me would have been exceedingly interesting. But public events will account either for delay or disappointment.

There is one request which I would beg leave to address to your Correspondents in general. This is to add to their other communications, of whatever nature these may be, the date of the rise, progress, and termination of the influenza, whenever they know it with tolerable certainty.

It is hardly necessary to state how a knowledge of its first appearance bears upon the most interesting question that can be started respecting this complaint. I shall have occasion to point out this at large, in a communication I mean to offer you for insertion next month.

I am, &c.

September 7, 1803.

THOMAS BEDDOES,

83. Dr. DAVIES, Carmarthen, July 21, 1803.

The influenza appeared at Carmarthen, and the neighbourhood, about the latter end of February, and continued until about the middle of May.

Although it appeared general, yet many, very many, escaped it.

It did not appear to me to be contagious. In my own family it clearly was not so, nor do I consider that it was so in this part of the country.

Its attack commenced with violent head-ach, pain in the limbs, a prostration of strength, pain in the chest, with cough, very violent in some instances, and the expectoration often streaked with blood. Hæmorrhagies from the nose were not unfrequent. In some cases a violent ear-ach, and in many, abscesses formed in the ear. In two patients, ulcers of a very foetid kind appeared in the mouth.

The pulse was quick, the thirst great, and the respiration in some remarkably oppressive.

I did not observe any peculiar foulness in the tongue.

Delirium often attended these symptoms, especially in old people. In one case (a gentleman of 76) the delirium continued six or seven days; I considered it to be the effect of debility.

I found

I found in this complaint the cascarilla bark of infinite service. The Peruvian bark, certainly, did not appear to me generally to agree. I gave the cascarilla bark after the second or third day, and with unquestionably good effects.

Where the liver was previously affected, the recovery was uncommonly slow, and lingering. In one or two instances ascites followed.

In all the observations that I made, (which embraced a practice of nearly fifty miles) the effect of the influenza appeared to be extreme debility, and the recovery from it in a most remarkable manner slow and tedious.

In a gentleman of sixty-five, paralytic symptoms showed themselves, and the whole terminated in a mortification of the feet, and death. The mortification of the feet shewed itself about a month from the first attack. The patient was of a thin spare habit, and in good health before the influenza attacked him. The paralytic symptoms appeared chiefly to affect the muscles, the throat, &c. This is the only fatal case that came within my knowledge.

I treated the coughs in their usual manner with blisters, &c. always having in view the support of the general strength. I did not bleed in any case.

84. Mr. MELHUSH, Tiverton, August 18, 1803.

The influenza first appeared in two of my patients, one of which resided in this town, and the other about a mile south-east of Tiverton, on the 23d day of March last.

This disease, after having been very general about a month, subsided almost immediately after the change of the wind from the east (in which quarter it had generally been from the time abovementioned) to the west, and the subsequent rain, without recurring in any single instances.

It appeared to me as uniformly endemic and sometimes epidemic.

I recollect the former influenza some years since, which seemed a compound disease of catarrh and peripneumony, the first rather predominating; in the late disease (in my opinion) a compound disease also of peripneumonia notha, catarrh, and sometimes inflammatory sore throat; the peripneumonia notha was most predominant. An intermittent tendency was also *very* observable in some instances, but it never continued so as to require the use of the bark.

I found the pneumonic affection in this disease infinitely less dangerous than when the peripneumonia notha is less frequent, for though three instances in this neighbourhood occurred where two in each house died, yet these were old persons,

persons, or of very bad stamina, and in a bad state to meet the influenza. Upon the whole, I found it *much* less dangerous than from the severity of the symptoms I had first apprehended.

I had only two cases in which I bled, in one of which the patient was accustomed to bleeding every spring; the other highly plethoric; but each recovered.

I treated the disease exactly as peripneumonia notha, except that opium at night, which I have so often given with the greatest success in this disease, unfortunately had generally a contrary effect in the influenza.

85 Dr. GRANT, Waterford, July 20, 1803.

As I kept no diary during the prevalence of the influenza, I send what I can recollect.

It was very general here from the beginning of April till the middle of May, but though you could meet few in the street who did not complain of it, as if it were the fashion, very few were so ill as to require medical attendance, nor did I learn that any one died of it here.

It was not contagious, as in several families where I attended not more than one or two were affected. It ceased, as well as I remember, when the weather became *settled* warm.

It was the same through the country round.

The symptoms I met were shivering more or less, a sense of tightness and oppression of the breast, a small cough, and sometimes failure of the voice, a thin discharge from the nose and eyes with great complaint of weariness, particularly of the loins; the treatment I used was antiphlogistic regimen, keeping the belly free with neutral salts.

86. Dr. RYAN, Kilkenny, July 28, 1803.

The first time I was called upon to visit a person ill of the influenza was on the 9th or 10th of April, and my conversation with the gentleman took place the day after. As you know I have already alleged that it was in consequence of this conversation, I pronounced my first patient to be ill of the epidemic, and I can positively assert I proclaimed its existence in this town at a time when no idea whatever was entertained of such a troublesome visitor having got footing amongst us; however, I will not take upon myself to declare that this was in fact the first case that appeared.

Relapses were so frequent, and the reliques of the influenza
(No. 56.) X enza

enza so completely resembled the original, that it is extremely difficult to ascertain the precise period of its complete extinction, though I think I can speak with confidence as to the time it began to take flight. I was particularly careful to insert the day of the month I commenced and ceased my attendance on every person of consideration during the prevalence of this disorder; and from this registry it appears, that about the latter end of May, or the beginning of June, its violence so completely subsided as no longer to excite any interest or alarm.

I enclose you Dr. Grant's letter, upon which it is necessary however to remark, that the intercourse between this town and Waterford is by an indirect and circuitous way, while that between Cork and Dublin is direct and constant, a mail-coach from each of these cities arriving here every day in the week, so that supposing the disorder to be infectious, and to prevail equally in the three sea-port towns at the same time, it is extremely improbable indeed that the contagion could be received from Waterford so early as from Cork or Dublin.

The features and character of the epidemic did not appear to me to be influenced by the weather, nor was there any striking difference to be observed between the influenza which was to be met with in the town and that in very distant country places. Individuals indeed on recovery suffered severely at times from north-east winds, by exposing themselves too soon and too incautiously to the open air.

87. Dr. KINGLAKE, Taunton, August 6, 1803.

The first instance which occurred in my observation of the late influenza, was about the middle of February; the last, at the beginning of June, though it is reported to have had both an earlier and later existence in this vicinity.

Its prevalence in different places was not simultaneous, it proceeded desultorily in some cases, in others it was more regularly progressive.

After it had attained its height, or greatest frequency, it continued to shew itself in single instances during several weeks, more particularly towards its termination.

Well marked examples often presented of its personal communication. It occurred to me often to remark, that when the disease had been unduly protracted, and had proved unusually violent, that those who were most occupied

plied in the care of the patient, successively suffered. This fact was so striking, that it soon confirmed me in the propriety of analogically extending to the disease, my *general persuasion* of all morbid action being more or less contagious, according to the degree of the malady, personal proximity, existing temperature, and temperamental susceptibility for diseased impression.

The influenzal disorder (as in every other instance of epidemic affection) probably had its source in the noxious influence of variable temperature, deranging the due distribution of the circulating fluids, vitiating the various secretions, and distempering the healthful conditions of vital motion, from whence generally resulted inflammatory determination to the mucous membrane of the trachea, bronchiæ, fauces, and nostrils, which became sympathetically diffused over the system, in the form of febrile affection.

The disease appeared to have had this catarrhal origin, and generally the catarrhal form. In some few cases its pressure was concentrated on the intestines, when it exhibited the strict character of enteritis; in others, bilious suffusion gave it an icteric complexion.

It was purely inflammatory; it speedily, and under my direction, almost invariably yielded to reduced temperature, administered by atmospheric exposure, copious dilution with cold water, and the rigid avoidance of dietetic, medicinal, and mental stimulants.

The want of universality in its personal contagion is no valid objection to its infectious nature. A variety of circumstances must concur to give effect to contagious power. Adequate virulence, suitable distance, and above all, an apt state, or susceptibility for morbid impression, must present; to render the communicable quality operative.

No greater difficulty occurs in explaining the numerous exceptions and anomalies, in the agency of personal contagion, than in those of atmospheric infection; in both, they are equally referable to concomitant circumstances, which widely modify the influence, but do not annul the specific power.

In short, my opinion is, that the late influenza (in common with every variety of epidemic disease, not excepting even the plague, originated from the morbid influence of variable temperature, by which the salutary conditions of vital motion became at length so distempered, as to generate and evolve from every part of the system an *halitus*, or *materies morbi*, proving infectious or not, according to its degree of concentration, and the existing temperamental

aptitude for being impressed by it. In many instances it may be efficient, while in others it may be quite inert. A similar operation of cause and effect, obtains in every description of disease that disturbs vital motion sufficiently to vitiate its salutary processes or functions.

The principle of contagion, consisting of a specific arrangement of matter, issues from every conceivable disease, but it amounts to operative force in comparatively few instances.

It may be fairly questioned, if the atmospheric air is susceptible of any condition but that of temperature, that could be generally active in the production of disease. Neither its mechanical impregnation with noxiously stimulant substances, whether in the form of miasma or animalcula, nor any chemical combination of its constituent principles in unnatural and deleterious proportions, could be admitted as efficient causes of epidemic diseases, consistently with the original mildness, gradual aggravation, limited extension, and personal communication of the morbid influence.

These hurtful agents must necessarily be too insulated for general diffusion, nor could their universal influence be compatible with animal existence.

Various remote causes may engender individual distempers, but these will not become general or epidemic in the multifarious dissimilitude of temperamental susceptibility, without the agency of specific matter, combined and combinable only by the peculiar affinities of *animal chemistry*. It does not appear that the late influenza was distinctly communicable by clothes or fomites. Its contagious quality did not seem to be sufficiently powerful to impart diseased impression, but when applied in the full force of direct personal transference.

88. Mr. BARTLEY, Nailsworth, Gloucestershire, August 26, 1803.

In regard to your queries respecting the influenza, I will endeavour to afford you all the information on the subject within my power of communication, which I fear is but little. It commenced here in the beginning of March, about which time I attended a gentleman who was, I believe, the first in this neighbourhood who was attacked; a very short time afterwards, I became myself the subject of the disease; the symptoms of which I will briefly recount as they occurred to me. I first experienced a very unpleasant

pleasant and painful sensation, as though gravel or some other extraneous matter was introduced between the globe of the eye and eye-lid. Considerable redness in the eye, impatience of light, and a profusion of tears soon followed. This was shortly succeeded by a great discharge of mucus from the nose, of so ichorous a quality as to excoriate the parts over which it passed, accompanied with violent pain in the head, slight cough, chilliness alternating with heat, pain in the back, and oppression at the præcordia. Appetite very much impaired, and debility excessively great. Every symptom increased in the evening; sleep was constantly interrupted; and during the two or three first nights, my imagination was so confused and bewildered as almost to approach delirium. Bowels costive; urine high coloured, small in quantity, and from its heat occasioning much pain in the discharge. After applying a vesicatory inter scapulas, the inflammation of the eyes subsided, and in about four days the febrile symptoms disappeared, but I experienced for some time afterward increasing debility, and an inconceivable, insurmountable dejection of spirits, with frequent nausea, and great disinclination to food. Becoming at length convalescent, I attended several persons in the same complaint, and soon after suffered a relapse nearly as violent as the first attack, save that the inflammation returned in the left eye only, which I relieved by keeping up for some time a discharge from a blister on the adjoining temple. Whether, in the first instance, my disorder proceeded from epidemical influence of the atmosphere alone, or not, I will not pretend to determine; but in the second, I am persuaded it was the effect of contagion, and was by that means communicated to every person composing my household; and I have constantly observed, that in houses where the disease made its appearance, all the family have in turn been the subjects of it, and other families, who avoided communication with the sick, wholly escaped the disease.

It may be useful to remark, that in no two persons I have observed precisely the same symptoms. Some, in addition to those I have enumerated, were troubled with a *violent* cough and excessive pain at the sternum, which commenced in the incipient stage of the disorder, in which cases the disease terminated with a profuse expectoration of high coloured yellow mucus, not frothy, but resembling pus in its appearance, and of a disagreeable odour, "*sui generis*." In others, it commenced with vomiting; every thing taken into the stomach was speedily rejected, which

in general relieved the head, abated the febrile symptoms, and induced a quicker termination of the disease. In others, there appeared symptoms of pneumonic inflammation. In others, cynanche tonsillaris. Many were affected with obstinate costiveness, whilst others laboured under profuse diarrhœa. The pulse in general was frequent, but not hard. The tongue, in many instances, white in the middle, but red round the edges, and covered with florid papillæ; but in some cases it exhibited no unusual appearance. The disease in general terminated about the fourth or fifth day, but in aged and infirm patients, it was much protracted; the debility was consequently greater and of longer continuance. I have found the disease fatal in one instance only, where it was succeeded by hydrothorax, which has terminated in death. It disappeared in general here about the latter end of April, but there were a few solitary instances of its re-appearance in remote situations, and, as I think, communicated by fomites.

I shall venture still farther to intrude on your patience by relating my plan of treatment, which, of course, varied as much as the symptoms. In the commencement of the disease, I have generally exhibited (particularly where nausea has existed, in which case a vomit was usually previously administered) a saline mixture in a state of effervescence, with a few drops of vin. antim. tartaris. or aq. ammon. acet. with mist. camphor. which, together with a strict observance of an antiphlogistic regimen, contributed to abate the pain in the head, and also the febrile symptoms. To obviate costiveness, cooling laxatives were administered occasionally, such as infus. tamarindorum cum senna, &c. I did not attempt to check diarrhœa where it appeared during the height of fever, but when that subsided, a small dose of tinct. opii has usually moderated the discharge. Where there appeared to be pneumonic inflammation, I did not hazard the use of the lancet on account of excessive debility. A vesicatory applied to the affected part, constantly relieved the pain, and produced the desired effect. I did not venture on the use of opiates until the disappearance of fever, when a little tinct. opii camph. with lac. ammoniaci and oxymel scillæ has been useful in allaying the cough and promoting expectoration. As the great subsequent prostration of strength indicated the use of corroborants, I exhibited the tonic bitters and steel with much advantage, and in some cases where cough was not present tinct. cinchon. comp.

I have, I doubt not, been unnecessarily prolix on the subject,

subject; nor have I replied to your queries in the order they are proposed, for this I solicit your excuse, as I have not at present, time for revision. You will be able to perceive at least from what I have stated, that I am decidedly of opinion, that the disease may be communicated by infection or fomites, and that it essentially differs from common catarrh. If the incoherent observations I have made can afford you the least possible satisfaction, it will abundantly gratify me.

89. Mr. HUGO, Crediton, August 10, 1803.

The first appearance of the disorder in this neighbourhood which came under my observation, was on the 22d of March, in the family of a gentleman who resides about three miles west of this town. He had been attending, with his lady, the assize at Exeter, the whole of the preceding week, at which time the influenza was very general there. They came home both ill of the disease. On the next day, the servant who returned with them, was seized with it, and by the 25th, it had been communicated to every other person in the house. Some labourers, who reside at an adjoining farm, were affected about the same time; but a woman who had been employed at Exeter, was the first attacked by it. It appeared very soon afterwards in the town of Crediton, and here also the first case I visited was a gentleman who had been attending at the assize. It spread very rapidly, and in a short time became general in the town and adjoining villages; its duration as an epidemic, was from the 22d of March to the end of April; it was afterwards only occasionally met with.

The symptoms and mode of treatment were so similar to those which are commonly described, that it is unnecessary to enumerate them. Very few fatal cases occurred, and they were all persons in advanced life, where the disease was accompanied with peripneumony of the low typhoid kind.

From the manner of its commencement and progress here, I can scarcely doubt its infectious nature, and believe it to have been brought into this town by persons who received the contagion at Exeter. It is scarcely credible that any miasmata floating in the atmosphere, can be carried in a direction different from the current of air existing at that particular time, which was far from being the case in this instance, or that it can be conveyed to a distant situation without producing its effects also on some part of the intermediate country; yet the last place in this neighbourhood

bourhood which was visited by the influenza, is a village situate at least six miles *eastward* of the house where I first observed it. It appears also that though the contagion on a large scale proceeded, in this part of the kingdom, from east to west, when considered with respect to particular situations, its course was by no means so regular, but seemed to depend rather on the degree of intercourse which subsisted between the uninfected and those who were ill of the disorder. In fact, I consider it as an epidemic, spreading in the same manner, and proceeding in the same course, as those diseases which are indisputably contagious.

The principal reason for referring it to an infected atmosphere, seems to arise from the circumstance of a large number of persons being seized so nearly at the same time; but if we reflect that the disorder when mild so much resembles a common catarrh that the patient does not submit to confinement, but mixes unreservedly with his neighbours, and also that the febrile action probably takes place within a short time after the contagion is received, there will be little difficulty in reconciling it to the same laws on which every other infectious disease is communicated and depends.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

AFTER a thorough investigation of the opinions adduced, respecting the disease, *entitled* Influenza; when a majority amounting to nine-tenths of the medical world are agreed with respect to its non-contagious nature, all controversy should now cease, as it is certain that the proof, though not positive, is sufficiently presumptive. As there has been diversity of opinion concerning its nature, so have there been different rules laid down for its cure. Some condemn the use of the lancet, asserting that phlebotomy is extremely pernicious, whilst others declare that a contrary practice has been, in certain instances, fraught with the happiest effects.

It fell to my lot, from having been appointed to attend the paupers of the outer and inner parish of Romsey, to see much of the prevailing epidemic; and if the following observations should tend to elucidate the subject, my trouble in drawing up this statement will be amply compensated.

I am

I am of opinion that the remote causes of this disease originated in the sudden change of atmosphere, which we experienced in this county; a change, I believe, generally felt throughout the United Kingdoms, as well as upon the Continent. As I kept no meteorological diary, the facts relative to the weather are deduced from my memory. The heat during the greatest part of the days in the latter end of March and beginning of April, was such that few people ever before endured at that season; its approach was as sudden as its departure, not giving the constitution an opportunity of accommodating itself, either to the expansion occasioned by the heat, or the stricture produced by the cold. If the above plain statement be correct, we may save ourselves the trouble of ransacking the bowels of the earth, or of darting with microscopic eye into the insect kingdom, to discover what seems to have perplexed our great philosophers.

I myself had the prevailing epidemic, which I attributed to taking too much exercise during the warm unseasonable weather, and not to contagion; for had the complaint been infectious, Mrs. C. and the rest of my family would surely have suffered from it. I was very ill four or five days, but not so as to prevent me from attending my patients. I was first seized with considerable pain of my head, a sense of languor and debility, heaviness of my eyes; at times I felt a sense of chilliness. I here wish to observe, that I conceive this complaint to be very different from catarrh, for neither in myself nor any of my patients, did I observe any affection of the mucus membrane of the nose, or watery eye, so commonly noticed; by taking a calomel purge, using pediluvium, and washing down a bolus pulv. antim. gr. v. opii gr. i. with white wine whey, and by perseverance in the bolus and whey for three nights, I found myself in a convalescent state; but my head for a fortnight or more, on the slightest exertion, was subject to pain and throbbing, something like palpitation, which I attributed to a state of atony in the system, and consequent increased vascular action. By way of divesting my brethren of prejudice with respect to bleeding in this disease, I have to observe, that the case of a patient, 61 years of age, ranked with the worst that came under my care. This old man was severely affected with the prevailing epidemic, and I have reason to think, if the dictates of timidity had influenced my conduct, he must either have died, or lingered out the remainder of his days in that distressing malady phthisis pulmonalis. He was at first taken with all the
usual

usual symptoms in an aggravated degree; the pyrexia, languor and debility were great, dyspnoea and painful inspiration intolerable; he complained of a stitch and tightness across his chest, so that, to use his own expression, there was not room for the air to descend into his lungs. His pulse though frequent, was small and tremulous, his debility such that with difficulty he could raise his head from the pillow. The treatment of such a case required time and consideration, yet there was not a moment to be lost; something was to be done, though not rashly, for without relief death appeared certain. The candid reader will easily conceive the difficulty and dilemma attendant on such a case; his debilitated state, his tremulous, quick, and weak pulse, according to some people's theories, forbade the use of the lancet, particularly in this disease, yet I bled him, and to the amount of ten ounces; though the blood did not flow from a large orifice, or quickly, yet I never in the whole course of my practice beheld so much coagulable lymph as presented itself to my view the next day; it was truly a buffy coat, not many degrees removed from the nature of a bull's hide, and considerably thicker; it constituted a third part of the crassamentum covering its whole surface. The patient's bowels being constipated, I deemed it necessary to give him a calomel purge, which operated very freely, yet after these evacuations the stitch and tightness still continued, and in less than twenty-four hours I repeated the bleeding to the same amount, and blistered him; the buffy coat did not occupy so large a space, nor was it near so thick. By observing the antiphlogistic plan, by giving small and repeated doses of soda nitrata, with the addition of a small quantity of antim. tartar. the violence of his complaint began to subside; after which, by the administration of gentle anodynes conjoined with tinct. scillæ, he began to expectorate, and his recovery after his pulmonic complaints ceased, was expedited by the exhibition of tonics. Two other cases of a similar nature yielded to the same plan of treatment; one of them a poor hard working man, from the violence of his pectoral complaints, nearly fell a victim to phthisis pulmonalis; for several days this patient's expectoration was so excessive, that he filled a pint pot with mucus of a purulent appearance, though I did not subject it to the test of experiment, knowing that common tests are as uncertain as they are fallacious; he had also colliquative night sweats, frequent and small pulse, and a constant pain in the head. I here had an opportunity of trying the effects of Dr. Magennis's favourite remedy

medy, tinct. digitalis saturata, beginning with small doses, and increasing them gradatim; and I must candidly confess it appeared to succeed and answer my most earnest expectation; the sweating gradually left him, the expectoration began to diminish, and the cure was completed by means of decoct. cinch. flavæ cum acido vitriolico, q. s. ad gratam aciditatem. The success of this practice, unadorned with any fluctuating theory of this epidemic with the fine name of *influenza*, is sufficient to enable me to assert that it is by no means a fatal disease, for I did not lose a patient notwithstanding I bled; yet I do not wish it to go abroad, that because I adduce an instance or two of the success of this practice, that I conceive it to be always necessary; by no means, for I would have quite the reverse to be understood, as I met with many cases that would not bear bleeding; and I must observe, that much must ever be left to the judgment of the practitioner, and that his opinion should not always yield to the dogmatical dictates of medical authors, of whom I think Cullen, in point of *good sense, candour, modesty*, and practical knowledge, deservedly holds the pre-eminence. I am afraid I have trespassed too much on the limits of your excellent publication, for in works of this kind people should consider that by being too diffuse on some subjects, others, as worthy and instructive, may be lost to the public: Yet I cannot close this essay, without animadverting on Dr. Magennis's account relative to the plan of treatment adopted by a naval surgeon in a ship of war; his observations may be ill timed, nay even unjust, for the censure which they seem to convey may be unmerited. What necessity was there for having mentioned the name of the ship? The characters of men in public situations should be delicately handled; and extremely glad shall I be, if the statement of my cases should tend to exculpate the surgeon, or wipe off any stain that may attach to his character: for it is evident, whether censure was intended or not, that the world does not always construe things in the most charitable way. I have no desire to wean gentlemen from their own opinion, *sed quod vidi ad scripsi*.

Romsey, Hants,
August 10, 1803.

I am, &c.
RALPH CUMING.

A CASE

*A CASE of COMPOUND FRACTURE; communicated by
Mr. C. SIMPSON, of Skipton.*

MR. EVANS, æt. 46, of a very irritable habit, had the misfortune to fracture his leg, by a fall from a causeway, on the 8th of April last. The family surgeon was immediately sent for, who laid the leg extended upon a pillow and applied a solution of the aq. acet. lyth. by means of linen cloths. Considerable swelling of the whole limb, with violent pain and starting, came on the following day, which continued to increase until the 15th, when I first saw him. I found him in the following condition: Pulse 130, very weak and fluttering, tongue covered with a dry brown fur, constant low delirium, skin hot and parched, bowels regular, urine of high colour without sediment, and small in quantity; particular wild look, picking the bed-clothes; the leg and thigh greatly swelled, of a livid colour, soft and flaccid, so as to retain the impression made by the fingers; a great number of vesications, full of yellowish ichor, surrounding the fractured part; the broken end of the tibia protruding without the skin two inches; very restless, and with great difficulty kept in bed. I immediately laid the patient upon his side, with the knee bent as much as possible; after moderately extending the limb, the protruding end of the bone disappeared; it was then laid upon an even pillow with a splint under it, and sprinkled over with crude sal. ammon. in fine powder; afterwards covered with a large stale beer poultice, in which was mixed a portion of the same powder; the bed, &c. being adjusted, a person was directed to sit by the bed side to keep the knee steady, and the following powder to be given every two hours, well mixed in a little gruel:

R. Mosch. chin. camph. aa. gt. xv. ammon. pp. gt. x. m. ft. pulv. and washed down with three table spoonsful of the following mixture:

R. Confect. arom. ʒiiss. sp. cinn. sy. com. aa. ʒj. tinct. opii gt. xc. aq. puræ ʒvj. m. ft. mist. Gruel, with a good portion of red wine to be given as diet, and when thirsty to have a little wine and water.

14th, mane. A few hours after I left him last night he became quite furious, rose up in bed, tore the poultice, &c. from his leg, and on my arrival this morning, one o'clock, found him sitting upon the edge of the bed with his leg hanging down, and the end of the bone pushed out as before; the colour changed to a much darker hue, with
every

every other symptom of the rapid approach of mortification. I again replaced him in bed, bent the knee, and reduced the protruding bone as before; then applied the powdered sal. amm. and poultice, as usual; also, a broad belt over his breast, and firmly fixed down to each side of the bed, and gave him *gt. lx.* more of the tinct. opii in a dose of the cardiac mixture, and directed the powders, &c. to be regularly continued.—*Vespere.* Had a few hours sleep after I left him this morning, during which a profuse perspiration broke out, which continues; the delirium yet present; pulse 120; of better strength, tongue a little moist upon the edges, urine in much larger quantity; starting of the limb not so frequent; wound made by the bone filled with a black slough; no more vesications; swelling much the same; has taken his medicines well; much better to manage since the application of the belt. The wound to be dressed with the ung. res. flav. and a little of the bals. canad. mixed with it, and applied warm: two ounces of strong camphorated spirit to be applied over the whole of the limb, afterwards the powdered sal. ammon. and poultice as before; the dose of the musk and camp. to be increased to *ʒj.* each, with the amm. ppt. and cardiac mixture as usual; likewise to have a draught with 50 drops more tinct. opii, *h. s.* and a large blister to be applied between the shoulders.

15th, mane. After a sound sleep of six hours he awaked perfectly sensible; pulse 86, of good strength, perspiration copious; considerable quantity of loaded urine made since last visit; tongue moist, little or no thirst; the bulk of the leg greatly diminished and of a much brighter colour, a slight redness appearing round the edges of the wound; complains of smarting sensation when the camphor is applied; has taken medicines regularly; blister rises well; no stool since the 13th. The powders and mixture to be discontinued, to have a solution of the neutral salts, with an infusion of senna; the wound to be dressed as before, and poultice changed for white bread and milk.—*Vespere.* Has had two stools from the solution, leg perfectly easy, and remains in a good position; swelling continues on the decrease; in good spirits, pulse 80, perspiration more moderate; a little matter discharges from the wound; to be dressed with balsam and poultice as before; to have a solution of cream tartar. for common drink, and a draught at bed time with 40 drops tinct. opii.

17th. Continues convalescent; wound discharges freely; an eighteen tail'd bandage applied, with another long splint

splint upon the inside of the leg; to have a nourishing diet with a pint of red-port daily, the leg to remain in a relaxed position.

June 14. Until this time has continued to recover daily; the wound discharged freely until the slough digested out, afterwards granulated and healed in the most favourable manner; is now able to walk a little upon crutches,

July 22. Is now able to walk with the assistance of a stick; the leg equally as straight and of the same length as the other.

If the favourable termination of this case lead to a further trial of the conjoined use of *large doses* of musk, camphor, opium, and ammonia, together with the external use of crude sal. ammoniac, and with similar effects, I shall consider myself highly gratified: there cannot be a doubt of the mortification here being arrested by steady perseverance in the above plan, assisted by strict attention to the relaxed position.

The whole limb exhibited every appearance of gangrene, having actually taken place when I first saw him, which demanded the most active and speedy treatment, and which hurried rapidly forward before the medicines could arrive, being seven miles distant from my place of abode. I consider *musk*, *opium*, and *ammonia*, the sovereign remedy in those cases, provided they be given *in full doses*, and at *short intervals*. Nothing can more completely contradict the impropriety of tight bandages in all cases of fracture than this. Mr. Corner, the gentleman first called in (since deceased) applied a circular linen roller firmly round the fractured part, afterwards the solution mentioned. To the tight application of the roller, the extended position the limb was kept in, and the patient's habit of body at the time, I attribute the attack of mortification.

August 4, 1808.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

HAVING observed in the Medical and Physical Journal, for last month, the paper of M. Dumas on the cause of hunger and thirst, I am induced to transmit to you the following observations.

A person

A person was seized, after a long confinement, with great anxiety, debility, and complete loss of appetite, which lasted for about four days, accompanied with thirst, and a failure of the saliva. During the second night, having sucked an orange, in order to remove the disagreeable dryness occasioned by the want of the saliva, he next day felt nausea and oppression referred to the stomach, which induced him to empty it, by irritating the fauces, about eight hours after the orange juice had been taken. I was much surprized to find it after that stay on the stomach, unaltered and unmixed with any other substance.

It would appear from this case, that the failure of the appetite for food is connected with a want of the gastric fluid. It was evident that there was nothing in the stomach but the orange juice, which had undergone no change; doubtless, because there was no gastric fluid present.

We must infer from the experiments of Spalanzani, Dr. Stevens, and others, that the gastric fluid is the means of effecting that change which the food undergoes in the stomach; and does it not seem probable, that the sensation of hunger may arise from the action of this fluid on the stomach, and that the absence of the gastric fluid is indicated by a want of appetite, a provision of nature, which prevents our eating at a time when no digestion can take place, by which we should only excite repeated vomiting, without receiving nourishment?

If these observations are just, we may, it would seem, by emptying the stomach of its gastric fluid, at will destroy the appetite; but it is difficult to empty the stomach entirely of the gastric fluid, both because it is difficult to empty it entirely of any of its contents, and because the very act of vomiting, excites it to pour out a fresh quantity. That the appetite, however, can be nearly destroyed, and the sensation of hunger almost entirely taken away, by removing the gastric fluid from the stomach, appears from the following experiment.

A person, in good health, having fasted for seventeen hours, and still farther increased the appetite by exercise, instead of satisfying it, by means of warm water, repeatedly excited vomiting.

The water returned clear, and only mixed with a ropy transparent fluid, such as the gastric fluid is described by Spalanzani, or as I have myself procured it from the crow, so that there had been nothing in the stomach but the water and the gastric fluid, which, like the water, was
without

without taste, smell, or colour. By this operation the hunger, which immediately before was urgent, was wholly removed, and rather a disgust to food produced, which was sensibly felt on seeing others eat. A small quantity of food satiated even to sickness, which continued for some hours, attended with a sense of oppression referred to the stomach.

Do not these observations seem to warrant the opinion, that the presence of the gastric fluid in the stomach, without such substances as are fit for combining with it, and thus destroying its activity, is a principal cause of death from hunger, for anorexia we have seen is occasioned by the evacuation of the gastric fluid, and we know how long people labouring under anorexia, however excited, will live without food?

The speedy acidity which took place in this experiment is remarkable. Although the stomach, as appears from the state of what was thrown up, was free from every fermenting substance, yet the food which was taken (bread and milk) acquired acidity in a quarter of an hour, indicated by acid eructations.

Does it not appear from this experiment, I may ask by the bye, that a diminution of the due quantity of gastric fluid is at least one cause of dyspepsia? Is it not probable that in such, perhaps in all cases of dyspepsia, the symptoms may be mitigated, perhaps removed, by supplying dyspeptics with the gastric fluid of those animals whose food is most similar to that of man? This I was led, from much consideration, to propose in a Treatise published eleven years ago. In a Thesis published at Edinburgh several years after by Dr. Scot, it is observed, that an Italian physician finding every thing else fail in a dyspeptic case, had recourse to the gastric fluid of brutes, which proved successful.

To return from this digression, with respect to affections of the mind removing the calls of hunger, do they not occasionally abstract our attention from all other sensations? I believe the appetite will always be found to return on the tranquillity of the mind being restored, except in debilitated habits, where the power of the gastric fluid is much impaired. The want of appetite in fevers, where the supply of the gastric fluid, as well as of other secreted fluids, fails, farther strengthens the foregoing observations.

With regard to thirst, it seems to attend all cases of diminished secretion in the alimentary canal, whether there
be

be a deficiency of watery fluid in the blood or not. There is no such deficiency in the commencement of fevers, and in dyspepsia.

I am, &c.

A. PHILIPS WILSON.

Worcester, Aug. 14,
1803.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

YOUR attention to my former papers, encourages me to solicit a place in the Medical Journal for the following Observations, as I think it of importance to the public to state, (in reply to that part of Mr. Ring's letter, wherein he says, the disease from my mode of inoculating, is more violent than by puncture) that I have never experienced a single instance of severe inflammation, but the contrary, and on that very account prefer using the quill, even when I have recent matter.

Within the last fortnight I was requested to visit a child in this neighbourhood, who had been inoculated at the Institution in Salisbury Court, by puncture; I understood the inflammation had been very great, but I was called in to examine the glands of the axilla, which were much enlarged in consequence; such a circumstance I had never before seen from vaccine inoculation. With many, I fear, I may be thought too partial to my own mode, but trust it has arisen from the best of all conviction, that of *experience*; not only in this, but the variolous also; and I hope it will not be thought irrelevant to the present subject, if I mention that this was *one* particular of my plan formerly alluded to, as I will state what gave rise to my practice.

In the beginning of the year 1786, great numbers failed with the natural small pox at Brighton, and a meeting of the inhabitants was called in consequence, to consider the propriety of general inoculation. At this meeting my father was requested to attend, and after the resolution being formed of carrying it into effect, he sent in the night an express for me, (sixteen miles) to desire I would bring all the
(No. 56.) Y preserved

preserved matter by me, and also to charge as many quills as I could, and bring with me by day-light; this I did, to the amount, as I should suppose, of about sixty. Two patients, with good distinct eruption, were put into a chaise and sent from our receiving house after me. As soon as I arrived at Brighton, I began inoculating some particular families we were well acquainted with, until all the matter thus taken was used; the rest of our patients, amounting in the whole to 725, were inoculated from the two patients above alluded to. The names being all taken down as inoculated, it was impossible I should be mistaken as to those who had the dry matter used; and when the time of eruption arrived, I could but remark the general mildness of the *first* inoculated, compared with the others; this, and some other particulars I then noticed, but conceived it might have arisen from the hurry of inoculating, by inserting the matter too deep, and using too much; or from the blood being heated by standing for a long time in the room, which was crowded all day; future experience explained the real fact, but I believe most of your readers will excuse any farther particulars on this head. I shall leave the physiologist to explain how this may happen, but have always considered that variolous matter, when inserted by puncture and in the fluid state, to partake more of the natural infection. I agree perfectly with Mr. Ring as to the impossibility of communicating diseases with the blood, but at the same time we meet with so many parents (and those well informed) who do believe it, and even insist on seeing the person the matter is taken from, that I never use the quill for more than one, though two or three might be inoculated when well charged.

The Report of Mr. Ricards, in the last number, gives me an opportunity of bearing testimony to his statement of the very beneficial effects from the fresh powder of sabine in syphilitic warts. I generally use it mixed in saturnine ointment; I have also made a tincture of it in aq. ammon. pura, and found it to answer better than any other application for the common warts of the hands.

*Soho-Square,
August 14, 1803.*

I am, &c.

C. DENNETT.

OBSERVATIONS

OBSERVATIONS ON THE USE OF GELATINE IN INTERMITTING FEVERS; *by* M. GILBERT. *Read at the Medical Society of Paris, March 18, 1803.*

AN ingenious theory led M. Seguin to the medical use of gelatine; he thinks, that what he calls the febrile matter of intermitting fevers, is decomposed by the gelatine, in consequence of which he instituted many experiments, the result of which has confirmed him in this theory. The object of the author of this paper is to offer to the Society an observation which he followed through all its details, and which, he thinks, leaves no doubt whatever of the efficacy of this new remedy in the disease in question. At present a number of persons, nominated by the National Institute, are occupied at the Hospital of the Medical School, in researches on the administration and effects of gelatine, and the author wishes to second the efforts of the Institute by those observations which his particular practice has afforded. The author tells us, that he made his first trials at the military hospital of Val-de-Grâce, and he found that the immediate effect of taking the gelatine before the cold fit, was, to moderate in a remarkable manner its intensity, and to render the access in general more mild. He further observed, that it produced, in many persons, a diarrhœa more or less considerable; and here closed the author's enquiries. The difficulty of restraining military men in hospitals, the dislike to persevere a sufficiently long time in the use of medicine, and the want of exactness on the part of the patients in following his prescriptions, prevented him from offering to the Society, the facts which he had remarked in the hospital. He preferred to draw his conclusions from those cases which his private practice offered, as affording more certain and sure ground for observation.

The following case is intended as an illustration of the good effects of gelatine; A woman, aged forty-seven years, thin, and of a delicate constitution, and whose general appearance manifested an irregular digestion, and imperfect biliary motion, by profession a cook, was attacked in the month of September last, with a double tertian fever, which at the end of six weeks weakened her considerably; the shivering fits were long and violent, parching heat, an obvious biliary irritation; the access came on at the distance of twelve hours, repeated every day, but the fits were less

strong every other day; such were the circumstances which led the author to fear the fever might change to a bilious remittent. The woman lived in the village of Sceaux, near Paris, where this fever wore an epidemical appearance, but seldom proved fatal. After emptying the stomach, the author administered the bark in substance during fifteen days, in consequence of which the fever disappeared, and the patient's health returned. Towards the end of February, the fever re-appeared but with tertian type. The paroxysms which were severe, were followed by great languor and general debility. During six weeks the disease resisted the general remedies, among which bitters formed a great part; the author could not venture to prescribe the bark, as well on account of the disgust of the patient to that remedy, as of considerable pains in the breast, of which the patient complained much, and which it was apprehended bark might increase. This was the state of the case when the author heard of the use of gelatine in this disease; he thought the opportunity a fair one for a trial, and which was done in the following manner. On the 17th of March, immediately before the cold fit, eighteen cakes or *tablets* of the gelatine were taken in three doses, after the interval of ten minutes between each; each cake contained two drachms of the gelatine, and which was melted without any addition of water; the effect was immediate and astonishing, both the length and intensity of the paroxysms were diminished, the heat was more mild, and instead of twelve hours, the ordinary period of duration of the fit, it lasted but six. The regimen necessary to be observed, and which consists in a soup, an hour after the access, some roast meat, bread, prunes, and half a pint of wine, was strictly attended to. Three hours after the access, twelve drachms of the gelatine were administered; four hours after, fourteen more; two hours after meals, the same quantity. This was continued every day. The 19th the same was continued, and the access was found to come on two hours earlier; no shivering, the sense of chilliness trifling, the heat pretty strong, general lassitude, pain in the head, cholic pains after the second dose of the gelatine, and immediately after which a bilious purging came, so as to oblige the patient to go six times in the space of twenty minutes; at the end of four hours, the patient found herself well; the paroxysm lasted but three hours, consequently had diminished three-fourths. The 20th she felt herself comfortable, and began to occupy herself, which she had not done for some time; the gelatine was continued, no purging

purging followed, and the face began to assume a florid healthy appearance. The 21st, the access came on two hours earlier; no shivering, gentle heat; the fit continued but an hour and a half; a diarrhœa came on as before. The 22d, intermediary day, the same regimen and use of the gelatine unattended by diarrhœa; the functions of digestion were much better, appetite more strong, and an obvious increase of powers; the patient employed herself as in a state of health. On being asked what sensation she experienced after taking the gelatine, she answered, that she felt a gentle heat internally. The 23d, the same treatment was continued; the access was hardly perceivable; the pain in the head and diarrhœa continued but half an hour. The 25th, there was no fever, no shivering, but a slight diarrhœa, and flying pains in the head. This day, which was the day of accession, the patient did her business as on the intermediate days. From that period to the present, 22d of April, the fever has not appeared. The use of the gelatine was persevered in fifteen days. After the disappearance of the symptoms, her strength, &c. were better than before she was attacked. Since the gelatine has been discontinued she complains of a weight in her stomach after meals, and which she did not experience during its use.

Such is the history of the case which M. Gilbert gives of the administration of the gelatine; if to this be added the number of observations made by M. Seguin, and which have been reported to the National Institute, as well as the corroborating testimony of the persons directed to pursue the inquiry in the hospital of the Medical School, we can hardly doubt but that the *materia medica* will be soon enriched by a new remedy.

The author asks, what notion we should form of the action of gelatine on the animal economy? The essential character of this substance, is that of being a matter highly nutritive and analeptic, that which has the least want of assimilation to be converted to our use, and changed to our proper substance; such is the point of view in which animal chemistry at present places it. This principle admitted as incontestible, let us, says the author, enquire into the nature of the fever; and without absolutely determining its proximate cause, let us judge of it after the inductions which the union of its remote causes present. It is an opinion generally received at the present day in physic, that intermitting fevers are produced by the action of a sedative cause, or of a debilitating one, which particularly

affects the nervous system; and what proves this assertion is, that all those causes which debilitate, such as marshy exhalations, contagion, weakness of the organs of digestion; the passions which depress, as fear, &c. repeated purges, sudden changes of climate, produce and keep up intermittents; while, on the other hand, every cause which excites, whether physical or moral, bark, wine, opium, the return of the warm season, a sudden fit of dissipation, a vigorous effort of the imagination, &c. suspend or cure intermittent fever. From all this may we not conclude that gelatine produces on the stomach and the numerous nerves which go to that organ, an excitement which is propagated to all the system of the animal economy? And what seems to favour this opinion is, that in proportion as the fever is subdued, the powers return, the healthy appearance of the face begins to shew itself; in short, every thing announces that to the sedative cause which predominated during the fever, has succeeded an exciting action, which cured the disease; and what proves that the gelatine acts on the nervous system is, the suddenness of the effect produced on entering the stomach, an immediate diminution is perceivable in the degree of heat, and the spasmodic state of the skin; effects which are well known to be owing to nervous irritation.

The author tells us, that his intention was only to present a simple, theoretical view of the question, and which he believes to agree with the doctrine of M. Seguin, and which is supported by facts. M. Seguin, it appears, has proposed a new theory. The knowledge of the chemical action of gelatine on particular animal substances, when brought in contact, enables him to explain its mode of operation in the cure of intermitting fevers. Until M. Seguin brings the proofs of his doctrine, the author recommends to medical men the necessity of multiplying properly attested facts. He has imagined, that the Medical Society would gladly receive his communications on this subject; and to leave no difficulty in the way of those who may think the question worthy of further inquiry, he gives the process, which M. Seguin follows in the preparation of the gelatine,

Mode of preparing Gelatine.				lb
Of the finest and most transparent glue	—	—	—	3
Common water	—	—	—	15
Melt and clarify it with white of eggs, and filter it through a cloth, to which add of sugar				3

Evaporate the whole on a slow fire, till the quantity of water be reduced to four-fifths; there will remain in the mixture equal quantities of the materials, sugar, gelatine, and water, 3lb. Such is the preparation in use. Run the liquor on a glass mould with raised edges, and about a square foot in surface; the substance must be left to coagulate, and which is afterwards to be dried on an iron grating, divided into spaces of an inch square; you will have cakes containing two drachms each dose. On the commencement of the shivering, from four to six of these cakes are to be given in three doses, at the interval of ten minutes; and during the intermitten, from an ounce and a half to two ounces are to be given every four or six hours.

AN ANALYTICAL DESCRIPTION of certain STONY CONCRETIONS (*Phosphates of Lime*), coughed up from the Lungs by JOSEPH SHILDIGGER, a Patient in the New-York Hospital, with Practical Remarks on their Formation. By M. LE BARON DE CARENHEFFEZ. Read before the Physical Society of New-York, October 6, 1802.

THIS man was by trade a stone-cutter, and was admitted into the hospital with phthysical symptoms. He had great difficulty in breathing, violent cough, expectoration of pituitous and purulent matter, sometimes mingled with blood, considerable emaciation and night sweats. He also frequently brought up small stones, which have amounted, by estimation, to more than two hundred. In proportion as these have been voided, his symptoms have been relieved. A suspicion had arisen that these stony concretions were formed from the dust, inhaled while he was at work in shaping quarry-stones, by his mallet and chisel, for the purposes of architecture. A parcel of these hard substances which he had spit up, having been given by the patient to the attending physician, and obligingly put into my hands for examination by Dr. Mitchill, I take this opportunity of communicating to the Society the result of my inquiries.

These morbid or preternatural calculi were of irregular shape, very hard, and of a greyish or pale slate colour.

When subjected to the operation of acids, both vegetable and mineral, for some time they became white, and seemed to be softer as they lost their grey colour, which appeared to be derived from a glutinous slime.

Treated

Treated by watery solutions of alkalies, both in their caustic and carbonated states, this glutinous substance was not decomposed, but separated, dissolved, and converted into a whitish compound resembling soap.

Some of the concretions were then mixed with an equal weight of carbonate of soda, grown dry by spontaneous efflorescence, and exposed to the heat of a reverberatory furnace, to determine whether they were of a siliceous nature. But nothing of a vitrifiable nature was observed. Failing thus to obtain any kind of glass, I concluded they contained no siliceous ingredient. The crucible then being taken from the fire, cooled and inspected, I was surprised to find the concretions in a heap, and suspended, as it were, in my crucible, without having undergone any change of their original figure, and without manifesting the smallest signs of vitrification. At the same time the whole inside of the bottom of the vessel was turned to glass, by means of the siliceous matter, which, as is well known, is a constituent ingredient of the Hessian crucibles which I employed.

On taking them from the crucible I found they had become brittle, and could easily be rubbed to pieces between the fingers: the gluten had been consumed, and they had become as white as in the former experiments.

On weighing them again, they were found to have lost scarcely three grains of their original weight; a loss which I ascribe to the animal gluten which connects, and, as it were, cements the particles together.

Some of the calcined matter being then reduced in a mortar to a very fine powder, I first diluted it with a little water, and afterwards poured on it about two-fifths of its weight of good sulphuric acid. Having been mixed well, they were exposed for three hours to a moderate sand-head. On examining the mass, I found it thick, viscous, and adhesive. I diluted it with water, and it reddened the tincture of litmus, and possessed a sour but agreeable taste. This was easily distinguishable for being an acidulous phosphate of lime: 1. By its dissolubility in water; 2. By its precipitating with lime-water, a regenerated insoluble calcareous phosphate, which was not decomposable by alkalies; 3. By its forming, with ammoniac, soda, pot-ash, and magnesia, as many particular phosphates. These phosphates precipitated a true phosphate of lime from the mixture, by depriving it of the surplusage of acidity; and from this surplusage only these new phosphates were formed. To this excess of phosphoric acid, the mass owed its solubility

bility and fluidity, for as soon as it lost this superfluous portion, it became an insoluble precipitate.

The oxalic acid acted upon this acidulous phosphate in a much more powerful manner. It decomposed it entirely by attracting its calcareous basis. Therewith it formed immediately an insoluble oxalate of lime. This fell to the bottom, while the liberated phosphoric acid swam in the liquid above it. I washed this precipitated oxalate of lime in water until it became tasteless, and then, on decomposing it by the carbonates of potash and soda, obtained carbonates of lime.

The sulphate of lime, formed by a decomposition of a part of these concretions, was purified and separated from the acidulous phosphate of lime by repeated washings. Being unable to decompose this earthy salt by carbonates of potash, soda, or ammoniac, I succeeded in forming an hydro-sulphure of lime by means of powdered charcoal in a sufficient heat. From this I obtained the sulphur by means of vinegar.

The result of all these experiments is, *that these pulmonary stones or concretions are true PHOSPHATES OF LIME.*

Their formation is owing probably to the great quantity of this calcareous salt carried into the system, with both vegetable and animal food. In order to keep it dissolved in the fluids, the constitution ought to be supplied with a surplusage of phosphoric acid. When there is a deficiency of this phosphoric menstruum, these concretions are formed in different parts of the body. Hence, when there is no excess of phosphoric acid in the blood and secretions, we so often find concretions similar to these in the kidneys, in the bladder, in the bronchia, in the lungs, and in other places.

There is every reason to believe, both from the probability of the thing, and from chemical experiments, that such concretions as these would not be formed, if there existed the requisite superabundance of phosphoric acid. For if this was present in sufficient quantity, it would soften, dissolve, and hold in solution the neutral earthy salt in all cases, after the same manner that the great quantity of it in healthy urine is kept dissolved and suspended,

The oxalic and sulphuric acids seem to have a powerful agency in totally loosening the compages of bones, and of disposing them to be dissolved in water; while the other acids, of whatever kind, though they may appear to dissolve them, do no more in fact than separate the particles,
which

330 *Historical Statement of the Galvanic Discovery.*

which, instead of undergoing solution, are precipitated in the form of a white and granulated powder.

All these facts which I have seen and derived from my own experience, in submitting these concretions to the action of different acids, and all the others which I have gathered from experiments made on calculi of the kidneys and bladder, convince me that most reliance is to be placed on THE OXALIC and PHOSPHORIC ACIDS for destroying these terrible concretions. While the *nitric* and *muratic* acids recommended by Messrs. Fourcroy and Vauquelin, do not act so powerfully upon these calculi, are more disagreeable to the taste, and are more stimulant upon the living parts, without having a proportional action upon the stones. On the other hand, considering that the *oxalic* and *phosphoric* acids may be exhibited in greater quantity and higher concentration than the others, I think them highly deserving the attention of physicians: I therefore recommend them to their notice and trial, as promising to do much in the cause of humanity, both in the form of drinks and injections.

ACCOUNT of the latest EXPERIMENTS on the APPLICATION of GALVANISM, for MEDICAL PURPOSES, made in GERMANY.

[Continued from p. 62.]

IN applying Galvanism for the cure of amaurosis, Dr. Martens made use of the following methods: He conducted it by means of two directors of brass wire, which were insulated to the nervous branches that issue above and below the eye; but finding this method not to answer its purpose, he took two copper plates, which were on one side a little excavated, and flat on the other; he combined them with a string which he fastened in the rings made on the flat side of the plates, and thus tied them to the eyelids, after he had laid under the plates round pieces of cloth, which had been previously dipped in pure water; the conducting chains were afterwards applied to the rings on the back of the plates. This manner of applying Galvanism however was soon left by the author, when he perceived that after each experiment the conjunctiva became red and inflamed; in lieu of which he adopted the following method: He ordered the patient to take in his mouth a silver spatula, to which the conducting chain had been adapted,

adapted, and having moistened the eyelids, he applied to them a double armed conductor, which was attached to the other chain. In complete amaurosis, he thinks it advisable to put a blister on the processus mastoideus; and the place having been deprived of the cuticula, he applied one conductor to it, while the other was held to the eye of the same side. Dr. M. mentions a case of rheumatic tooth-ach, which was instantly removed by applying on each side of the gums the two Galvanic conductors. The most proper time for the application of Galvanism is the forenoon, the body being then more sensible and fit to receive the impression of the Galvanic stimulus. He likewise cautions the patients who use the Galvanism in difficulty of hearing and deafness, against drinking wine, at least he advises to abstain from it during the day when they are galvanised. Dr. M. farther endeavours to determine the indications for applying the Galvanic agens, which according to him are the following: 1. Diminished activity of the cutaneous organ, suppressed transpiration, or any other obstruction in the cutaneous vessels and the tela cellulosa, &c. hence its great use in rheumatic complaints. 2. Diminished activity in the circulation of the blood, extravasations and obstructions in the blood vessels, &c. whence we may derive great advantage from the application of Galvanism in wens and bronchocele, &c. 3. Torpid state of the nervous system.

The indications which are to be followed in single morbid states, in which Galvanism may be employed, are thus stated by the author. 1. In deafness and difficulty of hearing, particularly in young healthy persons, and if the complaint is not too much rooted; farther, in deafness originating from a rheumatic cause, from a paralytic state of the auditory nerve remaining after apoplectic fits, &c. Contra-indications in these cases, are congestions of blood towards the head in plethoric subjects, in which a strong tinkling of the ears generally takes place, running of the eyes, hereditary deafness, &c. paralyzes which are not too inveterate. 3. Amaurosis, that species particularly which originates in a paralytic state of the optic nerve. 4. Rheumatic complaints, arthritis, ischias, tooth-ach, in all which complaints Galvanism has been frequently employed with success. 5. It is likewise a very good stimulus in asphyxia or apparent death.

On drawing a parallel between Galvanism and Electricity, Dr. Martens finds them to differ in the following points: 1. Galvanism is stronger, more penetrating and efficacious, its stimulus being at the same time more permanent, 2. Its action is generally limited to the
part

part on which it is directed. 3. Galvanism seems not to have the power of attracting light bodies, as we observe in electricity. 4. It seems not to be increased by insulating, as is the case with electricity. For medical purposes the application of Galvanism is undoubtedly preferable to that of electricity, as it is more convenient, and its action more certain and efficacious than electricity. There are finally added, some cases in which Galvanism was successfully employed by a practitioner, of which we think the first only worthy to be mentioned, where a paralysis of one side of the face was cured by means of the Galvanic agents after the fruitless application of other remedies.

Dr. Marcus, of Bamberg, likewise communicates several experiments which were made with the medicinal application of Galvanism at the great hospital of Bamberg. It was used in several cases of paralysis, as hemiplegia of the left side, paralysis of the right and of the left arm, in the last of which cases a complete cure was effected merely through the medium of Galvanism; farther, in several cases of deafness and difficulty of hearing, where it generally produced considerable relief. He employed it also in the following cases. 1. A violent head-ach which had remained after a remitting fever, and which would not yield to any remedy, was removed by the application of the Galvanic stimulus. The pain began to cease during the first experiment, when the temples, the forehead and the neck were moderately galvanised. Two or three days after, as the head-ach had returned, the experiment was repeated, by which it was entirely cured. 2. A sciatica, which had resisted all remedies for more than two months was entirely cured by Galvanism, after its application had been repeated for eleven days, one after another. 3. Epilepsy, of which three cases are related, where the paroxysm immediately ceased on bringing the patient in combination with the Galvanic battery by applying one hand to the negative pole, while the other was held on the positive. Besides this, Dr. M. orders the patient to be galvanised at the time when he is free from his disease, and he found in one case the paroxysm was postponed. He recommends to apply the Galvanism to the back bone, where the nerves of the neck, of the back, and of the lumbar region issue.

In Professor Loder's Journal for Surgery, we find also some accounts of the successful application of Galvanism in several diseases, particularly in dimness of sight, &c.

Dr. Hellwag, of Eutin, in the bishoprick of Lubeck, has communicated his experiments on applying Galvanism

ism for medicinal purposes, in a small work entitled, "*Erfahrungen über die Heitkraste des Galvanismus*;" i. e. *Observations and Experiments on the Medicinal Virtues of Galvanism*. The first experiment was made on a boy five years of age, who was deaf and dumb, though he seemed still to hear very strong sounds. The battery of which he made use was constructed of crown pieces and zinc-plate with round pieces of paste-board soaked in salt water. One of the conductors being applied to one ear, the other ear was touched with the other conductor, moving it to the ear and from it alternately. A battery of 20 strata was thought sufficient; but when its action seemed to decrease, the number of strata was raised to forty. At the end of the two conductors, round pieces of sponge soaked in salt water were afterwards fastened, which were introduced into the ears. The operation lasted generally from ten to twenty minutes. The experiments were thus continued for about a fortnight, before any effect could be perceived; but about this time the patient began to hearken to moderate sounds with visible pleasure, and even turned round when he was gently called by his name; he seemed to pay attention to every new sound which he perceived, and by degrees he could even hear a watch go at the distance of ten inches; in this way his audition gradually improved, and he learned to pronounce letters and words, though but imperfectly; but not finding it attended with further benefit, the experiments were discontinued. The success however of this cure induced Dr. Hëllwag to make farther trials with the medical application of Galvanism, for which purpose he constructed a new battery, taking plates of metal, of which printing types are cast, instead of the silver crown-pieces, and in place of the salt water he chose the gall as a wet conductor, which he found extremely efficacious. For better convenience the battery was placed horizontally. The conductors were brass wires, at the end of which he fastened small sponges, which he could conveniently introduce into the ear. Dr. H. then relates six cases of deafness, in which he employed Galvanism. A youth, of eighteen years, who had lost the power of hearing by a scrophulous ulcer in one ear, and the audition in the other had suffered considerably, was galvanized with seeming success, but shortly after he relapsed into his former state. Another patient, twenty years of age, who was born deaf, and whose organs of hearing were touched only by certain sounds, as the barking of a dog, the sound of a flute or harp, had been galvanized about a fortnight
for

for half an hour every day, when his ear became sensible to other sounds, as even to hear the noise which a watch makes when going. A similar success was observed in a girl, sixteen years of age, who was nearly deaf before. A young man was frequently affected with difficulty of hearing, which had often yielded to different external remedies. As his complaint returned, Dr. H. began to try on him the Galvanism, and having been under his care for some days, the patient suddenly raised himself during the experiment, as he felt a violent head-ach, attended with strong tinkling in the ears, which having gradually decreased, he perfectly recovered his hearing. In another man, sixty-eight years of age, who after a retrograde exanthema, had been afflicted with dimness of sight and difficulty of hearing, was considerably relieved by the use of Galvanism. A girl, nine years of age, was nearly cured of a difficulty of hearing, which occurred after a violent otalgia. Dr. Hellwag likewise employed the Galvanism in other diseases, of which he relates five cases, partly paralytic diseases, and two cases of amenorrhœa; but no remarkable effect could be observed from the application of that stimulus.

At the end of Dr. Hellwag's publication are annexed some observations and experiments with the medical applications of Galvanism, made by Dr. Jacobi, which he owns were not attended with such a degree of success as other medical writers have boasted of. The author then enlarges on the causes of the unsuccessful application of Galvanism, which partly is owing to the improper application, partly to a want of tone in the nervous and muscular fibres, which he thinks must in general be present to secure the success of the Galvanic operation; he therefore advises to employ a tonic method of cure at the same time with Galvanism, as cold baths, sea baths, steel, bark, &c.

To the Editors of the Medical and Physical Journal,

GENTLEMEN,

YOUR strict attention to whatever can promote the interests of our valuable profession demands the thanks of the medical world, and emboldens me to presume that the following remarks will meet your approbation,

The

The enormous price of books is an evil calling loudly for redress; it is a subject too interesting to the literary community to be longer neglected. The fashion of publishing every production in a splendid style, is a serious obstacle to the diffusion of knowledge. Is it vanity in the author, or folly in the public, that gives us such fine editions in quarto and folio? Every prospectus of publication in these times, is more prolix in its detail of fine wove paper and handsome type, than explanatory of the merits of the work. In the wide range of letters, from the *Principia* of Newton to the history of Jack the Giant Killer, we have such emphatic description of the quality of paper and type, that an ignorant person might be led to believe all human learning was manufactured at the mill and foundery. Probably the citizen supposed the bookbinder was a profound scholar, when in fitting up his villa he expressed a particular desire that his library might be composed of books *elegantly bound*, without any anxiety respecting their contents. Sir William Blackstone honours the Faculty, when recommending the study of the law, "to complete the character of general and extensive knowledge; a character which their profession, beyond all others, has remarkably deserved."* I fear this remark will soon be applicable to a *fortunate few*, if the price of learning continues to advance.

Truth and science, Gentlemen, are like Lavinia, "when unadorned, adorned the most;" and it becomes the guardians of literature to protect their charge from the dangerous innovations of frivolous fashion or vain parade. The evils arising out of this ridiculous propensity to gaudy shew are not confined merely to the pocket, but must have a farther and equally pernicious effect. Is it not to be feared that the exterior will subtract from our attention to the intrinsic value of the book; and that in our admiration of art we forget the utility of science? Can any decorations add to the importance of the works of Hypocrates, Boerhaave, Cullen, Monro, Hunter, and Darwin? Certainly not. These authors may be ranked the first in the scale of medical and physiological repute; their writings have been numerous; but to enable the professional world to profit by their labours, they should be published in the cheapest forms possible.

For

* Vide Vol. I. p. 13. Commentaries on the Laws of England.

For the honour of science, let her be clothed in plain attire, and consign the trash of the day to the livery of red Morocco and gold leaf. The nobleman of high rank and acknowledged worth is contented on common occasions with a respectable decency of exterior, whilst the fluttering coxcomb eclipses the rainbow. Novels, romances, and plays, are on a parallel with the gaudy Fribble; and as they possess little internal worth, I think their readers may properly be taxed for their folly. But in a grave, studious profession, like ours, embracing in its perfection *all* the sciences, wherein it is justly said, *Ars longa et vita brevis*, the means of information cannot be too much facilitated; nor can I sufficiently lament the melancholy effects that I hourly feel of this universal mania.

I know it may be said, that the high price of books arises partly from the heavy duties on paper. Admitted, but why add to that evil by unnecessary, extraneous, and expensive embellishments? May we not reasonably suppose that government saw our passion for beauty of art, and resolved to share the spoil with the artist? If philosophers had not been seduced by fashion or vanity, this folly would have been confined to foolish works alone.

The genius and industry of the present age have triumphed over the obstacles arising out of expence, but surely it is a legitimate inference that the profound discoveries and elegant improvements in every branch of medical science would have been more amply diffused, if the poor in pocket could have attained the possession of them.

Every author in medicine and surgery should reflect that there is a particular description of the Faculty precluded from the means of improvement by the enormous price of scientific books. It is in the metropolis, and large towns only, where professional men can obtain literary enjoyment at an easy rate, by forming themselves into societies; but what is to become of the country practitioner, who within his circle is an equally important, and ought to be an equally learned and respectable character? The objects he has to practice on, hold life and health in as high estimation as the pampered inhabitants of wealthy cities, and if public considerations might be indulged in such a case, we might perhaps in truth accord with Dr. Adam Smith,*
that

* See his incomparable *Inquiry into the Nature and Causes of the Wealth of Nations*.

that they more immediately form the basis of national opulence. If a solitary newspaper, penetrating his obscure retreat, announces to him the publication of a valuable work, he longs to peruse it; but the fine contour of the type, the beautiful texture of the paper, and probably the elegant binding of the splendid quarto, form so many insuperable obstacles to his *borrowing* it, how then should he *buy* it? he can only sigh over the sum total of its nominal value. The *Zoonomia* of Dr. Darwin (a work that may vie with any, whether antient or modern) was first published in a form that limited its distribution, and consequently its utility; the same may be said of Mr. John Bell's *Principles of Surgery*; its enormous price places it beyond the attainment of men in moderate practice, and these are the men who must require the result of another's experience to supply the deficiencies of their own. I am not ashamed to acknowledge, Gentlemen, that I *feel*; yes, I sensibly *suffer*, from the evils of which I presume to complain. My little library might have been twice its magnitude, if half of its prime value had not been sunk in the quality of type and paper. I am unable to store my mind with the estimable discoveries of my cotemporaries, because I could barely afford to purchase truth in her naked simplicity, and my ambition will never extend to the possession of her decked in *imperial* attire.

It is a melancholy consideration, that whilst almost every other class of men are in a state of improvement, the Faculty are certainly going retrograde; I speak to their revenue; competition has reduced the Profession to the lowest ebb, consistent with comfortable support. Half a century has produced an enormous advance in the price of all the articles of the *materia medica*, as well as of the necessaries of life; but no equivalent advance of charge by the apothecary has taken place. In short, such is the state of the country practitioner, that empiricism must soon supercede science, if every facility is not afforded him to procure information.

To remedy these evils, I humbly beg leave to recommend that all writers on subjects connected with medicine and surgery should publish on coarse paper with a plain type; it may be profitable too to intrude a little more on the margin. Dr. Darwin suggested the propriety of making the letter-press a spectrum with the ground, or paper, and perhaps by its superior distinctness we should be able to use paper of a quality still less expensive. The literary works of our continental neighbours, are almost all of them published

lished on a coarse paper, and perhaps the general diffusion of knowledge over France and Germany, in spite of their political slavery, may be attributed to the easy means of attainment.

Consistently with the above views, I call upon you, Gentlemen, to give the first example of departure from fashion. It would be highly honourable, and, I judge, equally profitable, to stand forward the first instance of independant character; add to this, that the circulation of your work would be infinitely extended, and the discoveries in medicine and surgery more widely promulgated. If I did not conceive the Medical and Physical Journal to be a miscellany of deserved repute, I should have presented my remarks to the Editors of some other publication; and assure you, that I do not compliment when I say, that by your giving an example of literary economy, you will influence authors as much as you will benefit readers. The Faculty, Gentlemen, have a sensible interest in my appeal to your prudence, and I presume will not refuse to join in my request, that you will abstract a little from the beauty of your work to render it of more universal utility.

It is possible some may object that any change in your mode of publication will diminish its value by destroying its uniformity; and that the taste of the public must be complied with. But I am sure, that however the country practitioner may hunger for knowledge, he cannot at present taste it; and it is of very little importance to a man anxious in the pursuit of professional information, whether truth be depicted on brown paper or vellum.

To shew that a scientific publication can sustain its character without condescending to put on a fashionable dress, I refer you to the Gentleman's Magazine, which, I believe, is not considered less valuable, because it is less *pretty* than the ephemeral productions of many moderns, and I think I dare venture to predict, that the Medical and Physical Journal will not sink in the public esteem, whilst conducted on its present principles, however plain the paper and type may be.

I hope, Gentlemen, to be believed when I declare myself a sincere admirer of the works of art; but when I see learning revered the more for its trappings, I fear a decay of public wisdom. The art of printing was invented to communicate knowledge, and has been the happy means of diffusing sciences and arts, improving our morals and politics, and extending human civilization through the remotest regions; but it will cease to be subservient to such
purposes,

purposes, because it bids fair to become the *primary* object of consideration.

In offering you the above remarks, I hope, Gentlemen, I am not actuated entirely by a selfish motive, and I beg that they who may see no danger, or who are too rich to feel any inconvenience, from the subject of my complaint, will give me credit for a small share of anxiety respecting the welfare of that Profession which I am desirous not to disgrace; but if my poverty of pocket is deemed criminal, I must stand convicted, and assure you that if knowledge is to be sold by *aspect* instead of by sterling worth, my head will soon be as light as my purse; I shall be reduced to the distress of the mortified connoisseur, for I cannot purchase the picture on account of the expence of the frame.

I am, &c.

Gillingham, Aug. 9, 1803.

JOHN WILSON.

To Mr. DUNNING, Plymouth Dock,

MY DEAR SIR,

FROM the consideration of your having been one of those valuable members, who have contributed towards the almost general adoption of the Vaccine pocks, and of the zeal you displayed in overcoming by your writings and practical proofs, the prejudices that existed against so beneficial a discovery, I conceived the following translations from some Spanish manuscripts, respecting the discovery and effects of the goat pocks, would not be unacceptable to you; as it evidently shews how far the zeal of a few can go in remedying the evils of human life, and the benefit that may be expected from such laudable examples. The goat pocks were discovered as far back as February last, but from its not having been proved to equal the vaccine, I forbore to give you any information relative to this subject, until I was properly informed of its good effects. The discoverer of this new species of pocks, is the Hebrew Professor of the Royal College of San Isidro, of this town; and as I am intimately acquainted with him, having known him these eight months, he has been so good as to offer his assistance in furnishing with every information any of my friends, who may wish to consult

him on the subject. Should you then have any inquiries to make respecting the goat pocks; besides, if you wish to propose any medical questions concerning any branch of physic as practised in this country, this gentleman has assured me, he will punctually answer them. From the present uncertainty of affairs, and from the far advancement of summer, I shall, in all human probability, leave this place in the course of seven or eight weeks, or perhaps sooner; therefore, you have the choice of either writing to the gentleman himself, or to me, under his address, which I have subjoined, who in case of my having left Madrid, will inform himself of the contents of your letter, and forward to you, as soon as possible, the required information.

I am, &c.

Madrid, July 8, 1803.

W. A.

No. 1.

To his EXCELLENCY, PETER CEVALLOS, &c.

My much esteemed Sir,

AS the health and happiness of the people is the supreme law, I cannot omit troubling your excellency's attention with a discovery which has for its object the benefit of mankind in general, and of this nation in particular. As there are no cows to be found here with pocks for the purpose of inoculation; and on account of this, the faculty find themselves reduced to the necessity of procuring vaccine matter from other kingdoms and provinces, to the detriment of the public health, arising from different causes; so that this valuable discovery could not produce in this kingdom the same happy effects, which have attended it in other countries; furthermore, having discovered in the vicinity of Madrid some goats to have the pocks, the matter of which I found by experience to have the same quality, and to produce the same effects in inoculation and preservation, as the vaccine matter; in consideration that we have fresh matter in this country in abundance, it will most assuredly produce more beneficial effects, than the matter introduced from foreign countries, of whose legitimacy no further security can be obtained, than the assertion of the person who sends it; also extracting matter from one person for the inoculation of another, may also be attended with inconveniences. Your Excellency ought to inform the Royal Medical Society of the purport of this letter, as this body can make the necessary experiments

pro and contra; and should it turn out, as I flatter myself it will, I shall have the satisfaction of having contributed in some measure to the preservation of some of our species, which is the greatest happiness I can possibly enjoy; and obeying the commands of your Excellency, I remain your most stedfast friend, and assured humble servant,

*Royal College of San Isidro,
Madrid, Feb. 18, 1803.*

JOHN JOSEPH HEYDECK.

No. 2.

To Mr. JOHN JOSEPH HEYDECK.

SIR,

I received your letter of the 18th inst. which informed me of your having discovered different goats of this country, with pocks the same which cows are known to have; the matter being of the same quality, and producing the same effects by inoculation; which discovery I have laid before the Royal Society of Physicians for their investigation; and have to thank you for the zeal you have shewn for the public welfare. I shall always be your most stedfast friend and assured humble servant,

Aranjuez, Feb. 25, 1803.*

PETER CEVALLOS.

No. 3.

His Excellency Mr. PETER CEVALLOS, First Secretary of State, and Privy Counsellor of his Majesty, has communicated to the Royal College of Physicians, the following Royal Order:

Mr. John Joseph Heydeck, Professor of the Royal College of San Isidro, has communicated to me the circumstance of his having lately observed in different goats in the neighbourhood of Madrid, pocks the same as cows are known to have; and having taken matter from them, found it to possess the same quality, and to produce the same effects in inoculation; so that he believes this discovery may be very beneficial to this country, as there is a scarcity of cows, and perhaps there are not any with the pocks; the faculty being, in consequence, reduced to the necessity of procuring vaccine matter from foreign countries, losing by this means some of its power, to the pre-

* Aranjuez, the King of Spain's country seat, seven leagues distant from Madrid.

judice of those inoculated with it, I communicate the same to you for the information of the Royal College of Physicians, in order that they may make a proper examination of this important discovery. I remain your most stedfast friend, and assured humble servant,

Aranjuez, Feb. 28, 1803.

PETER CEVALLOS,

To Mr. JOHN JOSEPH HEYDECK.

In obedience to his Majesty's commands, the Royal Medical Society have thought proper to forward the official letters, accompanied with the royal order of his Majesty, to Doctors Ignatius Maria, Luiz de Luzuriaga, and to Mr. Peter Hernandez, physicians to his Majesty, that agreeably to your information, they may be pleased to make the necessary experiments, and to acquaint the Society with the results. The purport of which letter I herewith inform you, and shall always remain your most stedfast friend and assured humble servant,

MANUEL CORGULLO.

An Account of an Inoculation tried with Matter taken from Goats, on two Children, by the Physicians commissioned by the Royal College of Physicians, from the 26th of May, 1803.

In consequence of the instructions which I gave to different goat-herds of Madrid, and its neighbourhood, respecting pustules, which, from time to time, are accustomed to appear on the teats of goats, I was advised by Manuel Lopez, goat-herd in the street of S. Bruno, opposite the Royal College of San Isidro, who had some goats with the pock, of the same quality which I described to him on the 26th of May.

May 27. I went to the house of the said goat-herd, and discovered that the goats really had the pustules I was in quest of, one in particular, whose pustules were full of virulent matter, and fit to extract for inoculation; of which I informed the commissioners of the Royal College of Physicians, Mr. Ignatius de Luzuriaga, and Mr. Peter Hernandez. At seven o'clock in the evening they attended, accompanied by Mr. Nicholas Diez, surgeon; and on examining the pustules, found them full of virulent matter, and fit for inoculation. They practised the greatest diligence to find a subject for inoculation, but not finding one, the surgeon, Mr. Nicholas Diez, took matter from the goat, and put it between two pieces of glass for its preservation.

The

The goat, according to my observation, shewed no visible symptoms of pain; her milk was plentiful, and excellent; she eat well, and laboured under no inconvenience from the pustules.

May 28. The wife of the goat-herd acquainted me that she had met with two poor women, who, for a gratification, would permit their children to be inoculated with the goat-pocks; I immediately acquainted the Medical Commissioners of the same, and at six in the evening, Mr. Hernandez, accompanied by Mr. Diez, surgeon, came and informed me, that his companion could not come by reason of his occupation, when the aforesaid Mr. Diez inoculated Nicholas Sanz, with matter taken from the goat, a child between two and three years of age, son of Nicholas and Isidora, living in Angel Street, in the yard belonging to the Mill House; and Maria, (whose mother's name is Michaela, and her husband, Mr. John Curial) a child eight months old, who live in St. Bernabe's Street. The inoculation was made in the arm, and both mothers declared their respective children never had the small-pox.

May 29. I went at nine in the morning to see the children that were inoculated, and found them without any symptoms of novelty.

May 30. I saw them at nine in the morning, but without any change.

May 31. At nine in the morning, I saw the child Nicholas, and was assured by his mother that he had a looseness in the night; this regularly proceeded from raw beans, which I found him eating the preceding days.

June 1. I discovered, at nine in the morning, two small pustules in both arms where the incisions for the inoculation had been made, which visibly proceeded from having been scratched, by which means the pocks that had been formed were destroyed. I observed nothing in the child Mary.

June 2. At nine in the morning, I discovered the child, Nicholas, to have a slight fever; his mother assured me he had it all night; I observed also some round spots of a red colour on his arm, the sides of the pimples of the incisions were something more inflamed, having a sufficient moisture; the child was seen to scratch them, though the mother was told to hinder it by putting on him a jacket, which she neglected doing. As no new appearance was visible in the child Mary, it made me suspect that she might have already had the natural small-pox, and I was not deceived in my idea; for the wife of the goat-herd assured me of it.

afterwards, and also assured the gentlemen, Mr. Peter Hernandez, and Mr. Nicholas Diez, that the child really had had the natural small-pox, which was basely dissembled by the mother, on account of the gratification, which was afterwards confirmed to me by the aunt of the goat-herd, as also by the mother herself, and finally it is discovered she is not the daughter of Michaela, but a child of the Foundling Hospital.

June 3. The mother of the child Nicholas, called me at seven in the morning, telling me the child had a high fever all that night; indeed, I found him to have a very slight fever, and the spots which I observed before, were increased in size, and inflamed, of an erysipelas colour. I informed the gentlemen commissioners, Mr. Hernandez and Mr. Diez, who went to see him.

June 4. At nine o'clock in the morning, I found in the place of the red spots, some pimples with clear matter; (and desired the mother to hinder his scratching) which I also acquainted the gentleman commissioners with. At six in the evening, we found him sleeping in the court-yard belonging to the house, almost naked, at a time when it was tolerably cold, and awaking him, found him without any fever; the pimples, that were scratched, were formed into pustules, and some food being given to him, he eat it with an appetite.

June 5. At nine in the morning, the pustules were something red without any fever.

June 6. *Ibid.*

June 7. The pustules and incrustated surfaces were almost dry.

June 8. The pustules and incrustated surfaces have disappeared, I continued to visit the two children twice every week till the 28th of June, without discovering any change, neither could any discovery be made of their infirmity or indisposition, either from the children themselves, or from any observations of their parents. That it produces less change than the vaccine pocks, proves incontestably the simplicity and benignity of the goat pocks. Nothing new has been observed with respect to the child, Maria, having had the small-pox before; the child Nicholas, notwithstanding the little attention paid to him by his mother, and the rigor of the season, as it was tolerably cold at that time, walked about naked, making use of eatables not conducive to health, and experienced nothing more than a slight fever from the fifth to the seventh day, in which the bladders and pustules appeared; they did not
suppurate

from the circumstance of their having been scratched off; and from the twelfth nothing new has been observed.

N. B. His Majesty the King of Spain has given orders that the children in the Foundling Hospital, and charity school dependant on the same, be inoculated with the goat pocks; of the former forty have lately been inoculated.

To Mr. WARD, Surgeon, Manchester.

SIR,

AS you have expressed to me a wish, with which others perhaps may sympathize, to be acquainted more particularly with an instance of Trismus, alluded to in one of my periodical Reports of diseases in the Monthly Magazine, I have thought it right to communicate to the Editors of the Medical and Physical Journal; and, in case of their permission, to the public, a brief abstract of the case, as it was taken down during my attendance upon the patient.

I am, &c.

J. REID.

Southampton Row,
July 16, 1803.

TRISMUS TRAUMATICA.

Ap. 27, 1803. Landeman Jues, æt. 24, a marine, has left the service nearly a twelve month, having received a severe wound in his leg, which, within the last fortnight, has given him very great pain and uneasiness. A few days ago he was attacked with the usual symptoms of a *cold*, and slight fever, which confined him to bed; a day or two after which he was seized with a violent pain and stiffness of the jaw, especially severe on the left side, which has since greatly increased, and at present, (the seventh day after the attack of the disease) his jaw is *locked*, but not so completely as to prevent broths and other fluids from being poured into his mouth, and he has no difficulty of swallowing. He likewise complains of pain along the spine, and that sometimes he is drawn backward by a sudden spasm; he is likewise afflicted with pain of his left arm, and of that side of the neck with slight spasmodic twitches. Pulse quick, small, but very regular; skin natural; body very costive; some thirst; pain of head and of belly; his jaw and neck have been rubbed with liq. vol.

R. Opii puri ʒj. Axung q. s

Ut fiat unguentum. Divide in partes, vj. Let his jaw
be

be rubbed with one of these portions for a quarter of an hour. Let this be done six times in the course of the day.

Habt. Pulv. Jalap gr. xxv.

Let him have broths and beer.

April 29. The pains of his back and the spasmodic contractions have somewhat abated; and the jaw is not so fast locked. The opium was well rubbed in, but produced no inclination to sleep. Body costive.

Rep. Frictio Opiata. Hab. Pil. Opii. ij. bis in die.

May 2. The medicines ordered to be repeated, with the addition of the electuarius purgans of the Dispensary; and, if that should not operate, the administration of a clyster.

May 4. Trismus as before; severe pain of bowels, with extreme costiveness. The clyster had very little effect; the electuary none at all. Good sleep since he took the pills; pulse small and quick; no difficulty in swallowing.

Rep. Frictio Opiata. Habt. Mist. Cathart. of the Dispensary, coch. mag. ij. tertia quaque hora.

May 5. Spasm of jaw somewhat relaxed; still he complains of great rigidity of his limbs and back; took about 3 oz. of mist. cathart.; had a copious stool this morning, and another at noon; slept well last night. He began to take the bark to day. Contin.

Trismus gradually abating; his limbs are not so stiff; pain of neck and back relieved; body open; he can sit up for some hours together; good sleep. Contin. med.

May 8. Jaw cannot yet be completely opened, but he recovers strength and appetite; pains relieved; body open; stiffness of limbs abating; let him have wine and broths.

Rep. M. Cinchon. & Frictio Opiata.

May 9. Trismus as before; recovers strength; complains of pain in his thigh.

Contin. Med. Cinchon. et Frictio Opiata. Frict. femur lin. volat.

May 13. Trismus gone; still a slight stiffness of jaws and of his knees.

Om. Frictio Opiata. Con. lin. vol. et mist. peruv.

May 16. Stiffness of jaws gone; knees still troublesome; continues to recover strength. Rep.

May 19. Decidedly convalescent; let him continue the wine. Rep. mist. peruv.

May 23. Cured.

During the process of convalescence, in addition to the bark, steel was prescribed according to the following formula.

Ferri ppt. gr. v. G. myrrh. gr. x. G. Arab. q. s. Fiat mass. divid. in pil. iij. Capiat æger pil. j. ter in die.

MR. CHAMBERLAINE, *on the AMENDMENTS of the
MEDICINE ACT.*

[Continued from pp. 258—266.]

BY the 25th clause, the common informer was allowed the scope of six months to bring his information; in which time the mischief he had it in his power to do, was incalculable; as must appear to any one who will only consider how much mischief might have been done, had the informations brought at the Mansion-house in a very short time after the passing of the act, by a common informer, unconnected with the stamp-office, not been quashed; as related in the former part of this account.*

Excepting in the salutary reformation of the Schedule, and the taking the business of information out of the hands of the *common* informer, and confining the power of bringing actions to the Stamp Office, in no case have persons, liable to be affected by this act, greater cause to be thankful to the respectable gentlemen to whom the committee made application for redress, than for the polite attention they paid to their remonstrances, and exposition of the destructive consequences which might possibly ensue, from the allowing the informer, by the 22d clause, six months to make his depredations in, before bringing his informations to issue. The committee represented to Mr. Estcourt, Mr. Vansittart, and Mr. Addington, the possibility of a man being completely ruined by the number of informations laid against him in the course of six months, for the sale of an article which he might erroneously deem not liable to a stamp duty; and they fought hard to obtain a clause in the new act, that the informer should be obliged to sue within ONE month from the time of the penalty being incurred. This ministers did not think themselves warranted to accede to; but, instead of six months, they consented to make it THREE months; and accordingly the 5th clause of the Amendment provides, that every information under the Medicine Act, shall be commenced *within THREE months after the offence committed, and not afterwards.*

Considering the very great disproportion of the penalty to the offence, it was represented, that even five pounds, the mitigated penalty, was too much to pay for the omission of a three halfpenny stamp; in reply to this it was argued,

* See page 170 of this volume, (No. 54) for August, 1803.

gued, that if a five pounds penalty attached to this, the omission of a twenty shilling stamp subjected the offender to no greater penalty. It was then suggested by one of the committee to lessen the penalty on the smaller stamps, and lay a fine *ad valorem*, that is, that the penalty should be in proportion to the value of the stamp omitted to be affixed.

This was objected to as being a matter that would make the act too complicated; and perhaps puzzle the Justices.—However, Government did better for us than we proposed for ourselves, by allowing the magistrate the power of mitigating the penalty to ONE-FOURTH, instead of ONE-HALF, as it before stood. (*Amendment*, latter part of clause 5th.)

It now only remains for me to take notice of that part of the act which relates more nearly to practitioners in Pharmacy, whether concerned in the sale of Quack Medicines or not; in order to shew to both how far they are exonerated from their former fears, and in what cases caution is necessary. And this brings me to the

SCHEDULE.

It would be the height of absurdity to suppose, that the mechanical parts of acts of parliament are constructed by any of those who compose the great legislative body of the nation.—They are, for the most part, composed by persons who are, or ought to be, conversant in the business which the acts themselves relate to.—But the many incongruities, and the introduction of so many articles which had no business there, into the Schedule of the Medicine Act, by the person who took on himself the trouble of favouring government with that ingenious compilation, shew that

EX QUOVIS LIGNO NON FIT LEGISLATOR.

The first material alteration we find is, that almost every article in the former Schedule, not clearly defined, has been in the new Schedule omitted; such as *chalybeate pills*, *carminative tincture*, *nitre drops*, *sweating powders*, *tonic pills*, and many others.

Arrow root, or *Indian arrow root*. This, as being more properly an article of food than medicine, and also an *unmixed powder*, (save when adulterated with potato starch, or flour, by our ingenious sophisticators) is very justly exempted from the stamp duty.

Arquebusade water. So great is the repugnance towards paying for stamps, that I once heard a man declare, that
if

If life could exist without his wearing his head, he would have his own head cut off sooner than be obliged to wear a stamp upon his crown. Another, equally inimical to wearing a stamp upon his head, but more ingenious, bought a second-hand turban that had belonged to one of the Duke of York's black cymbalists, which he wore in going about his grounds on week days, and kept a hat, made before the stamp duty on hats took place, to go to church in on Sundays.

When the perfumery tax was in existence, government lost *eight thousand pounds* per annum on the importation duties on foreign articles of perfumery. Every one knows how soon the fine powdered head was converted into the black Brutus; and the perfumery tax was ultimately given up, because the cost of collecting it exceeded the sum which the tax itself produced.

I wish a similar loss to government may not be found to ensue, from the laying a stamp duty on *arquebusade water*. This composition already pays a duty of twenty-seven shillings per gallon; it is sold in pint bottles at 7s. 6d. or 8s. each. The stamp duty on each pint is one shilling, which increases the duty on the gallon to eight shillings more, or *one pound fifteen shillings* per gallon duty in all! This enormous duty must rather operate as a prohibition, the good Lady Bountifuls in the country, among whom this article principally finds a sale, will grudge to pay a shilling extra on the pint, for what they consider to be of no use to them or any one else; and will soon find some cheaper substitute to wash their neighbour's wounds with. And when we also take into the scale, that *arquebusade water* neither is, nor ever was, a secret nostrum, (the composition is given in foreign dispensaries, and also in Lewis's dispensary) we may fairly infer, that this is not a fair article of stamp-ation, and that government will lose more than will be gained by bringing it within the meaning of the Medicine Act.

Blistering ointment, Goulard's extract, Huxham's tincture of bark, Spanish juice, syrup of Tolu, Turkey rhubarb, being all articles of the London Pharmacopœia, are very properly omitted. *Eau de luce, essence of peppermint,** and *refined liquorice*, are also expunged. *Candied horehound* and *candied ginger*, and a great many articles clearly belonging

* If sold simply in a common phial, but if sold "in quackish guise," it is liable. Juniper's essence of peppermint is particularly mentioned.

longing to the province of the confectioner, but for the sale of which, many grocers, confectioners, and apothecaries have been heavily mulcted under the old acts, are now expunged.

In the former schedule, the words, "OF ALL SORTS," were annexed to the following articles: *Dentifrices, issue plasters, lozenges, lip-salves, tooth-powders, tinctures for the teeth and gums*; thus lumping into one mass every thing that could be construed to answer any of the above purposes; which made it dangerous to an apothecary to sell a little powder or tincture of myrrh, or a small box of sperma cæti ointment, lest it should be purchased by an informer, who should call it lip-salve.

In the new schedule, not only is this exceptionable, sweeping expression, "OF ALL SORTS," done away, but every one of these articles, Lozenges excepted, may be safely sold, provided not sold under the name of any person claiming a proprietary right, or pretended secret, in them, or setting forth a superiority of his own over all other articles of the same kind, by printed hand-bill or advertisement.

In the new schedule, we find an article that I never heard of before, viz. *Chamberlain's ointment*; and I merely notice it here, to say, I am very sorry that any one, bearing that name, should be author of a quack medicine; (I know it is not my friend Chamberlain, the druggist, in Fleet-street;) and I am sorry on another account, because it might be supposed by those who do not know me, that the active part which I am proud to say I have taken in this business, was from interested motives; I therefore take this opportunity of saying, that I know nothing of either the ointment or its author; that I deal not in nostrums, and that I mortally abominate all manner of Quackery.

The names of a great number of articles, not medicinal, and which appertained chiefly, I might say exclusively, to the perfumer and confectioner, have been removed, in consequence of the petitions presented, and the proper measures taken, by deputations from these bodies. But there is one species retained, *partly* medicinal, but rather more an article coming within the province of the confectioner, although largely dealt in by both the druggist and apothecary, upon which something is to be observed: I mean, LOZENGES.

Although that phrase of universal proscription, "OF ALL SORTS," is not, in the new schedule, applied to the article, LOZENGES; yet there are very few of these, which have
any

any thing medicinal in their composition, that are not specified in the schedule. Such as bear the name of any particular person; as, *Ching's, Dawson's, Steers's, &c.* as also such as are sold as secrets under any fine name; as, *Lozenges of Blois, Patirosa*; or any expressing the quality or the complaint they are good for; as, *paregoric lozenges, worm, heartburn, or tooth-ach lozenges*, are clearly within the meaning of the act. These there can be no dispute about; but there are several sort of lozenges prepared, which never were, by any person whatever, pretended to be kept secret, as to their composition; for instance, peppermint lozenges, ginger, horehound, and some others, which are, nevertheless, inserted in the schedule.

At first, it seemed the intention of government to expunge the article, Lozenges, altogether; and if that omission had taken place, there would have been no loss by it, because the 19th clause would effectually secure the duties upon all such as should come under the description of secrets in the hands of particular persons. But, as they are retained, and specifically mentioned by their different names, the dealers in that article are placed in a very unpleasant situation.

It has been already observed, (page 260) that the consumption of lozenges made in England takes off a quantity of the best double refined sugar annually to the amount of not less than one hundred and seventy tons weight; and the preparing the different sorts of lozenges gives employment to a great number of people who are called lozenge makers, and who make nothing else.

The Committee were very strenuous in their endeavours to have an exemption for peppermint lozenges and a few others of very general consumption, and not classed in the rank of nostrums. Possibly they might have succeeded, but the very great press of business of the utmost national importance, which at that time occupied the attention of ministers prevented an opportunity of a discussion on this subject, with them; but the Committee received from the Solicitor of the Stamp Office, an assurance, "That lozenges, sold in ounces, half-ounces, &c. should not be considered as chargable with the stamp duties, provided those lozenges were sold without any printed or written paper or hand bill, expressive of their properties or virtues in the cure of any disease; but if any paper whatever, describing their properties, should be delivered with them; or if any person should vend lozenges, generally under-

stood

stood to be, or to have been formerly,* secret compositions in the hands of particular persons, such would certainly be deemed liable to the duty."

This, as I have said before, is a very small boon, and places the dealers in this article, wholesale as well as retail, in a very awkward situation.

If peppermint lozenges are a simple article of confectionery, never claimed as a secret by any one, they should have been exempt from a stamp duty, which will bear very hard on the wholesale dealers and those who sell in larger quantities than an ounce; *little* dealers are allowed, *speciali gratiâ*, and as an indulgence, that which both little and wholesale dealers should have enjoyed *de jure*, an exemption from stamps on that article, and a few others in the same predicament; but in the hurry of national concerns, it is impossible to give attention to minutiae.

Issue plasters, which were in the former schedule, are left out; informations under the old act were always quashed by the magistrates, as it seemed agreed that these were no more than a *bandage*, and not a medicine. But if sold with a bill, intimating that they cure corns, or have any other specific virtue, they are certainly liable. This it is proper apothecaries should be apprized of, as they are an article sold by every apothecary who keeps a retail shop.

Plaster, black, Court Plaster, is not in the schedule, and may be safely sold unstamped, although sold with stamps

* *Tolu Lozenges*, for instance. Every one knows how to make these; but the informers have made, under the old acts, a greater harvest out of this one article, than all other medicines put together; and many thousand pounds have been wrung out of the pockets of poor apothecaries who were ignorant that these were a stampable article. What led to the Tolu lozenges being a favourite bait with informers, was, the circumstance that the magistrates themselves were divided in their opinion; for, at one office, magistrates would not convict, because no one pretended it was a secret; whereas, at the next office, the justices remembered that it had once been a patent medicine, and therefore conviction followed of course.

This villainous tribe of gentry, taking advantage of this difference of opinion, when they had marked any one for their prey, used to purchase a box of Tolu lozenges and lay their information at some office where they knew it would be quashed. After thus plausibly inveigling the apothecary into an opinion that he might be perfectly safe in future in selling his Tolu lozenges without stamps, in some short time after, different faces, belonging to the same gang, would come to the same shop, and purchase two, six, or perhaps a dozen boxes, one at a time; and then lay separate informations for each box; making sure it should be at some office where they knew from past experience, conviction would be certain. Many hundred apothecaries have been robbed in this manner.

stamps by some who find an interest in getting off as many as ever they can, as the discount on taking very large quantities renders the stamps a very profitable article of trade to them.

Relfe's suckling assistant. A mechanical contrivance, and one of the most admirable ever devised for the relief of that part of the creation from whom we derive our greatest comforts, and who merit all our kindness and attention at all times, but especially when labouring under that most painful and distressing complaint, sore nipples. This was one of those articles of the schedule which, though not belonging to the Pharmacopœia, I took the liberty of animadverting upon, and marking as an improper subject of taxation. The inventress, whom I understand to be a sensible and skilful midwife, rather merited a handsome reward for her ingenuity, than to have a tax, and that, one that confers disgrace, imposed on her invention. As well might umbilical trusses, wooden legs, artificial noses, silver palate-pieces, laced stockings, fleecy hosiery, and every item of the stocks in trade of Mess. Sleath, Eddy, Sheldrake, and every other disciple of Taliacotius, be deemed quack medicines, and rendered liable to the stamp duty. Mrs. Relfe's machine is very properly exempted, since the act has been amended, from the stamp duty.

Red pills. Tooth-ach pills. So great was the panic struck by the act in its unamended state, that I positively know an apothecary who lost a few shillings by refusing to make up a box of pills, in which cinnabar. factit. was a principal ingredient, for fear the customer should inform against him for selling *red pills*; and the same person feared to dispense an opium pill to a stranger, lest it might cost him ten pounds on its being sworn to being sold as a TOOTH-ACH PILL! These, and as I have before observed, most other medicines indefinitely described, are omitted, and no danger attaches, unless the vender characterizes such as empirical remedies.

Troches of all sorts. To the apothecary who is attached to this almost obsolete form of medicine, it may be interesting to know that the omission of the word *troches* altogether, in the amended schedule, wholly exonerates him from any fears on that score.

Tinctures for the teeth and gums. By some oversight, in the hurry of other business, the above words stand part of the new schedule; but as the committee have received assurances that the commissioners of the stamps will never

encourage any vexatious suit, nor suffer the act of parliament to be strained beyond its just and fair limits, no apprehensions need be entertained by the apothecary acting in the fair and regular way of business.

The assurances already stated to have been given by the Solicitor of the Stamp-office on the part of the Commissioners, renders it unnecessary for me to specify every item of the old schedule, exonerated by that which is now in force, from a stamp duty. It may however be expedient for those whom it concerns, to possess *both* schedules; accurately mark wherein they differ, and particularize in the latter, such articles as they may be dealers in.

In taking a summary view of the whole, I have to congratulate the regular practitioner in pharmacy, and the retail apothecary in particular, upon his liberation from the dangers and apprehensions which the act of 1802 subjected him to; and all this, *free of expence*, as I may say: the druggists, who are not quite so far benefited, having borne nineteen twentieths of the expence of getting the business of the AMENDMENT through parliament; comprehending,

1. The exemption of *unmixed* drugs from a stamp duty.
2. The taking the business of prosecution out of the hands of *common* informers, and confining it to the Stamp-office and Attorney-general.
3. The obliging the informer to bring his action in *three* months instead of *six* months.
4. The allowing the magistrate to mitigate the penalty to *one fourth* instead of *one half*; and,
5. The exclusion of all articles from the schedule, indefinitely expressed, and which would, by being retained, endanger the practice of the regular medical practitioner.

The druggists, however, still labour under some hardships and inconveniences: In compliance with the wishes and instructions of their constituents, the committee essayed for a total repeal.—Had the druggists been less intent on obtaining this, and testified a greater readiness to give assistance to ministers in framing an amelioration of the act, the few exceptionable parts of the act, which still remain, would have been done away.

It would be injustice to conclude this paper, without paying a tribute of thanks to those Gentlemen, to whom in the course of the business, it was necessary to make application.

The Commissioners of the Stamp-office were easily accessible, and their deportment towards those who applied to them was marked by that liberality which characterizes
the

the gentleman. To Mr. Addington and Mr. Vansittart, many thanks are due for the readiness with which they granted conferences, and the attention they paid to what was laid before them by the deputations of the committee appointed to wait on them; as also to Mr. Estcourt, Solicitor of the Stamp-office, for his very great attention and patient consideration of every particular in the many interviews held with the members of the committee.

To the Lord Mayor, (Mr. Alderman Price) to Mr. Alderman Combe, and to Sir John William Anderson, members for the City of London, and to Isaac Hawkins Browne, Esq. M. P. for their easiness of access at all times, their polite attention, their patient hearing, their useful advice, and their friendly support in parliament, that gratitude, which on all occasions they have a just claim to from their fellow-citizens, is, on this occasion, most justly their due!

I am, &c.

W. CHAMBERLAINE, Surgeon.

Aylesbury Street, Clerkenwell,
August 12, 1803.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

THE late prevailing epidemic, *called the Influenza*, made its appearance in our neighbourhood in the month of April; but in the two following months, May and June, it was by far the most prevalent. I have also seen several well marked cases of it so late as the latter end of August: from the observations I made of it, I am induced to think it not contagious. My own servant boy, the latter end of June, felt the effects of it very severely for about ten days; the remainder of the family, eight in number, (though no precaution was observed to prevent intercourse) did not apparently receive the least inconvenience from it. From which, and several similar instances, I had strong reasons to suppose its contagion atmospheric, and not communicable from person to person. The epidemic shewed itself both pneumonic and of the low typhoid kind; *but the latter* was the most prevalent form of it: the medicines which I made use of in general were the aq. amon. acet. or the *alkal. volatil.* well saturated with lemon juice. As to antimonials, in a few cases which I thought strongly indicated

356 *Mr. Stables's Case of a Wound in the Omentum.*

the use of them, and which, in similar cases, I had seen good effects from, evidently did harm. Opiates, particularly when the disease pertained to the typhoid kind, I found pleasing effects from. The few cases which proved fatal under my care were taken off between the fourth and the seventh day.

I am, &c.

Storsforth, Yorkshire,
Sept. 11, 1803.

J. STABLES.

*Case of a WOUND in the OMENTUM; communicated by
J. STABLES, of Storsforth, Yorkshire.*

J. G. a boy about twelve years old, received a stab from a sharp pointed knife, which penetrated the abdomen, about five inches obliquely above the right ileum. When I got to him, which was about an hour after the accident, I found a large portion of omentum protruding through the wound in his body, whose aperture might be about two inches in breadth. The lad had lost a good deal of blood when I got to him, from an artery in the omentum, which I secured as soon as possible, by needle and ligature, leaving a sufficient length of ligature, when the omentum was returned, to hang out below the orifice of the wound. Not finding the omentum much hurt, after washing from extraneous matter, &c. I returned it with all possible speed into the abdomen, and closed the wound with a suture and empl. adhesiv. &c. Gave him a large dose of opiate immediately, and the next morning opened his bowels with a solution of the sal. cathart. amar. For the first two days he went on very well; but on the third morning, I found him with strong febrile symptoms upon him, and complaining of a good deal of pain in his body. On examination, I found tension and inflammation had taken place over the lower part of the abdomen to a great extent. Having lost a good deal of blood from the wounded artery, and being a delicate boy, and considering the state of his pulse, I did not think it proper to deprive him of any more blood, but confined my treatment to the diligent use of emollient fomentations and poultices over the abdomen, and the frequent use of emollient enemas, &c. and opiates p. r. n. By persisting vigorously in the above antiphlogistic plan of treatment, the inflammation was unexpectedly subdued, and terminated in a state of suppuration. I opened the abscess and let out a large quantity of matter and coagulated blood, and also
two

two large portions of omentum came away along with it at different times; after which nothing unpleasant took place. By the use of common dressings to the wound and the free use of the cortex, and a generous diet, the boy, in the space of about a fortnight, got quite well.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

THE communication in your last number, subscribed E. O. on the salutary efficacy of reduced temperature in rheumatic or gouty affection, is so pointedly in support of the treatment proposed by me, for the prompt and effectual cure of that malady, as to induce me to trouble you to request of the author his real signature, that no possible suspicion may attach to its authenticity from its appearing anonymously.

Such a detail of facts is truly valuable, and should possess every external claim to implicit admission as correct medical evidence.

A knowledge of the intelligent author's name will enable me to incorporate his case with many others, in an appendix to a work on Gout, now preparing by me for speedy publication. In the mean time, the transmission, either to your Journal or to myself, of any farther experience on this interesting subject, cannot fail to extend and improve the object of my inquiry.

The success of the treatment under my own direction continues to exceed my most sanguine expectation, and promises soon to acquire it a very general and confident adoption.

I am, &c.

Taunton, Sept. 8, 1803.

ROBERT KINGLAKE.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

THE anonymous attack upon the small communication of mine, which you honoured with an insertion in the fifty-second number of your Journal, although it is very derogatory

rogatory to my wish to intrude useless controversy upon the public, I look upon myself, in justice to my own feelings, warranted in making a short reply to.—At the time I offered the result of my experiments on taking metallic casts of the ear to public notice, I was very well aware, and I believe observed, that some persons had been successful in performing operations of a similar nature; one of whom, to my knowledge, was so fearful of spreading his information abroad, that, when solicited to communicate the process which had rendered his own experiments fertile, he refused to do it. As I never studied anatomy in Windmill-street, or heard Mr. Cruikshank or Dr. Bailey deliver their lectures on the art of making anatomical preparations, I would by no means presume to say that those gentlemen were not acquainted with a method similar to that which I recommended, and which, as I have before asserted, occurred to me, after making a variety of experiments; I can only observe, that of several gentlemen of great observation, with whom I am intimate, who regularly attended the lectures of the above justly celebrated professors, (one I believe for five years) not one knew any more of injecting the temporal bone, except, that it was requisite it should be calcined in a fire, and have a melted metal poured into its cavities, the nature and composition of which they were totally unacquainted with. To exculpate myself from any imputation of plagiarism, I have only to observe, that nothing in print ever met my eye, nor did any observation in lecture ever meet my ear, inculcating any way similar to what I have recommended: indeed, a very celebrated anatomical lecturer, with whom I was house pupil, was very anxious to become acquainted with a successful method of injecting this organ. These circumstances, with the detestation in which I have held a secret-monger in science, were my sole inducements for laying my plan before the numerous circle of your readers. I have several times used pipe clay as a luting; but from its liability to become detached from the surface of the bone and fly into pieces, as a gentleman, who assisted me in some of my experiments witnessed, I have never been able to succeed with it. As the Paris plaster luting, with the greatest care and attention in previously drying the bone, will sometimes crack, I conceive the crucible enclosure would afford a valuable protection to it. The oxydation of the metal, which always occurs from its exposure to the atmosphere, may be prevented by laquering the cast over with a varnish composed

composed of alchocol and gum mastic, or sandarac, in the way that philosophical instrument-makers preserve the metallic surfaces of their instruments.

*Tavistock-row, Covent-garden,
August 3, 1803.*

I am, &c.

ROBERT LOW.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

IN the Tenth Volume of your Medical and Physical Journal, No. 54, I have observed a few remarks on the method of obtaining metallic casts from the osseous cavities of the human ear.

Your correspondent, under the signature of REMEMBRANCE, expostulates with Mr. Low, on the originality of the invention of such casts. The result is, that he attributes the invention to Mr. Carlisle, surgeon, London.

Perhaps it may not be deemed intruding, to assert for myself, a supposed claim of precedency in preparing casts of the same parts.

In the year 1786, I advertised in York, a short course of anatomical lectures, &c. addressed to gentlemen of the profession, and to others of a philosophical turn. In that course, I shewed several preparations of the ear in wax; and in the lectures upon the organ of hearing, I demonstrated publicly the mechanism of the ear upon them.

Not having then prepared any in a more durable way, I recommended them to be prepared in some metallie form, or in plaster of Paris. But my recommendation I never fulfilled, although such was my intention.

The preparations then exhibited, I now have, some in a less perfect state than others, but sufficiently preserved to assert the fact.

I do not wish to detract in the least from Mr. Carlisle's claim to the invention; it is possible that two persons may have the same suggestions on like occasions.* There is notwithstanding, a certain degree of justice due to the industry

* John Hunter informs us, in his account of the organ of hearing in fishes, that he had prepared that organ by injection with wax and metals, prior to the year 1760. That great man, of course, is evidently entitled to the original idea, at least in respect to the present competitors.

industry of a man, from himself. This justice I assert, and no more.

I had certainly formed these injected preparations some years before they were publicly shewn.* But, as I am well aware of the indecency of petty contentions of this nature, and how much they have, in many instances, disparaged both science and civilization, I shall content myself with the liberty of only noting a fact, which many persons have witnessed, and (allow me to add) not one can disprove.

Never having seen any preparation of the sort in London, where I resided some years, nor having heard of any such, I did mention at the time, my method as a new and convenient one.

Whilst I was making a preparation of the ear, a sudden thought at once suggested to me the idea of injection.

My method was—to cover the temporal bone completely with clay, then to inject that bone; all foramina being previously stopped, which were judged necessary.

In this state the bone was corroded.

The injection failed in some instances in the semicircular canals.

York,
Sept. 14, 1803.

I am, &c.
JAMES ATKINSON.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

I Take the liberty of communicating to you, a few observations on a late publication, entitled, "The Natural History of the human Teeth, by Mr. Joseph Fox.

In page 32, 33, and 34, the author labours to establish a new system of his own, which is the vascularity in the solid substance of the teeth.

Page 32, he says, "There is another set of vessels called absorbents, of the existence of which, in the structure of common bone, I believe there is no doubt, and on account of certain effects produced upon the teeth, we must conclude that they are not destitute of them."

This

* Either in the year 1782 or 1783, I know from circumstances,

This is not conclusive; the author knows that the teeth have not the same advantage in the animal economy that other bones have; their formation, growth, and manner of ossification, differ from all other bones, and therefore must be considered as different in their nature and action. They have neither a cartilaginous nor a membranous base to form on, but on a pulp peculiar to themselves; they are not cellular, but compact in their structure, and cannot be considered as other bones.

In the same page the author says, "In some cases we find the teeth undergo the ulcerative process, and a considerable quantity of the inner part is removed; a circumstance which could not happen, unless there were absorbents entering into the cavities of the teeth, and properly belonging to them."

This circumstance, in my opinion, is occasioned by a different process, and arises from distinct causes, though similar in their action and effect. One is, when the vessels and membrane, which are in the cavities of the roots, become inflamed, suppuration takes place, and the pus so formed cannot be removed from those parts, as they have no absorbents to take it up. Hence it becomes acrid, and destroys the internal texture of the tooth. The same process takes place, but in a greater degree, in young subjects, when the remaining pulp in the fang has not as yet finished the inner part of the tooth, and either from external violence or internal cause becomes disturbed; this process takes place, and a larger portion of pus is formed; and when such teeth are extracted, and a longitudinal section is made, the internal substance so decomposed, is found in the state of a moist black powder.

Further on, in the same page, the author advances as a conclusive argument in proof of the vascularity of the teeth, the following observations.

"Besides these instances, the effects of absorption in the tusks of elephants are often seen; sometimes in sawing these bodies, iron balls, spear heads, &c. are met with, which have been forced into them in attempting to kill these animals. These extraneous substances are always found loose, having a space in which they can be moved; this could never happen, unless there were some action going on, by which part of the bone could be removed; and there is no other mode in which it can be effected, but through the medium of the absorbent vessels."

This I consider as a feeble support of the author's system. But allowing for a moment the existence of absorbents,
why

why does not the arterial system renovate the absorbed portion? As this is not the case, it is evident that the teeth neither possess the one nor the other.

But the small vacuity which allows motion to the iron bodies, in the part they are found, is easily accounted for, without having recourse to absorption.

When the animal was wounded, the ball, by its velocity, as it entered the substance of the tusk, must destroy the cohesive power of that part it comes in contact with; the animal lives for many years afterwards, and ranges about; the air is admitted into the orifice, and moisture also; rust forms on those iron bodies, and thereby their circumference is diminished, and at the same time destroys a portion of the bony lamella; of course, that orifice becomes enlarged, and allows motion to those bodies. Had the animal lived still longer, a larger portion of the bony substance would have been lost, so as to permit those bodies to drop out.

The teeth being deprived of animal vitality in their substance, cannot constitutionally be acted upon; all the alteration the teeth undergo, is from a chemical or a mechanical process, and can only be considered as a defect, and not a disease.

They never assume any of the diseases of the other bones, and the following argument will favor this hypothesis. They have no power to exfoliate any fractured portion, nor renovate their wasted substance. The gout, rheumatism, venereal disease, or the inveterate scurvy, do not alter their structure, nor does any ichor discharge from the diseased part; they form no exostosis, nor are they affected by the spina ventosa; they are only liable to one peculiar defect, which is a caries, and this from a chemical or mechanical process, and not constitutional. They are entirely passive, and have no power of resistance; the same process of decay takes place on the human teeth, supplied by art, or those made of the hippopotamus; this is decisive that the caries is not a constitutional disease.

Page 34, the author says, "A large quantity of blood is distributed to the teeth; this may frequently be seen in performing some operations. In cutting off the crown of a tooth, in which the caries had not spread to the fang, for the purpose of engrafting a new tooth, I have several times seen a discharge of blood from the internal cavity."

But in my practice, I have never seen, nor will the author say he has, that any blood was discharged from the solid

solid surrounding part of the fang, or body of the tooth, nor any sensation perceived, unless the instrument employed, came in contact with the vessels in the cavity. The lateral branches of those vessels are expanded on the internal membrane and there are lost, without entering the bony substance.

In the same page the author says, "Blood carries with it the basis of nutrition, and is sent to those parts only where renovation is necessary. For what other reason then but to impart some principle of nutrition, can so much blood flow into the teeth? If the teeth, after their first formation, received no supply from vessels, or did not require any nourishment, it would have been better if they had been destitute of an internal cavity, and of regular organization."

This will serve as an additional proof of the non vascularity of the teeth, as they never renovate any lost portion; their situation would not allow of that process, and the vessels would be useless; they must be considered in their substance as inorganized bodies.

As an additional proof, the author says, "It is always observed, that as persons advance in life, their teeth lose that whiteness which they possessed in the time of youth. This change in the appearance of the teeth seems to depend upon one which takes place in their cavities, by which the vessels entering them are gradually destroyed, and the supply of blood is proportionally diminished. In the teeth of persons advanced in years, the cavity is very frequently obliterated, in consequence of a deposit of bony matter, which entirely destroys the internal organization. When this happens, the teeth always lose their colour, and become very yellow."

But the alteration of colour which the teeth undergo, arises from a mechanical and chemical process. The friction on the bases of our grinders, occasioned by mastication, and by the friction of our lips, food, and by cleaning, diminishes by degrees the enamel on their surface and sides, and the bony part will appear through the enamel. The adult teeth, which during a long period of life have been acted upon by the juices of the mouth, heat of the body, by the various food, solid and liquid, undergo in addition to the mechanical operation, a chemical process, and by that means lose their primitive whiteness. And that teeth do undergo a discolouration in their substance, by a chemical process, may be seen by those who have accustomed

accustomed themselves to smoking, and particularly chewing of tobacco.

Page 35. The proof that the author further adduces for the internal circulation, is, "When a tooth has been loosened by a blow, and has afterwards fastened in its socket, a great alteration in its colour is the consequence; it gradually loses its whiteness, and acquires a darker hue, because it receives no longer any blood."

But the reason for the discolouration in this case, proceeds from an extravasation from the ruptured vessels, the blood lodges within the cavity, and acts as a foil to the bony part of the tooth.

When the absorption takes place in children's teeth, and they are of course cut off from the main branches of the vessels which supply them, they cannot receive any influx of blood, and still retain their primitive whiteness; but this is on account of their short duration, and the simple food on which children live during that period; no chemical action could affect them materially in so short a time.

The teeth are not liable to any disease but one, which is peculiar to themselves, namely a caries. This never begins internally, except in two cases already mentioned; the decay of the teeth has its origin always externally, which by small degrees destroys the attractive, cohesive power of the component parts, and that process goes on, sometimes very slowly, and at others with great rapidity.

When a tooth becomes carious, we are not apprized by any internal sensitive symptoms, we perceive no pain, as no diseased vital action can go on, and no pain is perceived till the cavity is laid open, and the air, or any heterogeneous particles, are admitted to come in contact with the vessels within.

The author says farther on, that "the teeth suffer like other bones, as they are subject to that species of inflammation, called the ossific; by this means the fangs become increased in size, and exhibit the appearances of exostosis.

But this appearance is a deception, and arises not from an inflammation, but is natural, or a malformation, and that it is so, may be seen by several sound teeth of all classes, which I have in my possession perfect without any defect, and some of very young subjects, recently formed, and which were extracted by myself, for want of room in the circle of the jaw.

Besides what the author calls an exostosis appearance, from the ossific inflammation, the same often appears, and of much larger extent, on the bodies of the grinders, bicuspides,

pides, and I have also a small incisor by me which has the same on the concave part of the body; and surely the enamel of those teeth could not have those appearances from an ossific inflammation.

If the fangs were capable of an increase by the ossific inflammation, they would increase at times to an extraordinary size, and the socket would not be able to contain them; according to its original formation, the tooth would become loose. I have extracted a number of teeth with those appearances, and all of them perfectly firm in their socket.

What has been advanced in the above pages, against the vascularity, will plainly demonstrate that the teeth are not vascular in their solid substance, and of course cannot become constitutionally diseased.

No. 6, Palsgrave Place, Temple,
August 3, 1803.

I am, &c.

SAMUEL MOOR.

CRITICAL ANALYSIS
OF THE
RECENT PUBLICATIONS
ON THE
DIFFERENT BRANCHES OF PHYSIC, SURGERY,
AND MEDICAL PHILOSOPHY.

A Concise History of the Autumnal Fever which prevailed in the Borough of Wilmington, in North America, in the Year 1802. By Dr. JOHN VAUGHAN. 8vo. pp. 32. Wilmington, (Del.)

A manuscript account of this distemper at Wilmington was sent, as we have understood, to Philadelphia for publication. The author was led to believe it would have been inserted entire in a collection of Essays then preparing for the press. But he was much disappointed to find that "a mutilated abstract only was published." After having asked some explanation from his correspondents concerning this manner of treating his performance, and obtaining but little satisfaction, he resolved to do himself justice by printing the whole under his own eye.

Though this is a short, it is an intelligent account of a disease which afflicted the place in which the writer resides, in the fall of 1802,

1802. It is a valuable piece of local medical history, drawn up by a physician who describes what he saw, and who lived through the scenes of calamity and terror which he witnessed. Dr. Vaughan has, however, not confined himself to a mere delineation of symptoms, and a recital of prescriptions; he investigates the origin and progress of the malady, and endeavours to trace it to some external or internal source. He declares that, with all his vigilance, he cannot discover it to have been brought from any place whatever, either by water or by land, by persons or by goods. He examines, with care, the allegations against a young woman, and a schooner, charged with having *imported contagion* into Wilmington, the former from Philadelphia, and the latter from Port Republican; and finds them quite unfounded in reality, no better supported than similar tales usually are. But we shall give Dr. V.'s own words. (p. 15.)

"On a review of the preceding narrative, it appears that the disease took rise in the narrow part of King Street and the adjacent district, progressing, with irregular steps, over the lower parts of the town, and finally encroaching on the district north of Third Street; but was principally confined to the district south-east of Market and Third Streets.

"The more prominent facts relating to the origin of the disease stand thus:—1. Ann Davidson, the only person who was or could be suspected of introducing contagion among us, came from Philadelphia in the beginning of August, to her father's house in King Street, and was reported to be affected with contagious fever on the 15th. She recovered, without suffering any of the more violent symptoms of malignant disease, and removed into the country.

"2. The family in which she resided consisted of ten persons, all of whom remained well until the 7th of September, when her mother had an attack of fever, after a journey of ten miles into the country, performed partly on-foot, and partly in an open cart.

"3. In the mean time, T. Musgrove's son, Ann Hadley, Capt. West's girl, Mr. Cloud, and Hannah Robinson, in the same square; and R. Hagin's son, J. Warner's girl, E. Dale, and others, in different directions, were attacked with malignant fever.

"4. If Ann Davidson's disease were contagious, and the only source of future disease, is it not reasonable to suppose that some one or more of the ten persons, confined in a small house with her, would have been the first affected by the contagion? The reverse was the fact.

"5. The first serious alarm of malignant fever took place in the first week of September. The cases were principally, but not altogether, confined to King Street. The square between Second and Front Streets, whose filthy cellars was a matter of notoriety, and a subject of common complaint, was the more concentrated seat of disease.

"6. The cases specified evince a correspondence of dates, indicating the action of a common cause, and precluding the more slow and successive routine of human contagion, from one diseased person to another.

"7. The

" 7. The disease was suspended by the great change of weather which took place on the 5th of September, and resumed a formidable shape about the 9th, and became general in the southern district against the 25th of the month.

" 8. When the disease became alarming a second time, I personally inquired into the preliminary circumstances of every case that occurred, for the purpose of tracing their origin; and none of them could be reasonably imputed to contagion from the previously sick.

" 9. The disease was evidently subservient to the states of the weather, in declining in frequency and force in warm clear weather, and re-assuming a formidable shape on every change to coolness and moisture of the atmosphere.

" On the most liberal view which can be taken of the rise and progress of the disease, with an unrestrained examination of the facts, as they occurred, I see no reason to suppose the insidious malady was of foreign origin, or specifically contagious. On the contrary, I am firmly impressed with the belief, that it was the endemic fever of Autumn aggravated to a pestilential grade, by local filth, and the tropical state of the season, in conjunction with an epidemical state of atmosphere, which appears to have influenced the diseases of our country since the memorable year 1793. This belief is further predicated on the following facts and inferences:

" 1. An epidemical state of atmosphere, favouring the occurrence of malignant fever, was evinced by the usual premonitory forms of disease.

" The measles were epidemic in the fall of 1801, and declined during the winter, giving place to the scarlet fever. The last winter was unusually mild, which gave birth to the swellings of the glands, croup, and the influenza, in April and May, 1802. June was, as usual, comparatively healthy, but chequered with some cases of cutaneous disease. In July the putrid sore throat occasioned considerable alarm; and, during the latter part of July and early part of August, the eruptive state of fever was extremely afflicting to children, and seemed to supercede the ordinary appearance of cholera infantum. In some cases general ulceration of the glands of the neck and axillæ were so obstinate as to require a complete course of alterative remedies.

" 2. The season became tropical in the middle of August. The weather, from being uncommonly cool, suddenly became extremely hot, varying from 80 to 90 degrees, with frequent gusts of rain and lightening. In the evenings of the 29th, 30th, and 31st, there were excessively violent thunder-storms from the westward, with torrents of rain. It was remarkable, during the autumn, that all our sudden and violent rains came from the westward, and commonly extended but a few miles along the Delaware. In misty weather the wind was mostly north-east. But the winds were unusually variable, not unfrequently traversing the compass in
twenty-

twenty-four hours. The changes of the weather were proportionally sudden.

" 3. Myriads of mosquitoes infested the lower parts of the town from July until frost, having gradually diffused themselves over the borough in September. The eldest of our inhabitants do not recollect this insect being troublesome here in any previous season; while the unanimous report of persons from the fenny counties of Kent and Sussex, the annual haunt of these winged pests, was, that they were unusually free from them.

" 4. The sources of noxious effluvia in the southern and flat part of the town were much increased by a regulation, but partially executed, for bringing the streets to an uniform descent from the summit of the hill. A number of cellars were filled with water; a new dock formed; and the gutters lowered in some places and raised in others, forming numerous depositories of filth. These circumstances, added to the nuisance in King Street, rendered the air of that quarter offensive to the smell in the day-time, and doubly so at night. After the 15th of September the air had a taint resembling bilge-water, especially after a light shower of rain and in the night, and more sensibly recognized by persons coming immediately from a higher region.

" 5. The fogs which collected in the evenings were suspended on the flats during the nights, gradually becoming more compact in the mornings, and mostly passed off in a dense cloud towards the Delaware, between seven and ten o'clock. This semi-circuit of the fogs, from Market Street southward and eastward, was the seat of concentrated disease. Those fogs were condensed miasmata of fever in a familiar garb.

" The seat of disease was so well defined until the 15th of October, that the inhabitants north of Third Street felt but little apprehension; and, as the fogs became diffused, a few scattering cases of disease appeared, and removal was the only mean of safety.

" 6. The poisonous matter exciting disease was evidently a constituent part of the fogs. Many persons visited the infected district in clear weather, and in the day-time, without injury, and several of the same persons contracted disease by a single exposure in the night-time, after the fog had collected. It also is remarkable, that the disease generally attacked in the night-time.

" 7. The non-contagious nature of the disease was repeatedly attested by persons sickening after removal from the lower to the higher parts of the town, and being nursed with every attention, and dying without communicating the malady to their attendants. Also, two sailors had the disease, on board of different vessels, at separate wharfs, without affecting their companions.

" It is not denied that the more malignant cases of disease may be incidentally contagious, or rather re-infectious, under circumstances favouring a new chemical combination of the venomous offsprings of filth and putrefaction.

" 8. A noxious state of atmosphere was manifested by the lingering

ering state of convalescents who remained in the contaminated region, while those who removed into the country were speedily restored to health.

" 9. The indigenous nature of the disease was evidently characterised by the ultimate sameness of every form and grade of fever. After the middle of September, the subordinate forms and grades of fever, not arrested within forty-eight or seventy-two hours, invariably passed on to the malignant grade of disease. No matter how slight the attack, nor who the subject, the livery of pestilence sooner or later appeared: and valetudinarians, cases of pulmonary consumption excepted, suffered in the common fatality.

" Lastly. The rise, progress, and confined state of the disease; the manner in which the fluctuating malady corresponded with the varying states of the weather; the non-communication of disease to the attendants on the sick, when out of the original sphere of infection; and the sporadic appearance of disease in other parts, after the more extended fog on the 15th of October; with the final termination of the progress of infection by a single frost—are, in my opinion, evidences striking as the nature of the case will possibly admit, that the multiform disease which afflicted us was not of foreign origin, not specifically contagious.

" I believe that a proper attention to the internal condition of this borough, and preserving the adjacent marshes in their present state of cultivation and improvement, by numerous drains, would be the surest means, under Providence, of securing us against a repetition of the calamity."

We think Dr. V. is entitled to much credit for the impartiality and intrepidity he has shown, and we hope his conduct will be an example to other gentlemen in the profession to observe, and relate what they shall see, with equal fidelity. We shall thus, by degrees, correct a considerable part of the errors which overhang the history of febrile distempers.

Practical Observations on Surgery, illustrated with Cases, by WILLIAM HEY, Esq. F. R. S. Member of the Royal College of Surgeons, in London; Honorary Member of the Royal Medical Society of Edinburgh, and of the Literary and Philosophical Society of Manchester; and Senior Surgeon of the General Infirmary at Leeds. London, 1803. pp. 537, 8vo.

THESE valuable observations are of a kind the best calculated of all others to render a real and essential service to the art which they illustrate. They contain some of the most important remarks on various parts of surgery, made by a practitioner of great and deserved eminence, who for many years has filled a leading station in his profession. Little scope is here given to conjecture, nor is any observation introduced, which has not the basis of personal experience, and both the character of the author and the internal

evidence which appears on the face of the work, give it the stamp of perfect authenticity.

The contents of this publication are a number of detached Essays on miscellaneous subjects of Surgery, given without arrangement or connexion with each other, and extracted almost entirely (as the author informs us in the preface) from his case-book, which he has been in the habit of keeping ever since his commencement of practice; a rich repository of excellent surgery to judge by the example before us! We shall take some notice of each Essay.

The first contains remarks on fractures of the skull. Mr. H. begins by objecting to a point of practice laid down by the celebrated Pott, in his excellent Treatise on Injuries of the Head, which is, that previous to the operation of trepanning, a portion of the scalp large enough to allow of the examination of the fracture, and the free employment of the trephine, should be actually removed by the knife. To this Mr. Hey objects with propriety, as unnecessary and injurious, inasmuch as all the advantage to be derived from a free examination of parts, may be gained by a large crucial incision into the scalp, and the natural integuments still remain as a covering to the bone and dura mater, after the operation. Indeed this method is so consonant to general experience, that we believe it is now almost universally adopted, and we may with reason be surprized at this maxim of one of our most excellent surgical writers, since, in other parts of the same essay, he is very explicit in directions for saving the scalp, when injured, if there is the least chance of its being brought to re-unite to the skull. A very important improvement in the instrument for removing the necessary portion of the cranium, is next given by our author. It is to substitute a flat, straight, or flat convex saw to the circular instrument in common use. In truth, it must be acknowledged to shew a great want of contrivance to employ only a single method of working on the cranium to be adapted to all accidents of this bone; and, considering this operation in a workman-like manner, we think that much benefit may be derived from the proposed improvement; we shall give the author's words:

“ When a broken fragment of bone is driven beneath the sound contiguous part of the cranium, it frequently happens, that the extraction cannot be executed without removing some of the unbroken part, under which the fragment is depressed. This might generally be effected with very little loss of sound bone, if a narrow portion of that which lies over the broken fragment could be removed. But such a portion cannot be removed by the trephine. This instrument can only saw out a circular piece. And as, in executing this, the central pin of the saw must be placed upon the uninjured bone, it is evident, that a portion of the sound bone, greater than half the area of the trephine, must be removed at every operation. When the broken and depressed fragment is large, a repeated application of the trephine is often necessary, and a great destruction of sound bone must be the consequence.

“ When

"When the injury consists merely of a fissure with depression, a small enlargement of the fissure would enable the surgeon to introduce the point of the elevator, so as to raise the depressed bone. But a small enlargement of the fissure cannot be made with the trephine. When it is necessary to apply the elevator to different parts of the depressed bone, a great deal of the sound cranium must be removed, where a very narrow aperture would have been sufficient.

"The same reasoning will apply to the case of openings made for the purpose of giving a discharge to extravasated blood, or matter.

"If a saw could be contrived, which might be worked with safety in a straight, or gently curvilinear direction, it would be a great acquisition to the practical surgeon. Such a saw I can now with confidence recommend, after a trial of twenty years, during which time I have rarely used the trephine in fractures of the skull."

Some very satisfactory cases are added, to shew the superior advantage of this instrument to the circular saw, which applies more peculiarly to those instances of fracture with great depression, where the injured bone is not loose enough to be removed by the forceps, and must therefore be got at by means of perforating the sound contiguous part of the skull. Two cases are also given, in which this saw was used with advantage in a necrosis of the tibia to separate the diseased portions of bone.

The cataract of the eye is the subject of the next Essay, on which the author has evidently bestowed much attention. The leading object is to recommend the operation of couching in preference to extraction, though indeed the author's experience hardly allows him to draw the *comparison* between the two methods, as it has been almost entirely confined to the couching needle. The instrument employed by Mr. H. differs in some material points from the needle commonly in use, being much shorter, smaller, and not spear pointed, but more resembling a common awl. The following is the exact description of it: "The length of the needle is somewhat less than an inch. It would be sufficiently long if it did not exceed seven-eighths of an inch. It is round, except near the point, where it is made flat by grinding two opposite sides. The flat part is ground gradually thinner to the extremity of the needle, which is semicircular, and ought to be made as sharp as a lancet. The flat part extends in length about an eighth of an inch, and its sides are parallel. From the place where the needle ceases to be flat, its diameter gradually increases towards the handle. The flat part is one-fortieth of an inch in diameter. The part which is nearest the handle is one-twentieth of an inch. The handle, which is three inches and a half in length, is made of light wood stained black. It is octagonal, and has a little ivory inlaid in the two sides, which correspond with the edges of the needle."

The advantages which the author describes as resulting from this

form of the instrument, are, first, that its length is so nearly adapted to the dimensions of the natural eye, that the surgeon can better judge of the direction and extent of the wound when he is unable to see the point. Secondly, that as the needle becomes gradually thicker towards the handle, it will remain fixed to that point of the sclerotic to which it has pushed it, and will give the eye more steadiness during the depression, and will also prevent the escape of any part of the vitreous humour. Thirdly, that as it has no projecting edges, like the spear-shaped needle, it will be less liable to wound the iris or ciliary processes; and fourthly, that having no projecting point, it will not readily injure the edges of the pupil during the motion of depression, which the common needle is apt to do.

The description of the operation with this instrument is clearly expressed, and very precise. It does not differ materially from that of other operators. Mr. H. is in the constant habit of couching the right eye with the left hand, and to acquire this ambidexterity, he gives the useful advice to the surgeon to accustom himself to bleed with the left hand.

The testimony of our author to the excellence of this operation is indeed strong and irrefragable, and certainly ought to have due weight against the opposite testimony of some very eminent oculists who uniformly prefer extraction. The peculiar characteristic of Mr. Hey's practice in this operation, (besides the form of the instrument) is that of caution in not attempting too much at first, and he does not hesitate to leave a great deal for future operations, rather than endanger the safety of the organ by violent inflammation. Thus we find, in the cases which are subjoined, the operation repeated as often as twelve times, and gaining ground by slow degrees in removing the opacity, attended finally with perfect success. It is owing to this caution also, that Mr. H. has been enabled to operate successfully even in partial adhesions of the iris, and in other cases of difficulty, which in general have been thought to forbid the use of the needle. Baron Wenzel, in his valuable treatise on this disease, mentions as an objection to couching, that "the pain produced by the puncture of the retina and the ciliary nerves, is often followed by a suppuration of the eye." Our author's answer to this objection is worthy of remark.

"I have now practised the operation of couching pretty frequently for thirty-three years, though I have not kept a list of all the patients upon whom I have operated. I have also seen the operation performed frequently by my colleagues at the Leeds Infirmary; but never yet saw an instance of a suppuration of the eye, in any patient who has come under my care in private practice, nor in any case that has occurred at our public hospital."

Now, if in the course of a practice so extensive as Mr. Hey's appears to have been, and with very frequent repetitions of the operation on the same subject, no such mischief as Baron Wenzel threatens

threatens has ever occurred, we must allow this hazard to be much over-rated.

Little is added to the pathology of the disease in this Essay, except to shew from actual experience the fallacy of several of the diagnostics of hard and soft cataract, curable and incurable, which several authors have attempted to establish.

In the third Essay the disease of strangulated hernia is considered. The first treatment of this disease does not much differ from that in common practice. Bleeding is advised only in very full plethoric habits, purgative medicines always to be avoided, opiates used very freely, and especially tobacco clysters. The experience of sound surgery will, we apprehend, agree with our author in advising an early operation. We shall give his words:

"When I first entered upon the profession of surgery, in the year 1759, the operation for the strangulated hernia had not been performed by any of the surgeons in Leeds. My seniors in the profession were very kind in affording me their assistance, or calling me into consultation when such cases occurred; but we considered the operation as the last resource, and as improper until the danger appeared imminent. By this dilatory mode of practice I lost three patients in five upon whom the operation was performed. Having more experience of the urgency of the disease, I made it my custom, when called to a patient who had laboured two or three days under the disease, to wait only about two hours, that I might try the effect of bleeding (if this evacuation was not forbidden by some peculiar circumstances of the case) and the tobacco clyster. In this mode of practice I lost about two patients in nine upon whom I operated. This comparison is drawn from cases nearly similar, leaving out of the account those cases in which a gangrene of the intestine had taken place.

"I have now, at the time of writing this, performed the operation thirty-five times; and have often had occasion to lament that I had performed it too late, but never that I had performed it too soon. There are some cases so urgent, that it is not adviseable to lose any time in the trial of means to produce a reduction. The delay of a few hours may cut off all hope of success, when a speedy operation might have saved the life of the patient."

The part which causes the strangulation in femoral hernia, Mr. Hey asserts, is not Poupart's ligament, but another ligament, to which he gives the name of *femoral*, running nearly in the same direction as Poupart's, but rather in an ascending direction, and situated below and behind it. A plate of this ligament is given. Here the author also refers to the treatise of Gimbernat, who has described these parts with great accuracy.

Many cases are added to this very important chapter, and the author, in particular, insists upon the care to be taken in disposing of the omentum in the operation for hernia, and the hazard

incurred by hæmorrhage of this substance, when returned into the abdomen with the vessels not properly secured.

An account of two uncommon varieties of hernia, one of the congenital scrotal kind, and the other of the umbilical, conclude this subject. (To be continued.)

Experiments and Observations on the Cortex Salicis Latifoliae, or Broad-leaved Willow Bark; illustrated by a coloured Plate, interspersed with general Observations and Remarks on the different Species of the Cinchona, &c. General History and progressive Introduction of the Salix Latifolia; with a Variety of Experiments, tending to elucidate its Properties. Illustrated by Cases demonstrating its superior Efficacy above the Cinchona in various Diseases, more particularly that Branch of the Healing Art, termed Medical Surgery; by G. WILKINSON, Member of the College of Surgeons, London, &c. Newcastle upon Tyne. Svo. pp. 118. 1803.

THE virtues of the various species of willow bark have long been ascertained and fully established, but the salix has not hitherto been formally received into our materia medica. In 1792, Mr. James, of Hoddesdon, in Hertfordshire, published a pamphlet recommending the salix latifolia (caprea) in strong terms, as a substitute to the cinchona; and in 1798, Mr. White, apothecary to the Bath Infirmary, added a valuable testimony to the efficacy of this bark. The author of the treatise before us has done the same, and has attempted to shew, by chemical experiments, the ground of its excellency.

The sensible properties of this bark are, in smell, scarcely perceptible; in taste, considerable astringency with a slight degree of bitterness, which last however goes off almost entirely on drying. It is in the astringency alone that the medicinal virtue of this bark seems to reside, and the whole object of the author's experiments is directed to this point. Indeed, his whimsical motto from the grave-digger's scene in Hamlet, is an indication to the reader what to expect. "A tanner will last you nine years," "Why he more than another?" "Why, sir, his hide is so tanned with his trade, that he will keep out water a great while."

The author gives a number of comparative experiments on the quantity of tannin contained in the following vegetables; the tormentil root, oak, cinchona of each species, angustura, and the willow bark in question. He determines their antiseptic property by their effect on animal flesh in retarding putrefaction; their tanning power, by immersing pieces of skin in the different solutions; and the actual quantity of tannin by the very accurate method of precipitation with animal jelly. In all these he finds the power of the salix to stand very high, only inferior to the tormentil. In some instances we think the author has attempted too general inferences from the result of his experiments, which, however, it is but justice to observe, appear to be conducted with propriety and great impartiality.

That

That the willow bark, properly administered, will cure intermittents, will have a salutary effect in supporting the strength of the constitution under copious suppurations and other debilitating circumstances, is what we do not in the least doubt; but the question more particularly agitated by the author is, the *preference* which he claims for it over the cinchona. On perusing the cases which he gives, some will be found quite unsatisfactory, from the irregularity of the patients; and in those in which the willow bark was of obvious utility, we must confess, that it appears to us that the cinchona, *if genuine and good*, would have produced the same benefit in much less time, provided the patient would have taken it regularly. We must therefore acknowledge the fairness of his cases, at the expense of the inferences which he would deduce from them. As the salix possesses scarcely any sensible *bitterness*, the author evidently is led to undervalue the efficacy of this principle, and yet with some little inconsistency, but (we believe) with practical propriety, he occasionally recommends the addition of quassia to the willow bark, as increasing its virtues, and making it strongly resemble the cinchona.

The great price of this excellent foreign drug, and the extensive and shameful adulterations to which it is often liable, render it highly desirable to increase the number of its substitutes, and to ransack all our fields and woods for indigenous vegetables which may be possessed of similar properties. Perhaps though no single vegetable may unite in itself the powers of the cinchona, a judicious combination may be found to answer the purpose, and the salix certainly deserves a place in our materia medica. Mr. W. exhibits it entirely in the form of decoction, for which the following is his formula.

“ R. Corticis salicis latifoliae siccati 3jß in pulverem crassum redige, et macera in aquae fontanae libris duabus per horas sex; deinde coque leni igne per quartam vel tertiam partem hora, et cola pro usu. Capiat æger cochlearia duo vel tria larga decocti ter vel quater de die; sed febre intermitente, dare oportet unciam unam aut duas secundâ vel tertiâ quaque horâ absente paroxysmo.”

Practical Observations on the Management of Ruptures, by WILLIAM HALL TIMBRELL, Esq. to which are prefixed Two recommendatory Letters, by WILLIAM BLAIR, A. M. Member of the College of Surgeons, &c. &c. Octavo, pp. 94. London, 1803.

THIS little work is published under the sanction of Mr. Blair, and the approbation of the Society for the Encouragement of Arts, Manufactures, and Commerce, which has honoured the author with their gold medal.

The following directions are given for reducing a rupture:

“ In cases of strangulated intestine, or of stricture, the patient should lay on the side of his body *contrary* to that on which the rupture is; by which position, there must be a *lateral* recession of

376 *Report of Surgical Cases in the Finsbury Dispensary.*

pressure from the aperture, which will give ease when the intestine or omentum cannot from inflammation *return* through the aperture.

" Another position, in cases of difficulty, is to lay upon a chair with its back on the floor, the patient's heels to be placed against the wall, and his head on the ground.

" Let the breath be held in, before an attempt is made to reduce the bowel; for the acts of breathing and speaking, contribute to force down a rupture.

" Cover the fingers with your shirt or handkerchief, by which means the rupture is gathered up with more certainty and dispatch.

" To render the practice easy to every one, I use the expression *knead* the bowel upward through the aperture, as dough is *kneaded*;* but during a state of inflammation, press upon the intestines very gently, if at all.

" By comparing the ruptured side of the body with the sound side, it may be seen and felt when the rupture is reduced.

" Method makes every thing easy, therefore observe the following directions in the *order* in which they are placed:

" 1. Lay down. The head is to be lowered, and the knees to be drawn up, or the heels to be raised.

" 2. Hold in the breath.

" 3. Be perfectly silent.

" 4. Cover your fingers with the shirt or handkerchief.

" 5. *Knead* up the rupture.

" 6. Put on the cushion and truss.

" 7. Draw the thigh strap under your thigh *very tight*, and buckle it to the pad."

The author lays the greatest stress on the immobility of the cushion, which he recommends to be made of callico.

MONTHLY REPORTS.

Cases admitted under the Care of the Surgeon of the Finsbury Dispensary, St. John's Square, Clerkenwell, from August 10, to September 10, 1803.

Phlegmone	- - - - 1	Fractura Ulnæ	- - - - 1
Abscessus Artuum	- - - - 3	Vulnus	- - - - 1
Maxilla	- - - - 1	Luxatio Humeri	- - - - 1
Mastodynia	- - - - 4	Lues	- - - - 3
Hernia Humoralis	- - - - 2	Gonorrhœa	- - - - 2
Ulcera Cruris	- - - - 11	Scrophula	- - - - 3
Leucoma	- - - - 1	Ascites	- - - - 2
Contusiones	- - - - 9	Hydathus Genu	- - - - 2
		Sarcocele	

* In the act of kneading, the fingers are to be extended and drawn forwards, gently and shortly.

Sarcocele	- - - - -	2	Psora	- - - - -	1
Hernia	- - - - -	5	Eruptio Chronica	- - - - -	1
Prolapsus Ani	- - - - -	1			—
Arthrodynia	- - - - -	3	Total	+	60
Tinea	- - - - -	3			—

A few months since, some observations were made by the Reporter respecting applications of a cold nature to local inflammations of a specific kind, as Gout and Rheumatism, which are generally considered as diseases whose existence should be rather encouraged than repelled, and which are thus very commonly protracted to a very tedious length.

We are much indebted to a physician of great discrimination and ability (Dr. Kinglake) for the remarks and relation of facts on this subject, which have recently been presented to the public by the medium of the Medical and Physical Journal, and whose assiduity in the collection of well substantiated cases, in which similar treatment has been pursued with success, will in all probability add much to our knowledge with respect to the nature of these diseases, and to our capability in the removal or mitigation of them.

Several cases have come within my knowledge, since those which have already been alluded to, in which the frigorific process has been attended with manifest advantage in recent cases of Gout and Rheumatism, or in such cases as are evidently accompanied with vigorous action, and inflammation of the sthenic character; in no one of the cases in which this treatment has been pursued, has any ill consequences succeeded to my knowledge; yet these certainly cannot be considered as sufficient evidence to prove its validity in all cases, but sufficient to warrant a continuance of the experiment in all cases of the above description.

A surgeon of considerable practice in this metropolis, a man of real professional ability, who has been a martyr to the pain and confinement of the Gout, is continually in the habit of arresting its progress when he has an opportunity of performing it sufficiently early, by a practice of this kind. When he perceives the approach of his enemy, he goes to the Thames, and making bare his legs and feet, immerses them in the river from the side of a boat, in which he is rowed about for a considerable time, which seldom fails of producing the effect required.

Several cases which have come to my knowledge, in which the feet have in the commencement of the attack of Gout

378 *Account of Diseases in an Eastern District of London.*

Gout been accidentally exposed to cold and moisture, with great advantage, further tend to justify the belief that such treatment will in a great variety of cases prove beneficial; though from the contrary nature of its operation to the plan which has for the most part been hitherto adopted, it is probable that much time must elapse before the remedy can become general.

Jermyn Street, St. James's.

J. RICARDS.

*Account of Diseases in an Eastern District of London,
from August 20, to September 20, 1803.*

ACUTE DISEASES.			
Typhus - - - - -	6	Leucorrhœa - - - - -	7
Scarlatina - - - - -	9	Amenorrhœa - - - - -	12
Cholera - - - - -	7	Menorrhagia - - - - -	5
Dysentery - - - - -	10	Prolapsus Vaginæ - - - - -	2
Rheumatismus Acutus - - - - -	4	Paralysis - - - - -	3
		Vertigo - - - - -	4
CHRONIC DISEASES.		Hypochondriasis - - - - -	4
Tussis - - - - -	10	Rheumatismus Chronicus	14
Dyspnœa - - - - -	15	PUERPERAL DISEASES.	
Tussis cum Dyspnœa - - - - -	7	Enteritis - - - - -	3
Hæmoptysis - - - - -	3	Dolores Post Partum - - - - -	7
Diarrhœa - - - - -	18	Œdema Puerperalis - - - - -	1
Enterodynia - - - - -	6	INFANTILE DISEASES.	
Ascites - - - - -	4	Diarrhœa - - - - -	15
Anasarca - - - - -	8	Hydrocephalus Internus - - - - -	1
Hæmorrhoids - - - - -	6	Aphthæ - - - - -	7
Prolapsus Ani - - - - -	4		

The diseases which are most frequently observed in the autumnal months now begin to shew themselves. Disorders of the bowels are becoming very frequent, and, in some instances, prove very tedious and obstinate. Diarrhœa, Dysentery, and Cholera are very general. The first of these, when restrained within certain limits, hardly deserves the name of disease, in any other sense than every effort of nature to throw off what is burdensome and offensive, when too violent or irregular, may be termed morbid. If a diarrhœa be not accompanied with pain, or if the pain be relieved by the intestinal discharge; if the appetite be not impaired, nor the strength of the patient too much reduced, this evacuation may be suffered to continue at least for some time, without any material injury. If however by the long continuance, or the excessive degree of it, the strength is much reduced; if the uneasiness and pain
of

of the bowels, which at first preceded the discharge, have ceased, and the evacuation seems to be continued either from weakness or habit, small doses of the pulv. rhei combined with the pulv. é cret comp. may be taken with advantage; but the too early application of astringent remedies is often attended with inconvenience, and sometimes with danger.

MEDICAL AND PHYSICAL INTELLIGENCE.

[FOREIGN AND DOMESTIC.]

Extract of a letter from the Baron Delaferronnays to the Editors, dated Weymouth Street, Sept. 12, 1803.

“ A few weeks ago the 51st Number of the Medical Journal came into my hands; and in your Address to Correspondents, I observed that you had received several accounts of the success of the Iceland Lichen in pectoral complaints. In this article it is observed, that if the remedy were more completely employed, and, above all, that if practitioners and their patients had more perseverance in the use of it, instances of its success would be far more frequent. Permit me to support this opinion by relating the case of Madam the Baroness Delaferronnays, my lady, who owes her present health entirely to the steady use of this lichen both as medicine and aliment.

“ This lady had laboured under a humid asthma for several years, which proved extremely distressing to her, as she was often nearly suffocated; and whenever she attempted to walk more than 200 paces, the stricture across the chest obliged her to rest. A cough, not less violent than frequent, tormented her continually, which was attended with an abundant expectoration, streaked with blood, and of a purulent appearance. The fever, loss of appetite, and even of sleep, alarmed me in the greatest degree. Hearing of Dr. Regnault's success in treating diseases of the chest, I consulted him about eleven months ago; he recommended the Baroness to take the decoction of the lichen with the concentrated syrup, and to breakfast every morning on the Iceland chocolate,* with a suitable diet. In about fifteen days she appeared to me evidently better; the fever had abated, and the expectoration seemed of a better

* These preparations are explained in Dr. R's book, and may be had at Mr. Huguenin's, No. 33, Haymarket. Ed.

ter colour; her appetite and sleep returned; and by the uninterrupted use of the lichen and its chocolate jointly, under the care of Dr. R. the shortness of breath on walking, and the suffocating attacks which had so long harrassed the Baroness, entirely left her; and it is now four months since she left off the use of a remedy, for which she had no farther occasion. I judged it right, as well for the cause of humanity as that of truth, to send you this account, being persuaded that these are the objects of your Journal.

"CASE II. Mrs. Swinburn, No. 12, Great Québec Street, has been, since last winter, subject to harrassing defluxions of the head. About the month of May, after a severe affliction, she was seized with a violent spasmodic cough, followed by an inflammation of the lungs. All the usual means were employed, such as venesection, blisters, &c. but the fever, which had been acutely inflammatory, assumed the character of a low fever, attended with a continual cough, expectoration of a purulent appearance, and extreme weakness. This patient, resigned to death, had settled her spiritual and temporal affairs, when, in the month of July, she commenced the use of the Lichen Islandicus. Its effect has been astonishing; the cough diminished, the expectoration became easy, her strength returned, the fever disappeared, and at the end of a month Mrs. S. was perfectly cured. She continued the use of the lichen, however, some days longer, and at the end of August she left it off, finding her health better than it had been for many months before."

Extract of a Letter from our Correspondent at Paris, dated August, 1803.

"PARIS has for some days rung with relations of the wonderful exploits of a Spaniard in this city, who is endowed with qualities by which he resists the action of very high degrees of heat, as well as the influence of the strong chemical re-agents. Many histories of the trials to which he has been submitted before a commission of the Institute and Medical School, have appeared in the public papers; but the public wait with impatience for the report to be made in the name of the commission by Professor PINEL.

"Until this report, which will contain a variety of details on the mode of conducting the experiments, be made known, your Correspondent sends some of the more remarkable circumstances, of which he has been himself a witness.

"The subject of these trials is a young man, a native of Toledo in Spain; twenty-three years of age, and free of any apparent peculiarities which can announce any thing remarkable in the organization of the skin; after examination, one would be rather disposed to conclude a peculiar softness than that any hardness or thickness of the cuticle existed, either naturally or from mechanical causes. Nor was there any circumstance to indicate that the person had been previously rubbed with any matter capable of resisting the operation of the agents with which he was brought in contact.

"This

" This man bathed for the space of six minutes, and without any injury either to his sensibility or the surface of the skin, his legs in oil, heated at 97 deg. of Reaumur, ($250\frac{1}{2}$ deg. of Fahrenheit*); and with the same oil, at the same degree of heat, he washed his face and superior extremities. He held for the same space of time, and with as little inconvenience, his legs in a solution of muriate of soda, heated to 102 of the same scale, ($261\frac{1}{2}$ Fahr.) He stood on and rubbed the soles of his feet with a bar of iron heated to a white heat; in this state he held the iron in his hands, and rubbed the surface of his tongue.

" He gargled his mouth with concentrated sulphuric and nitric acids, without the smallest injury or discolouration; the nitrous acid changed the cuticle to a yellow colour; with the acids in this state, he rubbed his hands and arms. All these experiments were continued long enough to prove their inefficiency to produce any impression. It is said, on unquestionable authority, that he remained a considerable time in an oven heated to 65 or 70 degrees ($178-189$ Fahr.) and from which he was with difficulty induced to retire, so comfortable did he feel that high temperature.

" It may be proper to remark, that this man seems totally uninfluenced by any motive to mislead, and, it is said, he has refused flattering offers from some religious sectaries of turning to emolument his singular qualities; yet, on the whole, it seems to be the opinion of most philosophical men, that this person must possess some matter which counteracts the operation of these agents. To suppose that Nature has organized him differently, would be unphilosophic; by habit he might have blunted his sensibility against those impressions that create pain under ordinary circumstances; but how to explain the power by which he resists the action of those agents which are known to have the strongest affinity for animal matter, is a circumstance difficult to comprehend. It has not failed however to excite the wonder of the ignorant, and the inquiry of the learned at Paris.

Observations on the Barbary Coast; communicated to Dr. MITCHILL, by Dr. GEORGE DAVIS, Surgeon to the American Fleet.

I have been in Tangiers, but can offer few remarks on the place. The plague prevailed in this town, a few years since, with much mortality. If it proves epidemic in Tangiers, with all the advantages of its local situation, its commercial intercourse with the adjacent countries, as also its being the residence of all consuls, who ought to be supposed to have some influence with the police of the country, particularly as it relates to the general health; the other dominions

* As the method of converting the degrees on Reaumur's thermometer to those on Fahrenheit is not generally known, we insert the rule: multiply the number on Reaumur by $2\frac{1}{4}$, and add 32 to the product. The heat of boiling water is 212° of Fahrenheit.

dominions of the Emperor of Morocco will always be harrassed, in a greater or less degree, by this child of filth and nastiness.

The lower class, who are indeed three-fourths of the inhabitants, contrary to the injunctions of Mahomet, neglect, in a most beastly and filthy manner, their persons, as it respects cleanliness; a woollen waistcoat, with a haick, or a coarse woollen frock belted round, being their only dress, and which, I am told, is often worn without shifting, until the ravages of time save them the trouble of removing it. The mode of building their houses, which are low, without any windows, and communicating one to the other from the roof, must have its influence.

The streets are narrow throughout all Barbary, and the receptacle of every species of filth and nastiness. The extreme poverty and indolence of the people, together with the miserable diet on which they subsist, must prove powerful agents in the production of this disease, which, once set in action, is greatly assisted by what they conceive the only means of arresting its progress.

Dr. TROTTER, in a letter to the Editors, dated Newcastle upon Tyne, August 14, 1803, says:

"About ten years ago, I had it in contemplation to comment on the subject of my Inaugural Dissertation;* and was forming the plan of an Essay on Drunkenness, and its Effects on the Human Body, when I was ordered to sea, at the beginning of the late war. To this task I was recommended by my friend and preceptor Dr. Cullen, and the present Professor of the Practice of Medicine in Edinburgh. Studies of a different nature having from that time engrossed my attention, it was not till now that I was able to resume my inquiry.

To such of your Readers, who have had any considerable share of the practical part of our art, or have profited by an extensive intercourse with mankind, this subject will appear of great importance. It is certainly one, as connected with the duties of our profession, that requires more address and knowledge of human nature, than almost any other. The phenomena attendant on ebriety, draw forth some of the most singular and interesting propensities that are to be met with in the character of rational beings. The life of a fellow creature often depends on the treatment of the drunken paroxysm; frequent intoxication paves the way to a multitude of diseases; it exhibits in glowing colours the strong attachments of habit, and how difficult to be overcome; in short, independent of the moral evils which it occasions, no human infirmity stands more in need of medical investigation.

Should

* *Dissertatio Medica
Inauguralis
Quedam, De Ebrietate
Ejusque Effectibus
In Corpus Humanum
Complectens.*

Should; therefore, any of your Readers be disposed to favour me with any Facts, Cases, Histories, Cures, or Dissections that relate to my subject, I shall most gratefully receive them, and most faithfully acknowledge their communications.

Mr. CARPUE, in the presence of Dr. Pearson, and several other medical gentlemen, has repeated the Galvanic experiments on the body of Michael Carney, the criminal lately executed in London for murder. The principal object was to ascertain, whether Galvanism, applied immediately to the nerves, could excite action in internal parts, and particularly those subservient to respiration. With this view, an opening was first made into the wind-pipe, and about three pints of oxygen gas thrown into the lungs; the phrenic nerve was then exposed to conductors applied to it, and the inside of the rectum, the lungs being at the same time occasionally inflated; yet no action could be excited in the diaphragm;—the nerves do not seem to be conductors of the Galvanic fluid. Conductors applied to the inside of the rectum and nostrils, excited very considerable contractions in the right auricle more than three hours after death; the ventricles were, as in Prof. Aldini's experiments, perfectly motionless; the distortions of the muscles of the countenance, &c. were nearly the same as on the former occasion. The experiments were conducted with perfect accuracy and science, but no new fact appears to be ascertained.

The ACADEMY of GOTTINGEN, which, say the foreign journals, has always distinguished itself by the importance and wisdom of the questions which it holds out to candidates, had proposed one relative to that terrible and fatal epidemic malady, called the Yellow Fever. Dr. Guttfeldt, who obtained the accessit from the Academy, has recently translated his Latin Memoir on this subject into German. He seems to think that the malady should not take its denomination from one of its accidental symptoms; it is, says he, the typhus of the tropical regions, the first notice of which we owe to Father Labat, who treated of it under the name of the *Siam Fever*, and was himself infected with it at two different periods, in the years 1694 and 1697. No further notice has been taken of it since; but during the last ten or twelve years we are unhappily but too well acquainted with its effects, though not with the real nature of the disorder itself, from the want of enlightened physicians and accurate observers. In the last century this epidemic ravaged America more than twenty times; the yellow colour is not a symptom inseparable from the malady; it sometimes does not appear even at the point of death; a blackish hue has been found in some individuals. According to the author, the cause of this malady is a suppressed irritation, an asthenia, and the remedies proper to be applied ought to be antiasthenic. Hitherto, he observes, very few patients have recovered from it. M. Guttfeldt thinks that the decrease of bodily strength has greatly contributed to propagate the malady, which originally was not perhaps contagious.

Westminster Hospital, Sept. 22, 1803.

Mr. LYNN and Mr. CARLISLE purpose, during the ensuing winter, to give Demonstrations illustrative of all the Operations in Surgery; and Mr. Carlisle will occasionally deliver Lectures on several subjects connected with the education of Surgical Pupils. These instructions will be confined to the Pupils of the Westminster Hospital only. For the Terms of the Hospital, and all other particulars, applications are to be made to Mr. Lynn, in Parliament Street, to Mr. Carlisle, in Soho Square, or at the Hospital, in James Street, Westminster, on Wednesdays or Saturdays, at half past 12 o'clock. — Mr. Carlisle will deliver an Introductory Discourse explanatory of this Plan, on Thursday, October the 6th, at eleven o'clock in the forenoon, in the Theatre of the Hospital.

Dr. BADHAM, one of the Physicians to the Westminster Dispensary, Gerrard Street, proposes to deliver during the winter, two Courses of Lectures on Chemistry.

JOHN PEARSON, F.R.S. Senior Surgeon of the Lock Hospital, and Asylum, and of the Public Dispensary, will commence the Autumn Course of Lectures on the Principles and Practice of Surgery, on Monday, October 3, at seven in the evening.

Mr. THOMAS's Lectures on the Operations of Surgery, will commence in Leicester Square, about the end of October. A Prospectus may be had at his house, or at the Anatomical Theatre in Windmill Street.

IN the course of this month Mr. MACARTNEY will commence his Lectures at St. Bartholomew's Hospital, upon Comparative Anatomy, and the Laws of Organic Existence.

Mr. MOOR, surgeon dentist to Her Royal Highness the Duchess of York, will commence a Course of Lectures on the Structure and Diseases of the Teeth, on the 4th of November, in which will be explained the Complete Practice of the Dentist. Further particulars may be known by applying at his house, No. 6, Palsgrave Place, Temple.

Dr. BLACKBURN's Observations on the Prevention and Cure of Scarlet Fever, with Remarks on Acute Contagions in general, are in the Press, and will be published in a few days.

TO CORRESPONDENTS.

Tynicola's reply to Dr. Mossman, and Empiricus's to Dr. Magennis on Apoplexy, are postponed for want of proper signatures.

Communications are received from Mr. Weber, Mr. Thoresby, and Mr. Marson.

Mr. Smith's request is complied with.

THE
Medical and Physical Journal.

VOL. X.] NOVEMBER 1, 1803. [NO. LVII.

Printed for R. PHILLIPS, by W. Thorne, Red Lion Court, Fleet Street, London.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

I Send you an additional packet of Reports on the Influenza; among which I think you will find some as interesting as any that have ever appeared on the subject. I may yet receive a few more, and they shall be forwarded for next month, with my own observations.

In the last number, pp. 291 and 294, the proper name should be Giddes. The omission of the queries before each paragraph makes Mr. Tudor's letter read unconnected. The queries related to the facts, shewing the influenza to be contagious or otherwise, to its resemblance to catarrh, and its gradation from pneumonia to low fever.

I am, &c.

October 10, 1803.

THOMAS BEDDOES.

90. Dr. MACKIE, Southampton, Sept. 16, 1803.

Southampton and its neighbourhood were uncommonly favoured; in February, March, and April, we had a very general catarrhal indisposition, yet by no means so universal that we should have given it the name of an influenza, if we had not heard so much of it from almost every other part of the Island. I believe it was sufficient, however, to fill the hands of our apothecaries. Few cases were so serious as to fall to the lot of the physician; those I saw, were marked with little or no peculiarity different from the common diseases of that season, and I neither met with, nor heard of, any that terminated fatally. I understood it was more severely felt in our neighbouring large towns of Portsmouth, Winchester, and Salisbury, from which you have probably obtained reports.

(No. 57.)

C c

91. Dr.

91. Dr. LITTLEHALES, Winchester, September 14, 1803.

In answer to your inquiry I beg leave to inform you, that, as far as I am able to recollect, the influenza made its appearance in this city and neighbourhood about the first week in March. In a very few patients some serious peripneumonic symptoms occurred, but I have reason to think that, comparatively speaking, the disease was light in these parts, at least if I may be allowed to judge from a family who brought it with them from London, which suffered more severely than their neighbours. There was frequently so great a degree of direct debility that I was under the necessity of allowing wine diluted with decoction of bark, or camphorated mixture with a few grains of myrrh, and I did not perceive that it ever augmented either the cough or difficulty of breathing. Opiates were much less efficacious in this than in common coughs, and I sometimes thought the cicuta answered better. Blisters were always I think useful. The most remarkable circumstance was a continued want of appetite for a very considerable time after the disorder had entirely subsided. These are all the observations which occur to my memory, and I wish they were of more importance.

92. Dr. FOWLER, Sarum, September 18, 1803.

This should have been with you earlier if I had been more successful in ascertaining dates. I saw no case of influenza before the 12th of March, nor any since the 8th of June. Mr. Wyche, who is a surgeon here, states his first case to have been seen on the 9th of March, and his last on the 11th of May. All the cases that I saw within the first two days of the disease, were instantly relieved by calomel and James's powder. I always applied blisters where there was pain in the chest; and where the inflammation of the larynx and trachea was such as to produce symptoms resembling croup, leeches were applied with good effect to the neck. I employed the lancet only in three cases. The symptoms differed from those of common catarrh in degree rather than in kind. The pain in the head was more severe. The sense of suffocation much greater during the first three or four days. In general, this symptom appeared to be produced rather by a spasmodic than an inflammatory affection of the larynx.

The first patients whom I saw with influenza were six interesting children in the same family. I then had the disease myself, but not so severely as to confine me. One large

large family in the country, and who had little communication with others, escaped the disease till June. They thought they caught it from their music-master. Seven persons, who attended in succession a lady who had it severely, were attacked with it. Her daughters, who were kept away from her, escaped. Several instances of a similar kind occurred. Nothing that I witness authorises me to say *positively* that the disease was contagious; but I thought it right to separate as much as I could the sick from the well.

93. MR. EARNEST, Sheffield, September 18, 1803.

According to your request I send you the following account of the influenza, when it appeared in Sheffield, and adjacent places.

It commenced first of all in the neighbouring villages near and southward of the town of Sheffield, in the beginning of March; about the middle of the same month it appeared in Sheffield, and in April it became very general and prevalent. The symptoms in some cases ran alarmingly high, and was with great difficulty subdued. I have been informed that several cases ended fatally, but it was with such subjects as were predisposed to phthisis. I believe many practitioners have said that the influenza is a contagious disease, but several of the senior practitioners here say not; and since I received your letter I have particularly inquired into the truth of this assertion, and the result of my inquiries is as follows. It is a well known fact by some of our medical men, that when two or three of a family were ill in the influenza, others of the same family slept with them and never took the contagion.

94. DR. MOSSMAN, Bradford, September 19, 1803.

The first time I heard of the Influenza was of its prevalence in the city of York; it then approached Leeds; and about the 25th of April it made its appearance in Bradford; from whence it continued its progress to the westward. In Bradford and its vicinity it was the most prevalent about the middle of May, and disappeared about the end of June.

Its first approaches resembled those of a common continued fever; but its future progress was characterised by several peculiarities. The lassitude, chills, and succeeding heats, which mark the presence of fever, preceded the influenza; but in the influenza the pain in the head was

not so acute as in a common fever, though it was very distressing if the patient was put in motion; and very frequently accompanied by a confusion and staggering; pains resembling those of rheumatism were generally complained of, more especially in the larger joints. In every case there was an affection of the chest, accompanied by cough and dyspnoea, without any violent or fixed pain. The pulse was from 100 to 120; thirst considerable. In short, with a few peculiarities, it approached nearer to the features of peripneumonia notha, (as described by authors) than any other disease. The symptoms were very generally alike; they only differed in degree; and it was never fatal unless it attacked asthmatic or phthisical people, or those labouring under other diseases. All ages and constitutions were attacked by it; but females seemed to suffer the most severely. In the commencement of the disease, *emetics* were of the most essential service. *Local bleeding* and *blistering*, *nitrous* and *saline* medicines, with *opiates* at bed time, were the powers employed here, and they never failed to afford relief; *but the most effectual of all other remedies was the digitalis*, administered in the dose of 15 or 20 drops three or four times a day. *In the cases of children its operation was strikingly beneficial.* A low regimen was universally advised, with cool drinks, and a cool temperature. It was generally terminated by secretion from the membrane of the larynx and expectoration; but unless much care was employed, relapses were by no means unfrequent. The convalescents recovered very slowly; they continued long in a weak state; and it was remarkable that their intellectual powers were very often considerably impaired. When the inflammatory action was subdued, we advised nutritious regimen, and we employed *barks*, and the *vitriolic acid*. The disease was very certainly not contagious. During its epidemic influence no other disease appeared. Since the appearance of my pamphlet on Consumption, &c. I have had very numerous applications for the cure of that disease; and more especially since the prevalence of the influenza. Seven out of ten of my phthisical patients date their complaints from the attack of the epidemic in question; and I certainly think that there is a greater tendency to fatality in the cases originating in the influenza, than in those which have sprung from other causes. I find extreme difficulty in combating the symptoms; and the powers which I employ successfully in other cases, do not effect the same relief in phthisis arising from the influenza. This is curious; but I have no doubt of the fact. No

No other disease, with the exception of pulmonary consumption, has appeared in this neighbourhood, which can be traced to the influenza.

I hastily submit to you these observations. You may make what use you please of them. They are thrown together without any proper arrangement; but you may depend on the facts.

95. A CORRESPONDENT, York, September 20, 1803.

On conversing with many medical gentlemen here, I am enabled to ascertain that the influenza was prevalent in York during the months of February, March, April, and May. Some catarrhal fevers were observed from about the middle of January, but were not then considered as a peculiar epidemic, although they very much resembled the disease afterwards called influenza. It was very general all February and March, and began to decline in April; there were however many similar complaints here and there through May and June, and perhaps still later.

The complaint was on the whole milder than in some other situations, and generally yielded to lenient methods of cure. Venesection was rarely necessary; and blisters were not often essential, but sometimes applied with good effect. The lower orders of the people must have managed it without much medical aid, for I am informed that there never were a great many patients in this disorder at the Dispensary; and it appears that the first applicants were so late as the 1st of April, when the vigor of the epidemic was somewhat abated in the town. Many suffered relapses, especially from exposure to cold; and one medical man had so many relapses that he did not get free of it for near six weeks. Happily for him he is in the vigor of life, and of a good constitution. It has not been considered as a contagious disease by the greater number of the practitioners in this city. Many instances have occurred where a whole family have had it in a most rapid manner; many where only one or two in a family, and others where the husband has escaped although cohabiting with his wife, who had the influenza; and vice versa. Some numerous families had it not at all, although no less intercourse than usual existed. Infants, in general, suffered more than adults; in some cases repeated bleedings with leeches and emetics were required. Old people, and especially those who had laboured under pneumonic affections, suffered much; and a very few died. Vertigo, to an excessive degree, occurred in a small number of cases, in which the

other symptoms were not considerable. A more minute account of symptoms, or detail of the method of cure, would be superfluous, as they agree pretty much with what has been pursued very generally. I shall only add, that two practitioners here thought the digitalis very useful in the commencement of the complaint.

The above seems all that is necessary as to what regards York, which I should have been glad to have sent you sooner; but you must know that it is no easy matter to collect the report of ten or twelve medical men, who have to look back into day-books, &c. In a few days I shall be able to send you a farther account of its appearance, &c. &c. in a circuit round York, whose radius cannot be less than thirty miles.

The same Correspondent has taken the trouble to explore the district surrounding York and has given the geographical positions so accurately, that if we had many similar examples, nothing further could be desired as to the progress of the complaint. The following nine numbers comprize his collection. Nos. 96—104.

At Kirby-moor Side, about thirty miles to the N. N. E. of York, situate at the edge of an extensive tract of barren moors, which separate it from the sea from north to east, Mr. H. observed as follows.

It is with extreme regret that I have at so distant a period to acknowledge the receipt of your last in September. Having had numerous and distant professional calls, I have been thus long prevented. I am half persuaded that any observations that may fall from me will be too late for the purposes designed, if not too trivial for further communication; yet, that I may not withhold my mite in settling the present controversy, or be thought indifferent to a request which you have honoured me with, I now hasten to observe,

That the influenza made its appearance here in April, and continued in May and June; that several passed through the disease in so mild a manner as not to require medical attendance, yet a few solitary cases proved violent, and put on alarming appearances. Few or none however proved fatal, except in the case of a maniac who expired in a sudden and unexpected manner. About this period the typhus mitior prevailed in this vicinity, together with several irregular cases of pneumonia, in which two asthmatic patients of a middle age were snapped off suddenly; and I am sorry to add, that a more than usual proportion
of

of cases resembling phthisis, have, since the prevalence of the general epidemic, been observed by me, which I can but with others (in predisposed habits) look on as a sequela thereof. The influenza bore a very considerable resemblance to a catarrhal affection which prevailed here in October and November preceding, but without the pre-exciting cause, viz. exposure to cold, watching, or fatigue. In its attack it was very different; instead of introducing itself slowly and insidiously, its commencement was immediate and sudden; pain of the forehead and temples, the eyes more or less affected, slight dyspnoea, accelerated pulse, pyrexia; these were soon followed with the variable characterizing symptoms of low fever, accompanied with such an extraordinary prostration and general debility of the whole system, as served to correct the mistaken ideas of those who had previously looked up to bleeding as a necessary measure. A petulant cough, which was seldom attended with free expectoration, was more or less distressing, unaccompanied with that coryza we experience from acquired cold, a dejection of spirits, and sometimes erratic muscular pains in the limbs and different articulations. These, together with a confusion of mental intellect, and a very slow return of strength, were in various combinations generally present, and which in my idea was what constituted our late general epidemic. Emetics at the onset; diluents; the free use of aq. ammoniæ acetat. sometimes combined with mistur. camphor. epispastics; mild aperients; tinct. opii. camphor. and sp. vitriol. d. were employed with general advantage.

I come now to give my opinion as to its contagious powers; and am sorry to observe, that from the division that prevails in the sentiments of the Faculty, the common adage so frequently applicable to another profession may attach to ours, and that the "*in-glorious uncertainty of Physic,*" may be as proverbial as that of *Law*. Allowing, as I am ready, that several in one family have suffered nearly together in the complaint, whilst on the other hand one or two only out of a great number have been attacked, this confirms my idea that we are still to look for one common exciting cause, viz. atmospheric influence; but before this can operate there must be a peculiar idiosyncrasy or aptitude in the constitution to receive this morbid impression; and wherever these two causes exist I would venture to suppose the result will be uniform, and the general endemic, alias influenza, the consequence. I cannot suppose the complaint is ever the offspring of contagion arising

from human infection or fomites; and indeed to countenance this opinion it is necessary to allow the duration of the complaint to exist for a longer period than it has been observed in the system, before such an assimilation or congeries of miasmata could prevail, so as to render it eminently infectious, at least if we are to infer from analogy with other diseases that have proved communicable from one individual to another. I am well aware that these arguments have been embraced for espousing both sides of the question, and shall anxiously look for Dr. Beddoes's summing up a commentary from the great mass of testimony that has been already before him and the public.

You are perfectly at liberty to make what use you please of this; I regret that it is not as I could wish, more *succinct*; but if your packet be not already dispatched to Dr. Beddoes, and you should deem it of any consequence, perhaps you might abstract such parts from it as you may deem worth the trouble. I cannot close this without expressing a wish that Dr. Beddoes may favour the world with a nosological arrangement, or classification, of the present disease, as a lasting memorial of his attention to the epidemic, which at various and distant periods has so suddenly diffused itself across this island.

At Tadcaster, nine miles south-west of York, where the vale of York begins to terminate in a variety of rising grounds, Mr. Shann informs me the first patient he saw was on the 15th of March; "if I had seen any before that time they had been considered as common catarrh." From the 20th to the 28th I saw many families, in each of which, six, eight, or ten were seized with the complaint in twenty-four hours; "at a later date I think the epidemic became less rapid in its progress, but continued to spread gradually till about the middle of April, at which period few cases of the disease remained. In more than two or three instances, in large families, I observed most of those escape who were not attacked with the complaint within three days of its first appearance in that family, although they waited upon those ill of the disorder." During the progress of the disease, Mr. S. observed, especially in two instances, where it had not yet been in the family, that in less than thirty-six hours after the arrival of an invalid, (in this complaint) from a short distance, two persons in each family were attacked by it.

The prevalent symptoms were pyrexia, acute pain accompanied with a sensation of tightness across the forehead; oppression of the heart with a troublesome cough;
and

and in many instances, especially in those who were in the habit of free living, great depression of spirits.

Antimonial and saline medicines, with occasional purgatives, appeared the most useful. Tonics and cordials in very few cases were indicated; and when tried, commonly seemed to aggravate the most troublesome symptoms.

At Selby, fourteen miles nearly south of York, in a very flat country, Mr. Fothergill first observed the complaint about the 12th of February. The symptoms first appeared truly inflammatory, attended with violent pain in the head, and a disposition to vomit. After an emetic, antimonials with saline mixture gradually reduced these symptoms in five or six days. General debility ensued with a slight appearance of putrefaction, attended with great irritability. Mr. F. found the cinchona very useful. The complaint lasted twelve or fourteen days, and in some instances longer. Seldom or ever fatal. In many instances the whole family were more or less afflicted. *Some had an eruption upon the skin, attended with sore throat.*

At Howden, twenty miles south east of York, in a very low country, Mr. Whiteley saw the first patient the 1st of April; the last, the 14th of June. The complaint appeared inflammatory the first two or three days; then followed excessive depression of spirits and prostration of strength. In some cases venesection seemed indicated; but although it relieved the symptoms, it very much increased the depression and prostration of strength; these last symptoms were cured by the cinchona. The complaint lasted from two or three days to a fortnight. Mr. W. saw one hundred and fifty cases, of which two died, both old people, of infirm constitutions. The severest symptoms were pain in the head and back; in some, an inclination to vomit and pain in the stomach, were always relieved by an emetic. Mr. W. had heard of the complaint both at Hull and at York before he saw it. Its progress was extremely rapid for the first fortnight or three weeks. Those most exposed were most subject to the attack; more adults than children. It was always attributed to cold by the patients themselves. Measles preceded this epidemic. Mr. W. did not observe that pneumonia, the most prevalent complaint in the spring months, was more frequent or more unmanageable.

At Hutton Bushell, about six miles from Scarborough, Mr. Smart saw the first patient the 3d of April, and the last the 6th of May. It again made its appearance the 13th of August, on which day Mr. S. was called to six patients; three in one house. It ceased about the 27th of the same month.

month. "The disease began very suddenly, with cold tremors, sensation of cold water trickling down the limbs; then followed heat and sweat, and dejection of spirits. Pain in the head, especially in the orbits of the eyes. The albuginea appeared red, but its vessels were not turgid. Pain in the breast with cough, which went off without expectoration. In numbers the pain in the head and breast alternated. When great dejection of spirits prevailed, the sick complained of a dull heavy pain, like a weight fixed upon the back part of the head. Pains like rheumatism or erratic gout were felt in the extremities, but never continued more than two or three minutes at a time in one part, or in the same limb. While these pains occupied the limbs, the head and breast were relieved. Pulse little disturbed; tongue covered by a yellowish crust; thirst never distressing. Mr. S. never bled. Nor did he lose a patient. He administered an emetic in all cases, and where necessary an opening medicine; and conducted the cure with antimonials, &c. His best cordial was a limited allowance of Port and water. The cinchona in no instance seemed to do good. Mr. S. never had recourse to a blister, so much recommended; but does not know any case in which a complaint of the lungs was left behind. During the prevalence of the influenza in the spring, we had mild weather succeeded by easterly winds, which are very severe on this coast. The epidemic abated as soon as these cold winds began to blow. Sore throats then were frequent, by many called influenza, but wanting the characteristic symptoms of that disease. Mr. S. saw many sore throats whilst influenza prevailed; but never in cases of true influenza did he see sore throat. During the time this epidemic prevailed in August the heat was intense and the country burnt up. Scarlatina anginosa and pertussis succeeded the first appearance of the influenza. The former continued to prevail about three weeks; of the latter there are still some instances, (Sept. 18). Two of them are in the same house; a child and an adult. "In this house the influenza prevailed in the spring; but neither of my present patients had it. Nor do I recollect that any patient has had the influenza, who had been previously attacked by scarlatina or hooping cough; or vice versa." Mr. S. did not at the time make inquiry whether the influenza patients had previously had either of the other diseases. It is worthy of remark, that in villages near the sea, the scarlatina prevailed before the influenza began, seemed
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suspended during the epidemic, and first appeared again in those very villages.

At Easingwold, thirteen miles north of York, approaching the high hills of Hambleton, Mr. George Cock observed the influenza made its appearance the latter end of March; it became gradually more general till the middle of April, and by degrees declined. The first symptoms were slight chilliness and shivering, soon followed by violent rigors and alternate heat; the pain in the head, especially in the forehead, now became extremely distressing; shortness of breath, tightness and pain in the chest, with harrassing cough, hardly admitting relief; scanty expectoration; coryza; the discharge from the nostrils excoriating the lips; an uncommon irritable state of the stomach also supervened. Except in a few delicate females the pulse was hard and corded; in most cases strong and bounding, from 100 to 120 beats in a minute; the tongue white and parched, with cracks; occasionally smeared with dirty looking mucus; thirst very great, urine clear and high coloured, with every mark of excessive excitement. The predisposed to pulmonic disease had hard struggles. "In almost all cases, I found it necessary to use the lancet, and often very freely; in one instance, twice in twelve hours, fourteen ounces each time. The blood always exhibited the buffy coat; and as soon as it began to flow, the pain both in the head and breast was generally relieved, and the patients said they felt *lighter*. In hardly any case did I find it produce the debility medical men have so much remarked and dreaded in this disorder. In weak females I found six or eight leeches frequently applied to the temples and breast alternatively give great ease, where general bleeding was inadmissible." A grain of tartarized antimony and twelve of ipecacuanha operated well, and brought up a large quantity of bilious matter, which relieved the sickness. Blisters applied to the breast and between the shoulders were of great service. Small doses of pulvis antimonialis with saline mixture, opiates at night, and attention to the alvine discharge, generally terminated the cure. "After the urine began to deposit a sediment, the bark and other tonics were of the greatest service. I only saw one fatal case, which was an old man, who had been a sufferer by thoracic inflammation many times before." Mr. C. had no reason to think the disease contagious.

At Thirsk, ten miles beyond Easingwold, to the westward of the Hambleton hills, Mr. Wasse informs me, the complaint

complaint was more mild than in other situations. He had no patients under his care whose illness gave him much anxiety. The disease made its first appearance in his practice on the 23d of March; "it was confined to six or eight cases until the 10th or 11th of April, when it suddenly became very prevalent; more so I think in the villages and farm-houses than in Thirsk." It appeared more general about the 26th of April; and before the 15th of May had pretty generally declined. "During this time I saw a great number of patients, most of whom required no medical aid at all. I only used the lancet in one case, a strong middle aged man, who sunk more after the operation than I expected. In a few cases I applied blisters where the lungs seemed more than usually affected, but found the complaint very readily give way to small doses of tart. antimony, with pulv. ipecacuanha, &c. The symptoms sometimes began to abate in a few hours; in a day or two were generally much lessened, and in six or eight were entirely gone, leaving the patients uncommonly much weaker than I expected. The predominant symptoms were an incessant and violent cough, with slight pains in the chest, rigors, languor, and what I conceived characteristics of the disease, a peculiar white tongue, and a violent distressing pain in the head; pulse seldom so much affected as might have been expected from the urgency of the other symptoms; extreme thirst was very rare." The circumstance of this disease becoming general in the whole district as it were at once, and whole families seized at the same time, Mr. W. thinks, does not support the idea of its being contagious.

At Masham, about thirty miles N. W. of York, and twelve or fourteen west of Thirsk, in a very high and mountainous country, Mr. Baines observes, that the influenza made its appearance about the middle of February. It was not however distinguished by that name till later, nor did Mr. B. begin to compare it with the influenza which prevailed in April and May, 1802.

"The general symptoms were pain across the forehead with vertigo; shivering or chilliness, generally in the afternoon; obstruction of the nostrils, with inflammation of the pituitary membrane; dryness and soreness of the fauces, and other catarrhal affections; sickness, and an inclination to vomit, for two or three days; pulse about 90; seldom quicker; tongue white, but moist; little thirst; bowels for the most part costive; urine higher coloured than usual, and generally letting fall a copious sediment;

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on the third day a pretty free discharge taking place from the mucus membrane of a greenish colour, without smell; severe cough. Those who coughed severely, complained of great pain across the thighs, in the arms about the insertion of the deltoid, and in the sides. Unless the disease made an attack upon the lungs, the patient was never confined to the house, nor were his symptoms exasperated by his going abroad. Those whose illness rendered confinement necessary, had all the appearance of pneumonic affections. Yet, although patients of this description expectorated much, I never perceived the least tinge of blood. The discharge had rather a purulent appearance. In all cases whatever, the complaint continued, after the first three days, much the same, till about the fourteenth day, when the patient gradually recovered, but so slowly that a month generally elapsed before he was quite well. Very few died, and those who did, died by suffocation. The influenza raged most in April and May. After the month of June few persons applied for medical assistance; an idea about that time beginning to prevail that the disorder must have its course, and that waiting patiently was all that was necessary."

Mr. B. observes, "That when the influenza made its way into a family or village, it generally spread through the whole of it. On the other hand, I never was called to attend a patient living in a high situation; nor have I ever heard of its being known in the villages situate on the sides of hills, of which there are many in this neighbourhood. Mr. B's mode of treatment coincides pretty much with what has been already mentioned. It does not appear that he used the lancet.

Mr. Smart, of Hutton Bushell observes, that in one case a person employed to shave another, beginning in the influenza, although this circumstance was unknown to him, went home and complained of the disagreeable smell of his customer's breath, and in less than three hours was attacked with the disease; had it very violently; but his wife, who slept with him the whole time of his illness, escaped. Mr. S. met with several similar instances. In almost every instance, irregularity or excess, especially in drinking, caused a relapse. "In one person who was convalescent I ordered red port and water without specifying the quantity, and when I visited the next day, found he had taken the moderate allowance of *two bottles*, which brought on a relapse that had nearly proved fatal."

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Comme j'ai encore un peu de blanc, observes the anonymous collector; I will add, that I have executed your request in the most ample manner I conveniently could. I regret the delay; it is not, however, chargeable to me—you will therefore acquit me of the imputation. The details of this disease are curious in several points of view. It is undoubtedly the same complaint; and whatever latitude we allow to our fallible means of observation, it has been singularly modified by extraneous circumstances. How different the complaint at Easingwold and at Thirsk, only ten miles distant, and in many particulars, especially in situation, &c. not very dissimilar. If, however, we inquire into the seat of the disease anatomically, we shall find it, I believe, universally the same, and only varying in degree. The *mucous* and *fibrous* membranes seem chiefly to have been affected by the influenza. The former, covering the inside of the mouth, nostrils, anterior parts of the eyes and eye-lids, fauces, trachea, and all its pulmonary ramifications, œsophagus, and stomach, &c. and the excretory ducts of the numerous glands which open upon its extensive surface, were universally affected. Of its effects upon that part of this membrane which lines the intestines we have little evidence. It has apparently had some effect upon the biliary and probably upon the pancreatic ducts. Large portions of the *fibrous* membranes, especially the dura mater, linings of the orbits, the ligaments, fascia and strong folds, which separate the muscles, and perhaps the periosteum itself, may, without improbability, be considered the seat of some of those erratic or more durable pains so frequently characteristic of this disorder. In cases of greater severity it is probable the affection has been extended, especially in the predisposed, to the *serous* membranes, particularly those forming the lining of the thorax, and the covering of the lungs. With respect to the question of contagion, there are too many points unsettled to admit of my touching upon it at the close of this long paper. All the diseases commonly acknowledged to be contagious, seem to require something extraneous and in addition to the poison itself, in order to produce that spread we call an epidemic. The history of the plague and American fever, by which we learn that they neither of them rage at all seasons, seems to support this inference. The former ceases to extend its ravages at a particular time, although little or no precaution is taken by the inhabitants of Egypt to arrest its destructive progress. And to whatever degree
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the people of America may be supposed to carry their efforts for that purpose, they do not secure their large cities from feeling, at the return of the season, the inefficacy of them. Facts of a similar tendency occur not unfrequently in measles, scarlatina, and hooping cough, and I believe also in small-pox; I can therefore readily suppose the influenza infectious; so may be common catarrh, and yet requiring something more to become epidemic.

105. Mr. FIELDHOUSE, Stafford, Sept. 22, 1803.

Mr. Ward and myself are fully convinced of its being highly infectious, and ground our opinions upon the following circumstances among many others which occurred.

Mr. Ward's family living in the country, and detached from any house, continued free from the complaint until a late period, when Mrs. Ward paid a visit to some ladies who were ill in Brewood; she was attacked in three days after being in the family, and returned home. About the same distance of time, a little niece that they kept was seized; the child hanging about Mr. Ward, he was taken ill, with a lady and the rest of the family. A school-master, in Brewood, (a small town) kept his scholars and family unconnected with the rest of the inhabitants for a considerable time, and till the complaint had nearly disappeared; during this period they continued perfectly free, but upon taking off that restriction and mixing with the people, they were all soon attacked. A ladies school that I attended kept perfectly free by the constant use of the nitr. & ol. vitriol, notwithstanding the complaint raged at the next door; being a school lately begun, possibly they took more pains in using the fumigation; certain it is, however, that family never had it.

How far these cases may tend to clear up the matter I know not, but this you may depend upon, that they are facts.

106. Mr. WILKINSON, Sunderland, Sept. 28, 1803.

The first appearance of the epidemic catarrh, occurred on or about the 6th of February; prior to this period, the hooping-cough had greatly prevailed among children, and in some instances proved fatal to those of younger years. Some cases of cough, accompanied with slight catarrhal symptoms, took place in persons advanced in years, particularly those who were predisposed to asthmatic affections, or what is usually termed the *tussis senilis*. These
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last were relieved by the application of blisters to the chest, mild pectoral anodynes, and the external use of flannel.

Some were attacked with colicky complaints of the bowels, accompanied with diarrhœa and gripes, which were relieved by sudorific anodynes, the occasional use of *ol. ricini*, and the same external covering.

From the 15th of January to the period in which the epidemic catarrh took place, several cases of *cynanche tonsillaris* fell under my observation; and in two or three instances, where the tonsils were not much tumefied, were accompanied with slight cough, pains in the chest, and some degree of *pneumonic* inflammation.

As the month of February advanced the sore throat went off, and the disease continued to increase gradually, I mean the *influenza*. It attacked a considerable number of people at once, in March, and went on progressively to the latter end of April, when it gradually diminished as the weather became warm. In May, however, some solitary cases took place, which assumed the typhoid form; even in June several instances occurred; and towards the latter end of July, myself and another person were affected, which confined me two days in bed, and some days in the house. The most urgent symptoms were, great depression of strength; pulse from 90 and sometimes to 120; pains in the limbs, particularly the loins and head, the latter was always the most distressing; in some, considerable difficulty of breathing took place, with incessant cough, and *pneumonic* inflammation. In others the appearances or symptoms varied much, and were very mild, so as neither to confine them in bed nor within doors. In the parish work-house which I attended, where there were about 280 paupers, consisting of every age and sex, five were at once attacked on the 7th of March; the day following seven more became ill, and a day or two after thirteen others were affected; afterwards it continued to go on, so that in the whole, not more than thirty-seven, or at the most forty patients out of this great number caught it.

On the 8th I saw seven patients in the Seamen's Almshouses, which are in an open airy situation, forming a small square, containing in number about thirty persons, the rooms rather small, but not inhabited by more than two persons. These had been suddenly attacked a day or two before, at one and the same time; five were men, and two women; their ages varied from sixty to seventy years; the former laboured under violent *pneumonic* inflammation with symptoms of pyrexia, &c. and bore V. S. remarkably well,
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by which, and the use of blisters to the chest, antimonials, and mild anodynes h. s. they very soon recovered. Four more fell ill of the disease; the proportion was seven men to four women. The women and two of the men were but mildly affected. No others out of the whole number caught the complaint, although the women and their husbands slept together.

Generally speaking, it evidently appeared that the symptoms of direct debility were more predominant in persons under forty or fifty years of age; than those younger, in them the inflammatory symptoms were more strongly marked, particularly in men. In the work-house none of the patients were bled; the disease in the men having taken on the appearance of typhus, and they recovered more slowly, while the women were more mildly affected, except in two or three instances, where the disease terminated in *phthisis*. In these, however, a predisposition to cough seemed to occur prior to the attack of the disease. Children in general, especially those under eight or ten years of age, were but little affected with this complaint; and what is not a little remarkable, this was the case with those in the work-house, in which there were a great many; several had laboured under the whooping cough; and as the warm weather advanced in June, July, and August, many were seized with measles, and some with scarlatina anginosa, from which they recovered with little or no medicine.

In no one instance under my care do I recollect that this disease, simply considered, proved fatal, except in one case, where it attacked a woman in her *accouchement*. Pregnant women appeared to suffer more than others; in them the inflammatory symptoms, such as cough, dyspnoea, attended with pneumonic affection, were more strongly marked; hence it appeared that moderate v. s. and that well-timed, became in them a *sine qua non*, and in all other instances where such evacuation was indicated, it always proved beneficial. It may not be here improper to observe, that in almost every case where blood was drawn, that it assumed the cup or concave appearance of the coagulating lymph on its surface. In two or three cases, where the inflammatory symptoms nearly approached to suffocation, and which occurred in patients that were previously subject to inflammatory affections of the thorax, bleeding was repeated two or three times, and to this I attributed their recovery. In these I had hesitated to use the lancet at the commencement of the disease, from an idea of depressing the system, a fear to which many practitioners were perhaps

subject, whereby not a few have been lost, that otherwise might have survived. It did not appear that any age or class of persons, if we except young children, were less exempt than others, nor were those within doors less liable than those exposed to the open air; and the proportion of males to females affected, so far as I can discern, were nearly on a par. Mariners were not uncommonly attacked at sea; some of these were affected at that period with syphilitic complaints, and were under an alterative course of medicine; on shore, the same effects ensued with persons under similar circumstances. In some instances where the disease was nearly cured, as in gonorrhœa and inguinal tumours nearly dispersed, these seemed to reappear, or were otherwise aggravated. In general it happened, that whatever might be the indispositions to which certain persons were habitually affected, these were aggravated even where no appearance of influenza existed; but when it took place, and continued for some days, it seemed to participate of typhus.

Some females, particularly from forty to sixty years of age, where menstruation had ceased, were violently attacked with acute rheumatism, such as tumefaction of the wrists, knees, ancles, &c. accompanied with symptoms of pyrexia; in these the catarrhal affections were more mild and generally unattended with *pneumonic* inflammation: they gave way to the lancet. Antimonials combined with calomel, sudorific anodynes at bed time, and the decoct. cort. salicis in the remittent state of the disease being given, greatly facilitated their recovery. In two cases I had previously exhibited the *decoct. cinchonæ* with a view to determine its comparative powers with the former; but although it was taken freely for more than two days, yet no amendment took place, while in those who took the decoct. salicis, under similar circumstances, prior to using it in these two, the febrile paroxysms and recurrence of the pain were speedily prevented.

Of the efficacy of *this* decoction in the speedy recovery of those patients already named, I am the more convinced, as at that time I well knew some female patients affected in like manner, who were treated nearly in a similar way, and took the cinchona without benefit. One of these, after being ill for near a month under the care of another gentleman, consulted me. She was treated in the way already noticed, venesection being premised on account of the symptoms of pyrexia still remaining; these being removed, with the assistance of the salix decoction, she was perfectly

ly free from her complaint in eight days, but continued it for two days more. Before I became acquainted with the *salix*, I had repeatedly tried the *cinchona* in similar situations, but it fell far short of it. Relapses were not very common, or rather few had the disease twice, except where they were incautious in exposing themselves too soon in the open air; I do not recollect more than half a dozen, of 120 whom I attended, in whom the disease re-appeared; but in these it was usually more violent.

The treatment I adopted was, venesection where indicated, but this I used only in urgent cases, combined with inflammatory symptoms, or in peripneumonia, *pulv. antim. gr. ij. ad ij. calomel, gr. ad ij. 6 quaq; hora*. Vesicatories, and these often repeated *sterno vel scrobiculo cordis*, gentle anodyne sudorifics h. s. to abate the violence of the cough, and the *salix* decoction in the intermittent or convalescent state; the use of wine according to circumstances, in sago, tapioca, or Indian arrow root; and as the strength and appetite returned, light animal food, &c. I never had recourse to emetics, as the alteratives in the form of a bolus already named, where nausea or sickness prevailed, generally acted in this way, and where constipation existed, usually produced starts, exclusive of their general effects on the system by exciting a copious perspiration. In some cases this remedy, as is well known, has acted in these three ways at once, with infinite advantage to the patient, and that with more certainty than antimonials singly.

This epidemic, to the best of my recollection, as I was then a young practitioner, bore some resemblance to that in 1782, which commenced in the latter end of May, and continued till near the beginning of July. It was I think more generally diffused, and more violent in its effects; it appeared to be less combined with *peripneumonic* inflammation, and not so much to require the lancet. Several died, but many fell victims to phthisis pulmonalis, while great numbers, as in the present, were but slightly affected.

A similar disease took place in 1788, but this participated more of the mild catarrh, and it was not so general in its progress, nor alarming in its effects. An epidemic sore throat prevailed nearly at the same time, but this was not very dangerous, neither did the catarrh require bleeding, being less inflammatory.

To determine precisely whether the epidemic disease of which we are now treating be contagious, is what I shall not attempt, although in that which occurred in 1782, I entertained but little doubt that it was. But this opinion

was formed more from a general belief of its being so, and the manner in which its progress was traced, than from any idea I at that time had formed of my own. Entering into a discussion pro or con on the subject, is what I am totally averse to, as this must be referred to more decisive facts or positive proofs, than has been to me hitherto advanced. The following extract of a letter just received from a friend, an eminent physician in the county of Norfolk, I beg leave to insert, in which although nothing strictly positive is inferred; yet the difficulties with which it appears to be involved, are so candidly set forth, that it would seem not so easy a task to decide on this question, as either party have so positively asserted.

“ It is very hard to produce facts for or against the influenza being contagious. I have known so many instances where a patient has died of the *typhus gravior*, without any one of the family suffering the slightest symptom of fever, that no argument can be drawn from the circumstance of only one person in the family having had the influenza. But I think that of whole villages on the Norfolk and Suffolk sides of this country being attacked in one night's time with the disease in question, depended upon what the old writers call an *occult* quality in the air, and not on contagion. If persons be exposed to the same air, diet, and fatigues, they are subject to the same diseases, independant of infection communicated from one to another. Soldiers and officers, whether they use public or private privies, become in the same proportion affected with dysenteries, when they are equally exposed to the same camp fatigues and diet. Very few medical men have had so good an opportunity as myself of proving this fact.

“ The luxury of an Indian army is such, that an officer has generally a small tent to himself for a privy; yet a similar proportion of *these officers* were on my sick report labouring under dysenteries, as of those privates who had the public privies to go to. But it is easy to argue against this conclusion, though the fact be admitted. Nothing is easier than to raise doubts against facts which can be produced for or against contagion. Still I am inclined to think that the prevailing state of the air of a country has more to do with most epidemics, than the infection that is imparted from the sick to the surrounding air of a room or camp.

107. Dr. MARSHALL, Lynn, Norfolk, May 15, 1803.

The influenza appeared here between two and three months ago; but whether it is to be ascribed to the state of the air, or to contagion, doubts have arisen.

From *tolerably good authority*, it was said to have appeared in this neighbourhood, in some almost insulated situations, much about the same time that it was first remarked in towns. At this period, I observed instances where it was introduced, apparently, by contagion into families, through which it seemed to be gradually propagated. In some instances, it was ushered into families, but made little or no progress.

Upon the whole, considering the almost innumerable means of intercourse now introduced into most parts of this island, I am inclined to think that it was the offspring of contagion; although, from the invisibility of the poison, it was extremely difficult in some cases satisfactorily to trace it. This is most certain, that neither the thermometer nor the barometer indicated any thing unusual in the state of the air.

The disease certainly ended sooner in towns than in the country; and so far as my own experience extended, it began sooner there also. This, as you justly observe, "*looks more like infection.*"

The disease, I have understood, first appeared in London, and it did not reach Edinburgh till two or three weeks after. This marks progress, and certainly favours the opinion of contagion.

The flying soil of Norfolk no longer exists. What was once the reproach of the county, is now its pride: By means of sheep and turnips, together with a spirited system of husbandry, it is completely arrested, and converted into fertile land.

P.S. Since I wrote the preceding, I have been informed from good authority, that in some of the distant hamlets, the influenza is not yet entirely extinct.

108. Dr. DUNCAN, senior, Professor of Medicine,
Edinburgh, Sept. 25, 1803.

I think I can answer your question, respecting the date of the appearance of the late influenza at Edinburgh, with tolerable accuracy, as I have already had occasion to make diligent inquiry on that subject. It must however be allowed that influenza is very apt to be confounded with

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common catarrh from cold, a very frequent disease in this country at every season, but particularly during the winter. From this circumstance, even the most discerning practitioners may be deceived with respect to the commencement of influenza.

The first well-authenticated case of influenza in Edinburgh during the year 1803, of which I have been able to obtain any accurate information, was that of Mr. M'Donald, of Powder Hall, who was attended during his complaint by my worthy friend Mr. John Walker, surgeon.

Mr. M'Donald, with his wife, his son, and his daughter, were in London in the beginning of 1803. They left London on the third of February, at which time the influenza was very prevalent there; but they did not know of their having been in any house where there were individuals subjected to that disease. When they set out on their journey they were all in perfect health.

They arrived at Berwick-upon-Tweed on the 8th of February, and were there in a house where there were several persons subjected to influenza. They arrived at Powder-Hall, situated within a mile of Edinburgh, on the 9th of February. The next day, Mr. M'Donald himself was attacked with severe febrile symptoms, attended with uncommon prostration of strength, and all the other appearances which most frequently occur in influenza. Soon after Mr. M'Donald was attacked with this disease, almost every other person in his family, amounting to near a dozen, were attacked in succession. But its progress, as far as I could learn, was not immediately afterwards very rapid in the city of Edinburgh, and I did not myself attend any case where the disease was distinctly marked till the 23d of February, when I was called to a gentleman dangerously ill of the disease, several of whose family had before been affected with it in a much slighter manner.

By the end of February, the influenza was very common in Edinburgh, but as far as I could judge, both from my own observation and that of others, a greater number of patients were subjected to it about the end of March, than at any other time. It did not make its appearance in my own family till the 21st of March. The first of my family affected with it was my youngest son, a boy about nine years old, at the High School. At that time, many of his companions laboured under the disease. Six others of my family were afterwards affected with influenza in succession;

succession; but neither Mrs. Duncan nor I were subjected to it, and two of my servants also escaped the disease.

When the influenza prevailed in Edinburgh during the summer of 1782, I had a severe attack of it; but Mrs. Duncan escaped that epidemic as well as the present, although all the rest of my family were subjected to it.

I observe by the Medical Journal of London, that several of your correspondents are inclined to think that influenza is not a contagious disease. I am decidedly of a different opinion. The contagion of influenza is not indeed conveyed on the point of a lancet, to be intentionally communicated like small-pox: But from all that I have been able to learn of the history of this disease, as recorded by eminent writers for many centuries past; from all that I have seen of it during former epidemics; from its progress during the present epidemic with very different states of the atmosphere, when passed from Paris to London, from London to Edinburgh, &c.; from its progress in Edinburgh after it appeared in this city; and finally, from its progress in my own family after its introduction into my house, I have no more doubt of the contagious nature of the influenza, than I have of the contagious nature of measles, chin cough, or typhus fever.

By the last volume of the Annals of Medicine, published at this place about the beginning of May, you will observe that very exaggerated reports respecting the frequency and fatality of the influenza, were propagated at Edinburgh. The accounts of the fatality of the disease in particular were very highly exaggerated. During the late epidemic indeed I attended several patients who were dangerously ill of the influenza; but I did not attend one to whom the disease proved fatal; and, in a great majority of cases, nothing was necessary but prudent attention to regimen. Indeed I am persuaded, that in the treatment of the late influenza, practitioners more frequently erred from doing too much than from doing too little.

I have now certain evidence, that the deaths from influenza were by no means numerous at Edinburgh. This is demonstrated by the register of burials in the Gray-Friars Church-yard, which you know is the principal burying place in this city. During the months of March and April, the numbers of burials from all diseases were each week as follow:

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From

From March 1 to March 8	—	—	—	19
From ditto 8 to ditto 15	—	—	—	25
From ditto 15 to ditto 22	—	—	—	12
From ditto 22 to ditto 29	—	—	—	15
From ditto 29 to April 5	—	—	—	28
From April 5 to ditto 12	—	—	—	29
From ditto 12 to ditto 19	—	—	—	24
From ditto 19 to ditto 26	—	—	—	20

Total number of burials for the eight weeks }
 during which the influenza was most prevalent } 172
 at Edinburgh.

Although therefore it was positively asserted by some, and believed by many, that no less than one hundred persons, dying of influenza at Edinburgh, had been buried in one day, I am convinced that during the prevalence of this epidemic at Edinburgh, for the space of three months, the whole deaths from influenza did not amount to one hundred, when taken altogether.

The influenza however had probably some influence on the bills of mortality at Edinburgh; at least, during the first quarter of the year 1803, more burials took place in the Gray-Friars Church-yard, than during the first quarter of the preceding year. In the months of January, February, and March of the year 1802, the number of burials was 158; but during the same months of the year 1803, the burials amounted to 238. Thus there was a difference of no less than eighty, which might, I dare say, be principally attributed to the influenza.

109. Dr. SPEER, Trim, Ireland, July 24, 1803.

The influenza made its appearance in this county the middle of February last, and disappeared the beginning of June. It first originated in towns, and afterwards spread gradually over the entire country, confined to no class of people. The inhabitants of low and marshy situations, and adults, suffered much more severely than those residing in airy or more healthful situations; the very heavy rains and moisture of the atmosphere which then prevailed, made both a variation in the symptoms and frequency of the disease.

People of debilitated or relaxed habits suffered much more severely, and were much more subject to relapses than those of a solid fibre. In fine, the symptoms of the late epidemic,

epidemic, so far as I am capable of observation, were Proteus like, consequently the mode of treatment must have varied. The incipient symptoms in its first stage were excessively violent, and ushered in with universal debility and lassitude, *vertigo*, *nausea*, violent *ophthalmia*, *angina*, sometimes *cynanche maligna*, *excessive pain in the loins*, *loss of rest and appetite*. But in general did not prove fatal to any who were properly attended to, except adults and valetudinarians who previously laboured under pulmonary affections; on the other hand, convalescents suffered by extreme debility for a considerable length of time, which daily, among the lower class, terminates in dropsy.

110. Mr. REWELL, Cheltenham, October 8, 1803.

The influenza made its first appearance here towards the end of February. It was very general, but except in a very few instances, was extremely slight and hardly to be distinguished from the common catarrh.

In the cases which were more severe, there was a tendency to debility after the first three or four days with very considerable expectoration. In this stage of the complaint, I found it necessary to have recourse to tonics. The severe cases, however, were very few. I do not recollect seeing or hearing of any instance of its proving fatal. Very few cases occurred after the first week in April.

111. Mr. THORESBY, Holywell, North Wales, Sept. 12, 1803.

The first patient with influenza I was desired to visit, was on the 12th of February, but I have been informed it had made its appearance in this neighbourhood at rather an earlier period; during the months of March, April, and the beginning of May, it was most active, and in many instances that occurred under my observation, shewed symptoms of high pulmonary affection, where bleedings and vesicatories became expedient and salutary. It seemed principally to affect adults, and proved fatal to those only far advanced in life. It may not be improper to remark, that during the prevalence of this malady, I attended a maniacal patient; the family in which he lived consisted of eleven persons, ten had the influenza, and the majority of them in a severe manner; three constantly slept in the same room with this person during the whole progress of the disease, and experienced the full effects of its power, yet the catarrhal affection did not extend its influence in the least apparent degree to this patient. Whether this epidemic

mic disease originated from atmospheric miasma, or from contagion, I will not undertake to elucidate; certain it is, I have known seven or eight persons fall suddenly ill the same day, in the same family; in others they have progressively sickened at the expiration of six, seven, or eight days; and in several instances I could enumerate, it shewed only a partial appearance, where several had it severely, while others escaped; none more observable than in my own family, three had it only out of six very slightly; and though I had been in the habit of visiting many patients daily, yet I was fortunately unworthy its attack.

To Dr. BATTY.

DEAR SIR,

THE enclosed Case was communicated to me by Dr. Thackeray. I think it well deserves to be laid before the public; and if you agree with me, I beg you will insert it in the Medical and Physical Journal.

Liverpool,
August 10, 1803.

I am, &c.

JAMES CURRIE.

On the 10th of November last I was called to see a young lady in Shropshire, who had been attended by Mr. Cartwright, a respectable surgeon and apothecary at Oswestry, whose case was as follows. M. V. æt. 18, with light hair and a pale complexion, had been some time subject to affections in the stomach and bowels, indigestion, flatulence, costiveness, great oppression at the præcordia, nausea, with occasional vomiting and singultus. Her catamenia had been profuse, and followed by fluor albus. All these symptoms had increased and been accompanied by spasmodic affections, at length arising to general convulsions. During these convulsions the belly was for a moment soft and again hard and contracted, and the spasms extended to the thighs and legs, arms, back, and neck. These general convulsions occurred four or five times every day. She had besides an irritating cough, dyspnoea, flushings, and night sweats. She was become very feeble, and seemed declining rapidly. I first ordered an emetic, and afterwards various antispasmodics, as bark, camphire, asafoetida, opium, and the warm bath. She had besides

fomentations and clysters. These procured some temporary relief.

I was sent for again on the 18th, and all the symptoms were increased. The cough was more troublesome with considerable expectoration, and the chills and flushings more frequent. In addition to the antispasmodic medicines, the digitalis was prescribed with castor; one grain of the powder was ordered every four hours, and the dose was at length augmented to two grains and a quarter. The pectoral and spasmodic affections were both strikingly relieved, but sickness, vertigo, and the other peculiar effects of digitalis coming on, it could not be continued.

I was sent for again on the 30th, and found all the complaints aggravated. The spasmodic affections were now constant and exhausting, and the general convulsions occurred more frequently than ever, were accompanied by the abolition of consciousness, and followed by delirium. The spasm extended to the bladder, and occasioned great distress. She complained particularly of burning heat in the sockets of the eyes, and acute pain of the whole tongue, both of which were somewhat relieved by pressure. Her stomach rejected every thing, cordials as well as the simplest food. She was extremely emaciated and unable to stand upright. All the usual remedies being exhausted, and the case appearing dangerous in the extreme, I determined to try the affusion of cold water, as recommended by Dr. Currie, of Liverpool. She had been affected by vomiting for upwards of half an hour, with little or no discharge; the abdomen was hard and contracted; there was considerable dyspnoea; the pulse was rapid and irregular, the skin cool and rather clammy; shiverings had come on, terminating in general convulsions and insensibility, under which she was lifted out of bed and placed under the cold-shower bath, containing nine gallons of water, her head having been previously shaved to increase the impression. The water descended upon her and in a moment her consciousness returned and the convulsions disappeared. Her pulse sunk to 80, her breathing became regular, and her stomach was found to bear nourishment. She became quiet and composed. In the course of the day the convulsions returned, and twice they were relieved in the same way by the cold affusion. They returned the third time at eleven at night, and the remedy now seemed to have lost its effect. She passed a restless night with repeated convulsions and vomiting. About eight in the morning she was however sensible, and she said she thought the failure of the bath

bath the last time of trial had been owing to its not being used properly, the water having fallen upon her shoulders, and not on her head. She desired to have it tried again, and in a full stream. Her directions were followed; the water descended suddenly and profusely on her head during the next general convulsion, and again the symptoms vanished and consciousness was restored. She now fell into a quiet sleep, which lasted several hours, and she awoke from it wonderfully refreshed and composed. Some slight partial spasmodic affections re-appeared, but the general convulsions have never returned, and she has increased in strength every day. The cold affusion was directed to be repeated morning and evening, which is still continued, and two pills were directed to be given thrice a day, containing at each dose half a grain of cuprum ammoniacale, the same quantity of opium, three grains of calcined zinc, and four grains of the extract of cicuta. I ascribe the recovery however entirely to the cold affusion used during the existence of general convulsion. Written January 24.

February 12, 1803. For a month from the 30th of December, she continued well and had recovered her flesh. She persevered in the bathing night and morning, and drank a pint of wine daily.

On the 27th of January the catamenia appearing, they discontinued the bath. Sitting in the evening with her family she was suddenly taken as before, with general spasms, dyspnœa, vomiting, and delirium. In this state they put her under the shower-bath thrice, which instantly removed her complaints, but the effect was transitory.

On the 28th at twelve at night, I saw her, and found her in the same state as formerly, but with delirium. Her situation was in some respects very singular. She would sit up in bed with twitchings all over her, particularly affecting the head, &c. and repeat passages of poetry, sometimes losing a word, but not recovering it when suggested to her, or appearing sensible that the suggestion was made. This continued several times. She also wrote a letter to a friend, directed it, and enclosed it to a peer. Some hours after, remaining in the same state, she read a favourite paper in the Rambler, and got part of it by heart. When she found herself perfect, she desired me to hear her repeat it. She gave me the entire sense, but altered many of the words. I then ordered thirteen gallons of iced water to be dashed over her at once; but though it brought her to her senses, she said it did not produce the same relief as the shower-bath, nor was it followed by the same comfortable glow.

glow. We therefore employed the shower-bath that night four times in all, and every time with sudden and striking advantage, the patient recovering her senses in a moment. The last time was at three o'clock on Sunday morning; at ten, eleven, and one, she took three draughts with 70 drops of tinct. opii, and 25 of tinct. digitalis in each, without the least apparent effect. No sleep. Sickness, vomiting, and spasms continued on Sunday morning.

The shower bath was repeated twice or thrice a day, and after the fourth day at noon no spasms or convulsions returned.

The Case continued by Miss V.

"From the time you quitted us, she had no spasmodic return till the 14th of March, when her head was dreadfully afflicted.

"In the night of the 16th she felt an uncontrollably ravenous appetite, though no aliment taken at the time would remain five minutes on her stomach; this craving returned at the same hour each succeeding night until the 21st, after which it never affected her in any degree, (that night she took the first of the three doses of calomel you ordered).

"On the 26th, 28th, and 29th, she had repeated and severe spasms in her head; in every instance the shower-bath, (and she used it fourteen times in twenty hours) has infallibly afforded instantaneous though temporary relief.

"On the 31st, symptoms of the influenza, confirmed on the 2d of April, and attended by a spasm in the head.

"April 9, all effects of the influenza had nearly disappeared, her spirits, strength, appetite, sleep, all seemed restored to their wonted state.

"Immediately on awaking in the morning of the 26th, a dreadful attack in her head, which recurred daily till the 29th, with the most aggravated and distressing symptoms; sudden stupors, from which she was roused with the greatest difficulty, and during which her countenance was drawn and distorted with involuntary motion; great alienation of mind without any previous complaint of pain; these alarming appearances subsided gradually by the repetition of the bath, and she had no recurrence of spasm till the night of the 9th of May, which attack may be imputed to the irritation occasioned by a journey of nearly forty miles, and a previous sleepless night. (She was on her road to Abergally.) She had a slight return on the morning of the 10th, another on the 15th, a much severer one on the

24th, two on the 25th, but unattended with stupors or alienation of mind, being able each time to walk down one flight of stairs to the shower-bath, which always had the usual good effect.

"In the night of the 29th, a very violent spasm.

"On the 30th, two fainting fits, great oppression at her chest.

"On the 1st of June, a dreadful attack in her head and stomach; delirium and convulsions, without sleep, till the 6th."

I was with her on the 4th, and did not leave her room till the morning of the 6th. From Sunday at eight in the evening till four the next morning she took 350 drops of laudanum, 9 grains of opium, and 85 drops of tincture of digitalis, *without the least effect*. The shower-bath alone checked the convulsions and brought her to her senses, and we were compelled to have recourse to it once, twice, or oftener in an hour. It required three people to take her down stairs; but the moment she was placed in the tub, she became quiet and clasped her knees with her hands. As soon as the water touched her head, she exclaimed, "I am well." Clothes dipt in a strong solution of ammonia-muriatis, and applied to the head, were of great use.

On the 10th she had a most violent diarrhœa, which continued till the following evening. This was easily removed, and she is now in good health.

AN ABSCESS IN THE BREAST, occasioned by a fractured Rib, attended with Symptoms supposed to have had a cancerous Tendency, successfully treated; and a STEATOMA, possessing the greatest Part of the Neck on the right Side, removed. By JOHN MOODIE, M. D. &c. Senior Physician to the Bath City Dispensary.

A Lady of a delicate constitution, aged twenty-eight, had been some years subject to a cough, which returned with more or less violence every winter. She had also frequent attacks of sick head-ach, and a spasmodic affection, attended with fever, thirst, anxiety, and costiveness, with most of the symptoms which accompany the *asthma spasmodica* distinctly marked, and sometimes a diarrhœa.

In the course of an extensive practice, several cases of this kind have occurred, in the cure of which I have generally

rally experienced the most beneficial effects from cold bathing. Having ordered the most powerful medicines, usually prescribed in similar complaints, to this patient, without the desired effect, I therefore advised the use of the cold bath in the summer and autumn months, which, together with a healthy residence in the country, entirely removed her disorder.

In treating of this subject, the account of Dr. Smollett's case, related by himself in the following lines, may not here be unworthy of public notice: "In consequence of a cold caught in France, I was seized with a violent cough, attended with fever and stitches in my breast, which tormented me all night long without ceasing; at the same time I had a great discharge by expectoration, and such a dejection of spirits as I never felt before. In this situation I took a step which may appear to have been dangerous: I knew there was no imposthume in my lungs, and I supposed the stitches were spasmodical; I was sensible that all my complaints were originally derived from relaxation; I therefore hired a chaise, and, going to the beach, about a league from the town, plunged into the sea without hesitation. By this desperate remedy I got a fresh cold in my head, but my fever and stitches vanished the very first day; and, by a daily repetition of the bath, I have diminished my cough, strengthened my body, and recovered my spirits."*

June, 1793, the lady aforementioned accidentally leaning over the ledge of a window, to remove a bird cage which had been placed on the outside, received a hurt about two inches below the right breast, which at the time was attended with considerable pain, and a sense of internal uneasiness. Upon examination soon after the accident, there appeared a small tumour and discoloration of the skin; the part was painful to the touch, but respiration was free; she had no sickness at stomach, or any other unfavourable symptoms. By the application of the *linimentum saponis cum opio*, in a short time the tumour diminished, and the part resumed its natural appearance.

Early in August she went to Weymouth for the benefit of sea bathing, but soon after her arrival at that place she was frequently seized with sickness at stomach, attended with violent retchings. Bleeding, sedatives, and a due attention to regimen were directed, but afforded no re-

* Smollett's Travels.

lief. Having remained about a month at Weymouth, and being unable to bathe, she returned to the neighbourhood of Bath; but, notwithstanding the use of such medicines as were deemed proper by the most eminent physicians of that place, the sickness at stomach and vomiting still continued. Upon examination of the side where she received the hurt, she now informed me that she felt a pricking pain, at times extremely acute, just below the right breast, where there appeared a small enlargement, but without any discolouration as formerly observed; I therefore had no doubt that one of the superior ribs had been fractured, or detached from its cartilaginous adhesion to the *sternum*, especially as she was sensible of the motion of the bones, which now and then occasioned great pain, accompanied with spasm, especially when she attempted to raise herself in bed. Leeches were repeatedly applied to the tumour, and rest in a horizontal position was enjoined. And when the inflammation was reduced, *emplast. thuris* with a moderately tight bandage was applied to the part; the body was kept gently laxative, and the following mixture directed:

R. Mist. camp. $\bar{5}$ viß. spt. æther. vitriol. comp. $\bar{3}$ iß. tinct. opii. gutt. xxx. syr. toltan. $\bar{3}$ ij. m. sumat. cochl. ij. ampl. subinde urgente spasmo.

About six weeks after the sickness at stomach and spasms were entirely removed, but there still remained a small enlargement of the breast, extending to the part where she received the hurt. However, nearly two years elapsed before there was sensible increase of the tumour; meanwhile she used the cold bath in the summer and autumn months, and generally enjoyed good health.

Toward the end of 1795, she at times complained of a pricking pain where she had received the hurt; the skin was somewhat discoloured, the breast considerably enlarged and uneven on its surface, attended with irregular pains shooting into the axilla and adjacent parts. A gentleman of the faculty recommended a discutient plaster to be applied to the tumour; after which it rapidly increased in size, with acute pain in the breast, and evident symptoms of the suppurative process going on. The lady having used considerable pressure upon the part by means of tight bandage, the fluid made its way into the breast, where it appeared to be contained in different cysts, which were moveable and circumscribed, and the glands in the axilla became greatly enlarged.

January, 1796, two eminent surgeons were consulted,
and

and were of opinion that the disorder had a cancerous tendency; however, they thought it might be advisable to try the effects of some powerful discutient previous to the operation. Accordingly the following cataplasm was directed warm to the part, and renewed twice a day:

R. Sal. ammon. crud. ʒij. acet. vin. alb. ʒiv. aq. pur. ʒiv. farin. lini. q. s. m. et fiat cataplasm.

The above having been continued about a fortnight without any alteration, a blister was applied to the most depending part of the tumour, and kept open near three weeks with *ceratum sabinae*; the discharge was very considerable, but the pain and irritation reduced the strength of the patient, and occasioned such violent spasms, that it was thought prudent to discontinue the use of the cerate.

At a second consultation, the gentlemen abovementioned were unanimously of opinion, that there could be no doubt of the tumour being a real cancerous affection of the breast, and contended that it had a connection with a steatomatous enlargement of her neck, which they imagined proceeded from a scrophulous habit, the tumour being at this time much inflamed and enlarged.

The gentlemen were therefore of opinion, that immediate recourse should be had to the operation, in order to remove such part of the breast as should be found cancerous. Being myself of a different opinion, I requested the operation might be deferred about a week, especially as it appeared to me that Nature was then making an effort which I had no doubt would soon relieve the patient. Emollient cataplasms were now applied twice a day to the breast, and the bark, in substance, was ordered to be taken freely.

On the 29th of March, when raising herself in bed, an opening was observed in the abscess large enough to admit a common probe, from whence issued a small quantity of lymphatic fluid; but as the opening was not sufficient to allow the tumour to empty itself freely, I made a puncture with a lancet in a longitudinal direction, about three quarters of an inch in extent, at the thinnest and most depending part of the abscess, which instantly discharged about a pint and a half of well digested pus tinged with blood. A pledget of digestive was applied to the orifice, and the poultice continued some days. The lady being much weakened by the discharge, a nourishing diet with port wine was recommended, and a drachm of Peruvian bark in powder four times a day, with an opiate at bed time.

Soon after, several small exfoliations from the rib, extremely irregular on their surfaces, and of a carious appearance, passed through the orifices, which continued open, with a considerable discharge, upwards of two months. During this time another opening burst about an inch below the former, which discharged a quantity of purulent matter, and a number of exfoliations came away of the irregular appearance as those aforementioned.

Having continued the bark for some time, she gradually recovered her strength; and from that time till the date of this paper, she has not experienced the smallest degree of pain or inconvenience from her breast, or rib which had been fractured.

This patient was also affected with a large steatomatous tumour on the right side of her neck, which had been increasing near fifteen years; it was much larger at its basis than any other part, and extended from the right mastoid process to the clavicle on the same side; and from all the vertebræ of the neck to the mastoid muscle, under which a part of the tumour was situated. It was not attended with pain, but had an unpleasant appearance. Various external remedies had been applied, but effected no sensible alteration or diminution of its size.

During her illness she rested much on that part of the tumour which was most prominent: this circumstance probably accelerated the formation of pus. On observing this tendency, every means were used to promote the suppurative process by emollient cataplasms applied warm, and renewed two or three times in twenty-four hours, in order to convert the substance forming the steatoma into a purulent abscess.

About ten days after the commencement of this operation, there appeared a fluctuation of pus in some parts of the tumour, which I requested to open with a lancet. The patient refused to submit to this operation, but had no objection to the caustic, which was immediately applied to the most depending part of the abscess. And, at this time, and several months after, large lumps of a suety substance resembling tallow, by means of gentle pressure, was discharged from the orifice, with now and then a quantity of purulent matter tinged with blood. During the inflammatory state the application of an emollient poultice was continued.

It has been generally observed, with respect to steatomatous tumours, that it is absolutely necessary that the whole should be removed if possible in the operation, and

not to trust to the effects of dressings: for, if any part is left behind, there have been instances of the tumour arriving at its former size in a few months, and where a repetition of the operation became necessary.

However, in this case, it was impossible to remove the whole at once, as there remained a considerable degree of inflammation. But by means of gentle pressure, during the time the discharge continued, the substance was effectually removed. Since that time, there has been no appearance of any enlargement, and scarcely a scar now remains perceptible.

Scrophulous induration and enlargement are easily distinguished from a cancerous affection of the part, by not being attended with pain, even when greatly increased in size. If it tends to suppuration, it has not in general that craggy feel and unevenness of surface peculiar to cancer ready to burst; and when it suppurates, discharges good pus, which cancer never does. An induration from external violence, affecting the breast, requires the most careful attention. But we are not possessed of any means of knowing that an induration so occasioned will terminate in cancer, if it does not yield to the proper treatment in order to disperse it.

When such induration or scirrhus is occasioned by external injury, it is rather a favourable circumstance, and a presumption that it will not terminate in cancer; and when such induration, or scirrhus, immediately succeeds the external injury, it is a more favourable appearance than when it attacks the part some considerable time after.

In either case, it may remain without pain or unfavourable symptoms for several years, and may quickly become dangerous and alarming, attended with the characteristic symptoms of cancer, and that the external injury was the exciting cause, without the occurrence of which, the person might have passed through life without any inconvenience from the disease; it is, therefore, necessary to be guarded in our prognosis concerning an induration thus occasioned.

Bath, September, 1803.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

THE following Case was communicated to me by Mr. Carter, who had been a witness to the sufferings of the patient, and the success of the operation, when he was with Mr. Harrison. It is extracted from a letter of Mr. Harrison, addressed to Mr. Carter, when attending the hospitals in London; and was drawn up at my request, for insertion in your valuable Journal.

“ Mr. William Dixon, of the Green Yew, Winster, of a strong muscular make, robust constitution, and about sixty years of age, became affected with a slight pain in the left side of his face about six years ago; which gradually increased, and assumed all the characters of the *dolor faciei*, as described by Fothergill, and others, in its most distressing state.

“ It is, therefore, unnecessary to enter into a minute detail of the symptoms; suffice it to say, that the most trifling exertion, such as pulling the bed-clothes up, or turning in bed, would excite the most excruciating agony.

“ He was often unable to bear shaving on that side of his face, until he had sat with his legs in warm water for a considerable time. He was not able to eat a bit of bread till after he had undergone the operation for his disease.

“ I first saw him on the 15th of April, 1802. Pain and misery were, perhaps, never more strongly pictured on any living countenance than on his. He had been under the care of several respectable practitioners; taken cicuta, mercury, gum guaiacum, bark, &c.; and applied leeches, blisters, and various other stimulants, without the least alleviation of his sufferings.

“ I was decidedly of opinion, that nothing but the division of the infraorbital nerve would be likely to relieve this dreadful complaint; and he submitted to the operation with the greatest fortitude; assuring me, that nothing could add to the tortures he already endured.

“ The incision was made of a semilunar shape, an inch in length, through the integuments of the cheek, immediately below the infra-orbital foramen; through which the nerve passes from the fifth pair, to be distributed to the face, and in some instances sends one or more branches to communicate with the *portio dura* of the seventh pair.

“ Notwithstanding the knife apparently reached the bone,

bone, the whole length of the incision, yet I was convinced the nerve was not divided, from his not complaining, nor even distorting a muscle. I therefore introduced the fore-finger of my left hand into the wound; and feeling the hole through which the nerve came with a sharp pointed scalpel, made sure that nothing remained undivided between it and the bone.

“The pain this produced was so severe, that it forced a shriek from the most determined fortitude I ever saw; and, instantly applying a finger to the left angle of his upper lip, he exclaimed it was quite numbed.

“After the hæmorrhage had ceased, the edges of the wound were drawn together by means of sticking-plaster, and dressed superficially; after which he ate and drank with a degree of pleasure, which I shall never forget.

“The wound healed by the first intention; and, from the moment when the nerve was divided, I have the satisfaction to add, he has never had the least return of his complaint.

“From the concealed and deep situation of the nerve, immediately after it issues from the infra-orbital foramen of the maxilla superior, and from what happened in this case, I am confident, that in performing the operation, simple as it is, the nerve may easily escape the knife; and unless it be detached from its connection with the sensorium commune, no relief can be expected.

Yelverton, June 6, 1803. “I am, &c. “WILLIAM HARRISON.”

This case deserves attention; and, if surgeons will observe the hint here given by Mr. Harrison, time will shew, whether the operation so frequently fails from a re-union of the nerve taking place, or from its not being divided.

In the last number of your Journal is a letter from a gentleman, whom I am under the necessity of calling the late Mr. Dennett; in which are expressed two opinions, totally differing from those commonly entertained.

The first is, that in inoculation, incision produces less inflammation than puncture; the second, that dry varicellous matter produces a milder disease than fluid.

Were the latter opinion well founded, I apprehend the discovery would soon have been made by every other considerable inoculator. To that character, with respect to the small-pox, I never had any pretension; but having inoculated some hundreds with dry matter, as well as with fluid, I never could distinguish any difference in their effects.

With regard to vaccine inoculation, I never had the least idea, that in publishing an account of his mode of preserving and inserting the virus, Mr. Dennett meant any thing more than to ensure infection. When I read, in your Journal for 1801, that his manner of inserting it was by making three or four incisions or scratches across the arm, about one-fifth of an inch long, and only half a line apart, I dreaded consequences far worse than those which Mr. Dennett has recorded, as arising from puncture.

Such consequences, I have great reason to believe, no puncture, or vaccine vesicle excited by puncture, ever occasioned, or ever will occasion, unless the arm be irritated by some other cause. It is, however, not unnecessary to observe, that even the puncture ought to be small and superficial. For ensuring infection by this mode, fluid matter is preferable to dry; and from much experience, I confidently affirm, that it is not more virulent, as Mr. Dennett supposed.

Much worse cases than that recorded by Mr. Dennett, occurred at Clapham; partly, if not entirely, in consequence of incisions; of which your Journal bears ample testimony.

Had not the case in question been more severe than common, no practitioner in the neighbourhood would have been consulted. It would be easy to mention several worse cases occasioned by incision; but over these, hoping, and believing, that the practice is on the decline, I wish to draw a veil.

Many practitioners have discontinued incisions in consequence of my request; and have confessed, what indeed is apparent to others as well as to themselves, that their practice is much more successful than it was before.

Mr. Dennett acknowledges, that the blood is not infectious, yet disapproves of inoculating more than one person with one vaccinator. It was not necessary for him to do this; nor is it necessary for me: but it may be necessary for practitioners, in a situation remote from the metropolis, when the small-pox is raging on every side, and they can procure but a scanty supply of matter. In such cases, every one must use his own discretion.

I have exerted my utmost efforts to prevent that necessity, by facilitating the conveyance of matter on very small instruments; twenty or thirty of which may be contained in a single quill. Hence there is less occasion to inoculate more than one person with one instrument.

The demand for cow-pock matter is still considerable;
but

but the sources of supply are much more numerous. The Royal Jennerian Society has already opened thirteen stations; besides a central house. At all these places, matter is distributed free of expence.

I am, &c.

New Street, Hanover Square,
October 12, 1803.

JOHN RING.

A CASE OF INCONTINENCE OF URINE; *communicated by*
Mr. R. COOKE.

THERE has occurred to me of late several cases of persons afflicted with incontinence of urine, which evidently appeared to be occasioned from *blows* received on the loins, and which have baffled every medicine which has been given to *relieve*.

P. L. aged 38, a strong, healthy man, received, while at work, a violent blow across the loins from a truck, which almost immediately caused his urine to flow involuntary. At first, there was considerable symptomatic fever, for which he was ordered saline medicines; the bowels were kept open, and at night an opiate was given. The next day a blister was applied across the loins, and the fever subsiding, the tinct. cantharid. was administered, afterwards alum, camphor, volatiles, opium, zinci, calcin, &c. &c. but none of them had the least influence over the complaint. Electricity and cold bathing were also employed, but with no better effect. The sal martis was given, and after this the bark with valerian, but to no good purpose, except that of improving the man's general health.

The pain in his back, which he originally so much complained of, is in a great measure removed, but his mind is made miserable with the reflection of his never again being capable of following his usual employ.

Last week I had an opportunity of seeing another case very similar to the above, and which has every appearance of proving equally distressing.

My only motive for requesting the insertion of the above is in hopes that some useful observations may be thrown out respecting the treatment of such a very formidable and unmanageable disease.

London, Oct. 11, 1803.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

I Understand that in one of your late numbers, you have noticed the introduction of the Cow-pox into this island; if any credit is to be derived from it, I believe I may claim it. In July, 1801, I procured the vaccine matter in Liverpool; and on my arrival here in September following, inoculated nine girls at a parish school, in one of whom only the pustule was produced, and from her I propagated the disease. I have kept no regular account of my number of patients, but may safely affirm that Mr. Caddele, a surgeon, who afterwards inoculated in conjunction with me, and myself, produced the cow-pox in more than 1000 persons, blacks and whites; in no one case were any more pustules produced, than incisions were made. In some, after the disease had run its course, trifling eruptive complaints seemed to be excited by it, and in a few robust children, elevated itchy wheals about the limbs and body accompanied the formation of the pustule, but a slight medical treatment removed these; in no other respect did the disease vary from its usual progress. As I was the original introducer of the practice here, (and I believe first succeeded in producing the disease in the West-Indies) the novelty of one disease preventing another for life, excited many doubts of its efficacy; and notwithstanding the inoculation was encouraged by the most respectable inhabitants, and every exertion was made by myself, Mr. Caddele, and I believe other practitioners, the island has been now destitute of matter for some months, from the want of subjects to re-produce it. I trust when next we procure a supply, to find less difficulty in diffusing its benefits.

I am, &c.

Barbadoes, June 10, 1813.

H. E. HOLDER, M. D.

P. S. I brought the vaccine matter from Europe between plates of glass, defended from the access of air by strips of bladder pasted round the edges. On thread, the heat of the climate appeared quickly to render it inert,

On

On the Use of SCARIFYING and CUPPING; by N. BROUSSONET, M.D. Communicated by our Correspondent at Paris.

WH Y have certain remedies, commonly employed by the ancients, been neglected by the moderns, so as hardly to find a trace of them in the works of the present day? Has experience proved that these remedies were altogether useless? or have others, more efficacious, been substituted? No; but it will be answered, they are no longer the fashion.

The author tells us, that he hardly commenced practice when he determined to give a trial to the actual cautery, from which he experienced as surprising advantages as are set forth by authors; in short, such as to justify all that Pouteau has said in its praise. It remained to make trial of cupping and scarifications, but the prejudices of people against this remedy prevented the author from proposing it in private practice. In the army, however, he had ample opportunity of giving this practice a fair trial during three years. Here he found the superiority of scarification in some cases in which blisters and rubefacients are recommended. He confirmed the observations of Stoll, on the advantage of cupping in catarrhal peripneumony, particularly in those cases which prevailed in the army of the western Pyrennees during the winter of 1794. The circumstances in which M. Broussonet was placed, gave few or no opportunities of ascertaining its effects, except in internal diseases; but last year a case occurred to him, which in many points of view the author thinks important.

On the 16th of July, a carter, aged forty, of a bilious temperament, received a kick of a horse under the left hypochondrium; the stroke was so violent as to knock him down senseless; on coming to himself he vomited. When the author arrived, the patient complained loudly of pain, which he felt above the place where the stroke was received; there was no echymosis, the pulse was small and intermitting, and the body covered with a cold sweat; he had taken a little wine, and in this state he continued till evening. During the Author's absence he fell into a state of coma, which returned from time to time, and during which interval he complained much of pain; in this state he found him at six o'clock in the evening, when the part was scarified and cupped. The operation was hardly begun when the patient fell again into coma; the pulse becoming much stronger

stronger the cupping was repeated four times, after which the scarified part was covered with a bread and milk poultice, and the section of the abdomen was covered with cloths rung out of emollient decoctions; the patient rested by intervals, and towards the morning he passed with his urine a considerable quantity of blood; this confirmed the author that the spleen and kidney had been violently contused, besides which the small hard pulse, the difficulty of breathing, and the pain which the patient referred to the xiphoid cartilage, left little room to doubt of an injury being done to the diaphragm.

17th. In the morning the scarifications and cupping were repeated. The patient was relieved, the pulse was stronger; the tongue became foul on the right side. Although there was more reason to apprehend a bilious than an inflammatory fever, yet by way of precaution, and to remove spasm, about two ounces of blood were taken from the left arm; the cupping was repeated, and the patient passed a somewhat better night. Since the accident, he had taken but a light tisane; clysters were frequently administered.

18th. The pain was less violent, the patient was twice cupped, and the urine was as in a state of health.

19th. He found himself much better, and felt an appetite for food, which he was not however permitted to use. The pain was yet considerable on changing position. The author feared a deposition, in which he was justified by the event.

23d. In the morning the patient complained of weakness, and immediately afterwards was in the greatest agonies. When the author arrived, the pulse was not perceivable, the extremities were cold, the teeth were covered with the *fatal* mucus; in short, the patient was about to expire. The author did not long hesitate on the means to be pursued; it was the seventh day from that of the accident; convinced that the animal powers were not exhausted, he still hoped; Two blisters were put on the legs, two on the hypochondria, and cupping glasses were once more applied over deep scarifications on the affected part. Towards noon the patient seemed to return to life; in the evening he was better, and during the night he evacuated a quantity of black bilious matter by stool, which formed probably the deposition, and the sudden evacuation of which into the intestines terminated the disease. Since this day the patient recovered, and in the course of ten days could resume his usual occupation.

From

From this case, the author thinks we may estimate the benefits arising from the application of cupping and scarifying; it enables us to judge too of the excellence of that leading precept, of bleeding repeatedly in contusions of the viscera. The author thinks, that if he had employed this method, that a bilious fever would have been the consequence, and which he could not have checked, or else the system would have been so exhausted as to be unable to make that salutary and critical effort which terminated happily the disease. The progress of the complaint also shews, that when Nature is not disturbed in her operations by an unnecessary and ignorant interference on the part of the practitioner, that she follows in external diseases the same course as in internal ones. In this case, the fourth day of the disease indicated the crisis which took place on the seventh.

CASE of a VARIETY of INTERMITTENT FEVER, accompanied by Symptoms of HYDROPHOBIA, and forming an INTERMITTENT HYDROPHOBIC FEVER, (Febris Hydrophobica); read at the Medical Society of Montpellier, by C. L. DUMAS, Member of the National Institute, President of the Society, &c.

THE moderns, observes the author, have improved no part of the practice of physic so much as our knowledge of intermittent or dangerous remittent fevers. This order of diseases offers the best proofs that can be brought to establish the certainty and resources of the medical art; here the best answer is found to the detractors of a science, which has so many titles to the first rank amongst useful inventions. If the physician was ever worthy of being compared to God, it is doubtless when calculating the unavoidable dangers of a remittent fever left to itself, he can announce the precise moment when it shall terminate either favourably or otherwise. The probability of death following a certain number of paroxysms of this fever; that of a cure succeeding the timely and judicious administration of bark, are facts founded on the united testimony of such multiplied observation as to amount to unquestionable certainty. In enumerating the symptoms and dangerous consequences of intermittent fevers, Torti remarks those only which he had most frequently met with. The dangerous
symptoms

symptoms which this celebrated practitioner enumerated are cholera morbus, dysentery, bilious discharges, sweats, syncope, long continued shivering, and lethargy. Hence the fever was particularly characterised according to the predominant symptom; such as, the choleric, hepatic, dysenteric fever, &c. Mercatus had already noticed many of these species under the head of varieties of the dangerous tertian fever; all the rest he comprehended under the title of fevers, which became dangerous from some foreign cause, (*perniciosæ ob aliquod accedens quod lucrescit*); he adds too, other circumstances of difference which Morton has elegantly marked. Torti, who did not think necessary to speak of appearances which he had not seen, does not however exclude them. All fevers which become dangerous from the association of some symptom are tacitly comprised in the first division, and agreeably to him should be treated according to the same method. (*Omnes nihilominus quotquot sunt que vitæ periculum inferunt ex quovis adjuncto symptomate tacite comprehensas eademque simul methodo curandas.*) Among the symptoms which Morton has noticed connected with intermittent fevers, we principally find those of pleurisy, peripneumony, cephalalgia, rheumatism, &c. Lautter has described fevers accompanied by epilepsy. Galiazzi gives instances of fever attended by all the symptoms of asthma. Torti speaks of a double tertian accompanied by delirium. Alibert, speaking of irregular intermittents, notices very accurately those fevers which have delirium for a leading symptom. Delirium, observes the author, is an affection which takes on a great variety of characters. A horror of liquids, and a wish to bite whatever comes near, are modifications which are sometimes observed; such instances are however uncommon, though they must have been met with in practice. A kind of symptomatic madness, which comes on in certain cases of malignant or putrid fever, and which frequently accompanies inflammation of the stomach and angina, has been already remarked. Boerhaave gives the case of a man who attended criminals to the place of execution, and was suddenly attacked with fever, of which he died at the end of three days, and during which he drove from him with horror every kind of fluid. Salius Diversus mentions the case of a spontaneous hydrophobia which developed itself in a woman of 36 years of age, at the conclusion of pestilential fever, and during which the hydrophobic symptom was so remarkable, that she could not suffer a person to drink in her presence. Hippocrates mentions a case of
fever

fever where this symptom was predominant; and similar instances are to be found in Koehler, Massa, Hoffman, Sauvages, Mead, James, and many others. Vogel speaks of hydrophobia when treating of fevers, and says that it may spontaneously occur in the course of high inflammatory fevers. Selle says that spontaneous hydrophobia may occur in the course of many fevers, particularly of the nervous kind. There can be no doubt, observes M. Dumas, but that the same symptom may occur in the course of intermittent fevers; but as yet, facts are wanting to prove the truth of this association. The only one within the author's knowledge is given by Lentieri, in the case of an old man, who after exposing himself to cold was attacked with a remittent fever of a malignant kind, accompanied by delirium and a horror of water, but which disappeared on the use of bark. Nor has Lentieri mentioned all the details necessary to characterize accurately the *febris hydrophobica remittens*. M. Dumas having found no instance of this kind in any medical work, considers himself entitled to the credit of being the first to give an account of this particular fever, with all its attendant circumstances.

In the year 1793, the author had occasion of observing a fever of this kind in the Civil Hospital of Lyons, and since which period he has constantly mentioned it in his medical lectures; and Dr. Alibert, on his testimony, has reckoned it among the varieties of irregular intermittents in a dissertation which he has published on the subject, but it has been nowhere described as in the history of the following case.

A man, forty-five years of age, of a dry temperament, nervous, irritable, melancholic, a heated imagination, and violent character, and who had for a long time given himself up to singular irregularities of regimen, was obliged to pass many nights in a tent exposed to the firing of cannon, and the explosion of bombs; laying himself down on damp ground he fell asleep, but was soon awakened by a sense of cold and general uneasiness. The following day he experienced some giddiness, accompanied with pain in the head and every unpleasant sensation throughout his members. At night he had a shivering fit, followed by slight heat, obscure vision, loss of appetite, and prostration of strength. These symptoms appeared on the 26th of August, 1793.

27th. The patient was free of any similar sensations, except that he complained of cephalalgia, and continual vomiting of greenish matter, which fatigued him much. The pulse and heat of the body were natural.

28th. At night a shivering came on, succeeded by a
stronger

stronger degree of heat than after the preceding attack, accompanied by ardent thirst, a fixed pain about the throat, difficulty in swallowing, and slight delirium. The patient was ordered an emulsion with nitre, and after the conclusion of this access he was brought to the hospital.

29th. M. Dumas found the remission of the fever complete. He appeared however in a state of stupor and dejection, and complained much of a tightness in the muscles of the neck; at night there was a slight degree of fever but unaccompanied by either cold or sweat; the pulse retained a degree of irregularity sufficient to excite mistrust; an emulsion with nitre and a clyster were the only remedies used this day.

30th. There was a very decided access of fever, and the characters of a tertian intermittent were manifest; the paroxysm was marked by some disagreeable appearances, and it exceeded the former both in strength and duration. The heat was considerable, the delirium furious, with convulsive motions in the muscles of the neck and lips, and deglutition became more difficult. The patient was violently agitated, threw off his bed clothes, struck his breast, and complained of the tightness of his throat, and which the impression of fluids increased; the tongue was dry with red edges, and blackish in the centre; and to judge from the motions of his members, one would have thought the patient already far advanced in an acute disease. The emulsion was continued as before, except with the addition of camphire; and fomentations of vinegar to the legs, with the application of four leeches to each ankle, were ordered. The access was prolonged to a late hour of the night, accompanied by the same symptoms throughout.

September 1. All the symptoms had disappeared, and were succeeded by a perfect calm; and with the exception of a singular dislike to drink, and a difficulty of swallowing, the patient experienced no inconvenience.

This sudden change from what was observed the preceding day engaged all the author's attention, and led him to suspect that he had something unusual to combat in the disease.

[To be continued.]

An ACCOUNT of several CASES of general DISEASES cured by the EXTRACTION of decayed and diseased TEETH: In a Letter to Dr. EDWARD MILLER, of New-York, from BENJAMIN RUSH, M. D. &c.

SOME time in the month of October, 1801, I attended Miss A. C. with a rheumatism in her hip-joint, which yielded, for a while, to the usual remedies for that disease. In the month of November it returned with great violence, accompanied with a severe tooth-ach. Suspecting the rheumatic affection was excited by the pain in her tooth, which was decayed, I directed it to be extracted. The rheumatism immediately left her hip, and she recovered in a few days. She has continued ever since to be free from it.

Soon after this I was consulted by Mrs. J. R. who had been affected for several weeks with dispepsia and tooth-ach. Her tooth, though no mark of decay appeared in it, was drawn by my advice. The next day she was relieved from her distressing stomach complaints, and has continued ever since to enjoy good health. From the soundness of the *external* part of the tooth and the adjoining gum, there was no reason to suspect a discharge of matter from it had produced the disease in her stomach.

Some time in the year 1801 I was consulted by the father of a young gentleman in Baltimore, who had been affected with epilepsy. I inquired into the state of his teeth, and was informed that several of them in his upper jaw were much decayed. I directed them to be extracted, and advised him afterwards to lose a few ounces of blood at any time when he felt the premonitory symptoms of a recurrence of his fits. He followed my advice; in consequence of which I had the pleasure of hearing from his brother that he was perfectly cured.

I have been made happy by discovering that I have only added to the observations of other physicians, in pointing out a connection between the extraction of decayed and diseased teeth, and the cure of general diseases. Several cases of the efficacy of that remedy, in relieving head-ach and vertigo, are mentioned by Dr. Darwin. Dr. Faber relates that Mr. Pettit, a celebrated French surgeon, had often cured intermitting fevers which had resisted the bark for months, and even years, by this prescription; and he quotes from his works two cases, the one of consumption, the other of vertigo, both of long continuance, which
were

were suddenly cured by the extraction of two decayed teeth in the former, and of two supernumerary teeth in the latter case.

In the second number of a late work, entitled, "Bibliothèque Germanique Medico-Chirurgicale," published in Paris, by Dr. Bluver and Dr. Delaroche, there is an account, by Dr. Siebold, of a young woman who had been affected for several months with great inflammation, pain and ulcers in her right upper and lower jaws, at the usual time of the appearance of the catamenia, which, at that period, were always deficient in quantity. Upon inspecting the seats of those morbid affections, the Doctor discovered several of the molares in both jaws to be decayed. He directed them to be drawn, in consequence of which the woman was relieved of her monthly disease in her mouth, and afterwards had a regular discharge of her catamenia.

These facts, though but little attended to, should not surprise us when we recollect how often the most distressing general diseases are brought on by very inconsiderable inlets of morbid excitement into the system. A small tumour, concealed in a fleshy part of the leg, has been known to bring on epilepsy. A trifling wound with a splinter or a nail, even after it has healed, has often induced a fatal tetanus. Worms in the bowels have produced internal dropsy of the brain, and a stone in the kidney has excited the most violent commotions in every part of the system. Many hundred facts of a similar nature are to be met with in the records of medicine.

When we consider how often the teeth, when decayed, are exposed to irritation from hot and cold drinks and aliments, from pressure by mastication, and from the cold air, and how intimate the connection of the mouth is with the whole system, I am disposed to believe they are often the unsuspected causes of general, and particularly of nervous diseases. When we add to the list of those diseases the morbid effects of the acrid and putrid matters which are sometimes discharged from carious teeth, or from ulcers in the gums created by them, also the influence which both have in preventing perfect mastication, and the connection of that animal function with good health, I cannot help thinking but our success in the treatment of all chronic diseases would be very much promoted by directing our inquiries into the state of the teeth in sick people, and by advising their extraction in every case in which they are decayed. It is not necessary that they should be attended with pain, in order to produce disease; for splinters,

ters, tumours, and other irritants before mentioned, often bring on disease and death when they give no pain, and are unsuspected as causes of them. This translation of sensation and motion to parts remote from the place where impressions are made, appears in many instances, and seems to depend upon an original law of the animal economy.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

AS I have long been convinced of the advantage of considerable pressure for the more ready deliverance of the placenta, and of its being otherwise of good effect, I send you the following observations on that subject.

Let us suppose the woman to be delivered. As soon as the child is born, and convincing myself that it breathes, and before tying the funis, I apply my left hand to the sacrum, and the right hand (both exterior to the clothes) to the parietes of the abdomen on the region of the dilated uterus. I then make a slight pressure with both hands, and increase it gradually till I have exerted sufficient force for nearly two minutes, unless interrupted by the pain (indicating a contraction of the uterus) as Dr. Hunter used to describe it. I frequently relieve my right hand during the pressure, with the idea of forming a kneading motion, as will be described below, but I always keep up the force I had gradually carried it to. I then secure the navel string and give the child to the nurse, when I again apply to the funis, and find the placenta waiting for me either at the os externum, in the vagina, or so as to be brought away directly or in a minute or two afterwards; if it should not, I apply pressure as before, and the business is generally completed; but I should repeat it again and again, if necessary.

If we consult the different authors and lecturers on midwifery, we find a gentle pressure recommended by some of them on the parietes of the abdomen as soon as the child is born, "to press the air from the uterus, and to assist it in its contraction." But they do not, I observe, assign any reason why this pressure should be so slight; yet where it is necessary to introduce the hand into the uterus to turn the

child, the attendant is told to press hard with both her hands on the abdomen, to prevent the uterus rolling; and this without a seeming notion of the pressure doing any harm, because it is not even mentioned afterwards, but they speak of a gentle pressure, as above mentioned, as if they conceived a stronger one would be injurious, or perhaps they may think a slighter pressure sufficient, as corresponding with what they intend to be effected by it; but as it does not by any means agree with my idea, I shall beg leave to assign my reasons for a continued strong pressure.

In labour in general there is more or less of faintness comes on when the child is born; this is ascribed to the fatigue of labour, to the discharge, and to the sudden taking off of tension. The latter I consider as the chief cause; and if so, pressure must be as advantageous as in the operation of the paracentesis, which no practitioner, I believe, would neglect.

The uterus, when the child is born, being left in a state of flaccidity, the muscular fibres I have imagined to be fatigued with their exertion, less disposed to contract during the faintness; that they could not be so soon excited to contract, having lost the distension, the irritating cause; that if it is the first child, the overjoy of the mother leads the mind quite astray from any thing further than its birth to be accomplished, and though it (the mind) may not have any voluntary power on the uterus: I conceive then it is our duty to promote its action, and this by means of pressure, which will assist it in its contraction; but as there must be frequently great atony and want of irritability, a gentle pressure of short continuance is not so likely to fulfil the intention as that I speak of.

Admitting the placenta to be urged forward by pressure, it is very clear that the hour glass contraction, as it is called, when this is practised, cannot take place, the muscular fibres of the fundus uteri not contracting, and those of the middle or sides of the uterus doing so, the pressure on the bulk of the placenta would overcome the circular contraction; I have thought so much of this, that if ever I was called to a case of retention of placenta, and it had been previously ascertained that there had been an hour glass contraction in former labours, I would endeavour to surmount it by pressure, rather than the introduction of the hand.

The unpleasant case of flooding after the child is born, will be less liable to be fatal where considerable pressure is used, for provided we should not think it right to immediately

ately extract the placenta, pressure would approximate the sides of the uterus, and close these patulent vessels. If the placenta is extracted, still pressure is advisable, as the uterus may remain in a state of flaccidity from its inertness or inirritability.

I particularly recommend this to the consideration of your numerous readers; the application of considerable pressure in most cases of uterine hæmorrhage, I am persuaded, is calculated to be of advantage, and I am positive can do no harm. The matter, I conceive, speaks for itself, or I would encroach more on your time and patience to illustrate and enforce it. I am, &c.

W. MARSON,

Member of the College of Surgeons.

Workop, Notts, Sept. 20, 1803.

OBSERVATIONS ON THE EFFECTS OF OPIUM ON THE HUMAN BODY, *by Mr. F. WEBER, of the Foreign Depot, at Lymington, Hants.*

TO acquire a perfect knowledge of the effects of opium on the human body, I have taken it myself for a length of time in all quantities, as far as prudence would admit, and under different circumstances; I have administered it to two medical friends, and to a number of persons in health in the same manner, and have observed its effects with attention on patients labouring under local and general diseases, to whom it had been administered as a medicine for various purposes.

From any single dose, sufficiently strong to produce sensible effects, I always experienced first certain sensations in the forehead, a kind of pressure and straining, the latter of which seemed to reach down to the eyes and nose, attended by an increase of vigour, confidence, and cheerfulness. Here it would remain had the dose been within two grains of solid purified opium. The effects would last an hour or two, perhaps with some dryness in the mouth and fauces, and then vanish, leaving sometimes a slight degree of costiveness behind.

If I had taken two or three grains, the said sensations in the forehead would insensibly increase to a slight confusion of thought and giddiness, a heat and sensible pulsation of the arteries in the head; flushing of the face; a sen-

sation of the eyes, as if they were swelled and the sockets not large enough to contain them; a slight degree of sickness; a dryness of the mouth and fauces; slightly diminished sensibility, and propensity to sleep; sometimes gripings and a strong contraction of the intestines.

These effects lasted an hour or two, whilst an elevation of spirits and watchfulness remained yet for an uncertain time behind; sometimes a few hours, at other times the whole remaining part of the day; as did likewise costiveness.

From four to six grains caused all the named effects in the same order, but in a higher degree and quicker succession. The pressure in the forehead increased often quickly and passed on to pain; there was also an itching in the nose, and not very rarely all over the body; hiccup, stupor, and strong propensity to sleep; startings, and a strange chaos of happy and disagreeable visions, if sleep sometimes surprised me whilst I was sitting in a chair, and a strong increase of confusion and giddiness, and sometimes when I recollected myself again, sickness and vomiting; impaired voluntary motion; stammering in speech and trembling; heavy uneasy eyes; contracted pupils and dimness of sight; finally, a dysuria with frequent involuntary interruptions in the stream of urine, costiveness cum gradu impotentiae. It is a curious, but not the less certain fact, that through all the stages of the effects of opium, the most cheerful flow of spirits not excepted, I perceived the latter phenomenon, which undoubtedly was owing to a want of due sensibility. I experienced these effects from four hours to a whole day, and sometimes longer, and a liveliness, activity, and watchfulness, rather in a higher degree than usual, which succeeded the former affections, viz. giddiness, stupor, sickness, &c. and seemed to be proportionate to them.

A lassitude and exhaustion, and strong propensity to sleep, were the late and last effects which I experienced, more or less, sooner or later, in proportion as the earlier effects had been more or less strong, and lasted a shorter or longer time. If, for instance, I had taken from four to six grains, at ten or eleven in the morning, I sometimes experienced a burning heat creeping throughout my limbs, but which was particularly strong in the palms of the hands, followed by exhaustion, at nine, ten, or twelve, or thereabouts, at night; sometimes I experienced lassitude and propensity to sleep next morning, when I got up, at eight or nine; sometimes at noon, or any other time during
the

the day or at night. I cannot exactly determine how long this state of relaxation lasted, but I think I sometimes felt it on the third and fourth day, after having continued most part of the second, or at least made its appearance on that day. From seven to ten grains caused, besides the former effects in a proportionate high degree, a distressing sickness and vomiting; violent gripings, lassitude, stupor and **sopor**, which continued a whole day.

Sometimes, if I had taken seven or eight grains only, I would be quite well the next day, if a sickness and even vomiting directly after breakfast did not remind me, that some effects were yet remaining. If I had taken full ten grains at once, I perceived the first day, giddiness, trembling, stupor, dimness of sight, great difficulties in making water, violent gripings and vomiting, if I ate or drank any thing; afterwards, continual but highly disturbed dosing.

Next day, though much milder, I perceived most of the said effects. On the third day I was well, active, and cheerful. On the fourth day I began to be despondent, tired and exhausted, and continued in that state to the sixth and even seventh day.

All the different doses of which I have enumerated the effects, I took, from one to three hours after breakfast, that is, between nine and twelve o'clock.

Not to use myself too much to opium, I sometimes left it off for a week; besides that, if I had taken a strong dose, I waited four, five, or six days without taking any, in order that no effect should escape me.

Half a grain of solid opium, taken every half hour; or a grain taken every hour; or a grain and a half taken every hour and a half, or every two hours, has insensibly brought on a happy humour, increased vigour, activity, and unusual watchfulness, which I perceived after having taken about two, three or four grains, and which continued if from time to time. I repeated the same procedure for several days and nights, without the least inclination to sleep, without tiredness, or any impaired function, except dryness in the mouth and fauces, and thirst, occasionally gripings, and costiveness. I have made this experiment often, being a very pleasant one, and only the consideration of injuring my health, prevents me from repeating and persevering in it longer. When I discontinued the use of opium, taken in this manner, I perceived the second or third day after, the same stupor and exhaustion as I had experienced when I had taken the

same quantities, which I had now used in small doses, at one, two, or three different times.

The longer the use of opium had been continued, and the greater the quantities which had been taken, the greater was the ensuing exhaustion, as might a priori be supposed, and the longer it lasted. If I had taken opium for a week or longer, from six to ten grains per day, and then suddenly discontinued it, the exhaustion and stupor would, though gradually diminishing, continue for three or four days, during which time I was unfit for any business. Once, when I had taken from eight to ten grains every day for about a fortnight, I perceived the second day after I had left it off, besides a high degree of lassitude, violent pains in the knee and hip joints, which became so excruciating at night that I could neither sit nor lie.

Determined at first to wait the event, I supported the pains till they grew so violent that my fortitude failed me, and I had again recourse to a dose of opium. At twelve o'clock at night a medical gentleman, who was with me, gave me eight grains in two pills, and in three quarters of an hour I perceived the usual sensation in the forehead, a glow in the face and head; my spirits began to raise; sensibility sunk, and ere I was aware of it all my pains had vanished. I blessed the power which I had cursed the moment before; pleasant fancies floated in my mind, and deprived me of sleep.

If at any time, in any degree of the said exhaustion and despondency, I took four, six, or eight grains at once, or in repeated doses; vigour and activity, and a disposition of the mind to happy reasoning took place, as soon as the opium began to operate.

I have taken opium for three weeks and never experienced any symptom of lassitude and exhaustion, (as the late consequence of former effects) because I at first took the same quantity every day, and afterwards increased the dose to two or three grains in the whole. I used to get up perfectly well and in good spirits, and remained so all the time till I took another dose, which was generally at ten, eleven, or twelve o'clock. The effects of solid opium, taken in pills, at the mentioned time, I could never perceive, before three quarters of an hour, sometimes a full hour, and not very rarely an hour and a half had elapsed.

Nor have I ever been able to discover any alteration in the pulse or general temperature of the body (though I have paid the strictest attention to both), which I could have attributed to a direct operation of the opium on the heart

heart and blood vessels. Neither have I found that opium affected the processes of the economy at large, nor, as will be perceived, was the appetite particularly impaired, those intervals excepted where actually sickness and vomiting, or high degree of stupor, or sopor, or exhaustion had been produced.

It will be superfluous to mention, that, in as far as opium causes rest and sleep, it must materially reduce the frequency of the pulse, the circulation being more slow during the latter than when the body is in a watchful and active state. The contrary takes place during liveliness and activity.

This is to be applied also to the general temperature of the body, and processes of the economy. Dissolved in any usual menstruum, opium produced effects in half an hour.

If taken with a small quantity of spirits or any liquid containing alcohol, or any warm fluid, the effects made their appearance sooner than usual.

Any meal taken withing half an hour or later after a dose of opium, speedily brought on all its effects, and it seemed in a considerable higher degree. Gripings, sickness and vomiting, I once or twice experienced directly after breakfast, having taken a strong dose the evening before. If taken within an hour after dinner, the effects appeared later than usual and were less in degree; I even sometimes could hardly perceive them at all, if the dose had been a moderate one.

The effects seemed to be the stronger, the more early in the day the opium had been taken. They were strongest if I were unwell, or if any thing had in the least deranged the functions of the economy; for instance, if I had been up all night, if I had been sick and vomited, and taken no food, two or three grains would have as much effect as otherwise four or five.

The effects were the stronger, the shorter the time since a former dose had been taken, even if the effects caused by the latter seemed to have subsided; if, for instance, I had taken two or three grains at ten or eleven o'clock in the morning, and giddiness, confusion, &c. seemed to have ceased at three, four, or five in the afternoon, a repeated dose would yet produce much stronger effects than the first. Again, if a grain or a grain and a half had produced little or no effect, the same quantity administered an hour or two after, caused exhilaration, pressure in the forehead, dryness in the mouth and fauces, &c.

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If I was in high spirits and very active; if I walked, or took such exercise as made me warm and perspire, the effects made their appearance considerably sooner, were less in degree and much less in duration. I have walked to Southampton, a distance of four miles from my former residence at Totton, (a small village) in a hot day, and whilst I was very warm and strongly perspiring, I took successively three pills on the road, each pill of 4 grains; so, that having taken a similar one half an hour before I set out, I took sixteen grains in about an hour and an half, of which I perceived much less effect, than when I took four or six grains at my usual hour coolly and quietly at home. Having been about an hour in Southampton, I walked home again, and I must confess that I did not feel the least effect remain whatsoever, not even elevation of spirits and watchfulness, but on the contrary I was tired and exhausted, as I should have been at any other time after such an excursion. The reader will perceive that this was at a time when I was in some degree used to opium. But I have made, I may say, a hundred similar trials which confirm the above. I have frequently taken the same quantity at the same hour as I did when I remained at home, and directly after walked out, or set off at a brisk pace on horseback, and always perceived that the effects made their appearance much sooner, were much less in degree, and lasted, instead of eight or ten, only two or four hours.

Under the influence of emotions, strong sensations, and any particular strong attention and exertion of the mind, the effects of opium appear later than usual, are less in degree, and much shorter in duration.

If it so happened, that the cause which disturbed my mind was removed, then all the effects would almost instantly make their appearance and take their usual course.

Cold, rest, but particularly sleep, also retard the appearances of the effects of opium, and prolong them.

If I had taken any quantity during the day, in consequence of which only slight effects remained when I went to bed; in that case sleep would be the *means* of restoring perfect order to the functions of the economy.

Four grains of jalap taken with an equal quantity of opium in four pills, has caused several stools and the usual effects of the latter.

I have often repeated this, and generally perceived more purging than I should have supposed from so small a quantity of jalap, and in such a combination.

The evacuation of the stomach by irritating the orifice
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of the pharynx with a finger, the moment when the effects made their appearance, or before, has cut short the effects of any dose. Beyond an hour after the effects had made their appearance, I have found vomiting excited in the same manner, not alone useless, even if the stomach was quite emptied, so that nothing but bile was brought up, but even aggravating confusion, giddiness, stupor, and particularly retching to a high degree.

Vegetable acids, especially lemon juice, if used in sufficient quantity and for a sufficient length of time, before the opium has been carried into the circulation and produced strong effects on the head, resist its operations in a great measure, but do not quite counteract them. I have taken the juice of a lemon diluted with half a tumbler of water, at the same time with eight grains of opium; I have repeated the draught five times in three or four hours, then discontinued it, and in an hour after I have experienced all the usual effects of opium. I have taken at another time the same dose of opium with the same quantity of lemon juice, repeated the latter at first every half, and afterwards every three quarters of an hour, for five or six hours, and the effects of the opium was inconsiderable in proportion to what it used to be.

About two ounces of vinegar used as the former, has done me much the same service. Vegetable acids, like vomiting, are useless and hurtful, if confusion, giddiness, sickness, &c. have lasted some time. Immediate vomiting and violent retchings are the infallible consequences without affording any relief. Mineral acids possess no property at all in counteracting or removing the effects of opium,

A tumbler full of warm milk, drank directly after it came from the cow, took the gripings away instantaneously, as often as I used it for that purpose.

To a medical friend of mine, who wished to take a dose of opium for the sake of observation, I gave three pills, containing together three and a half grains of opium and three grains of jalap. An hour after (about seven o'clock in the evening) he got sick and giddy, having drank tea shortly before.

In about another hour the said effects had increased to such a degree, that he was obliged to go to bed. He was not much disturbed in the night, and got up tolerably well next morning. He made a hearty breakfast, consisting of coffee and toast; but got giddy, sick, and vomited soon after. He was again obliged to lie down, and remained in bed the whole day. I administered to him, from time to time, the juice of a lemon diluted with half a tumbler full

full of cold water; but he soon perceived, that far from relieving him, this caused an increase of sickness and vomiting, and violent retchings. As often as he made water, he experienced the abovementioned difficulties, and he experienced also some griping.

Directly after he had taken tea in the evening, not having been able to make any dinner, he vomited, and perceived renewed gripings. He got up seemingly well next morning, after having enjoyed a good night's rest, but found himself unwell, giddy, and rather sick for some time after breakfast; which, as the day before, consisted of coffee and toast. He perfectly recovered during this, and continued in good spirits till the fifth day, when he began to feel himself very tired and despondent.

On the following day he was so sleepy, that every effort to read was in vain; and it was not till some days after that he enjoyed his usual alertness again.

Another medical gentleman took early in the morning, before breakfast, a pill of one grain. Not perceiving any effect, he took another grain an hour and a quarter after. Having waited again an hour and a half, without feeling the least effect, he took two pills of a grain each, which caused in less than an hour some giddiness; directly after head-ach, red and swelled eyes, strong inclination to sleep, and dryness in the mouth and fauces. After some time, he perceived violent gripings, which became easy directly after he had drank a tumbler full of warm milk as it came from the cow. About an hour after the gripings returned, and warm milk, used as before, afforded him the same relief. Five hours from the time that he had taken the last dose, he drank two dishes of tea, to which he ate some toast, which soon caused violent giddiness, sickness, and vomiting. Having lain down for an hour, he walked out, got warm, perspired, and came home perfectly well. He was costive this and the next day. After some time, he took again two grains very early in the morning, which produced no effect. Two hours after he repeated the same dose; from which he perceived nearly the same effects as before; only that he was near a quarter of an hour before he could make water, which was about five or six hours after he took the last dose.

Both gentlemen are between five and twenty and thirty years of age, of a common habit; that is to say, neither plethoric and very strong, nor weak and irritable. As for myself, I am of about the same age, and rather of that disposition which is pretty generally known in this country by the expression nervous.

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A young lady, lively, healthy, and strong, who was anxious to know what effect those pills could have, which I constantly carried about me, and which I took at all times, she could not conceive for what purpose, desired me to let her take some. Afraid of causing disagreeable and violent effects, I only gave her now and then, and at different times, and under different circumstances, one grain; of which, neither she, who waited with female curiosity, nor myself, could perceive any effect. One morning, in compliance with her ardent entreaties, I gave her two grains at breakfast, at seven o'clock. I did not see her again till evening, when she told me that she had been very sick *indeed*; very giddy and drowsy the whole day; but thought she was then quite well.

To eight men, in a general state of health, between five and twenty and fifty years of age, most of them attendants and the others patients in the Foreign Hospital, with local disorders, perfectly free from pain and fever, I administered to each four grains of opium, dissolved in a sufficient quantity of brandy, diluted with water, shortly before dinner.

In two hours after, two complained of gripings, giddiness, head-ach, drowsiness, thirst, and sickness; which lasted the whole remaining part of the day.

A third experienced gripings, and dryness in the mouth and fauces. Three others were slightly confused, giddy, and dry for some hours, and the remaining two perceived no effect at all.

Some of the former had more or less disturbed sleep, difficulties in making water, and costiveness. The others were well in the evening, and had a good night.

Sometime after I administered to three men, of the beforementioned age and healthy economy, a pill of three grains each, three hours and a half after dinner. In little less than an hour, two experienced a slight confusion of thought, slight giddiness, and grumbling motions in the bowels. In about half an hour more, the one perceived gripings, which, together with thirst and disturbed sleep, continued the whole night. I ordered him a quart of milk, several hours after the gripings had made their appearance, which he drank gradually without any benefit. The other had no gripings, but a grumbling in the bowels, giddiness, head-ach, thirst, costiveness, and slight difficulties in making water, which he experienced great part of the night, and a part of the next day.

The third experienced, very late, slight giddiness and thirst, and his sleep was rather disturbed.

[To be continued.]

OBSERVATIONS ON THE PETECHIÆ SINE FEBRE,

by Mr. A. EDLIN, of Uxbridge.

THIS disease has not been noticed by Physicians till within these few years past, and a particular description of it has not yet been received into any of the works of systematic writers. Such accounts as have been published, were either suggested in the form of notes, or detailed in books, which do not usually fall into the hands of young practitioners.

The first person who noticed and described it was Dr. Graff of Gottingen; and as the absence of fever is a most striking peculiarity in this disease, he gave it the name it now bears. An account of a similar disorder is recorded in the Transactions of the Medical Society of Copenhagen; and Dr. Tattersall, in the tenth volume of his Medical Commentaries, has described four cases of this complaint, which all terminated in death; but the most accurate and comprehensive account I have seen of the petechiæ sine febre, is given by Dr. Ferris, in the first volume of the Medical Facts and Observations, and the plan he recommends for the mode of treatment is not only the most judicious that can be devised, but if properly followed up, appears the most likely to remove a disease which, if left to Nature, will most commonly prove fatal.

It usually begins with a sense of lassitude and disinclination to active exertion, but the appetite, notwithstanding, continues good, the pulse natural; neither is any pain, fever, or disturbance in the constitution excited. In general, the first untoward symptom is a few bright red spots on the feet and legs, which are scarcely noticed. As the disease advances, they increase in number, put on a purple appearance, and sometimes spread over the whole surface of the body, in which state they have been known to remain for days or even weeks, the patient pursuing his ordinary occupations, insensible of his danger. The eruption now becomes of a livid hue, and sometimes a number of these spots run into one another, and occasion on the lower extremities a dark coloured appearance similar to a bruise; this shall remain in an indolent state for some time, when a thin bloody serum is discharged; on the skin being removed, an ill conditioned sore is observed underneath, which soon becomes exquisitely painful, spreads unequally, and assumes every appearance of a phagedenic ulcer, which seldom heals till the breaches in the constitution are repaired.

repaired. At other times the throat is particularly affected, the tonsils swelling considerably, and assuming a livid aspect; and if the tumefaction does not speedily subside, the cutaneous vessels rupture, and an ill conditioned ulcer appears upon the surface, which occasions the breath to be excessively offensive; or if ulceration does not ensue, an hæmorrhage not unfrequently takes place from these parts. Faintness and languor now succeed, which are followed by loss of appetite and great prostration of strength. An hæmorrhage from the nose now usually follows, which excites a considerable degree of alarm from the difficulty of restraining it. Again and again it takes place, most frequently in the sleep, and is restrained when the patient is in an erect posture; the hæmorrhage continuing, the debility increases, the spots assume a dusky brown colour, bordering upon black, the extremities become cold, and death in a short space of time closes the scene. Such is the usual progress of this disease when left to Nature; but when the complaint takes a favourable turn, the petechial spots diminish in size and number, the bruised appearances upon the legs gradually disappear, or if they have ulcerated begin to heal; the throat no longer continues sore or swelled, the symptoms of debility decline, and that peculiar languor, which characterises diseases of debility, no longer manifests itself.

The *petechiæ sine febre* very frequently * occurs among the wretched poor in large towns, particularly in London; and the persons most liable to its attacks, have been either previously debilitated by disease, or lived in confined situations, upon a sparing unwholesome diet, by which means their blood is brought into such a thin dissolved state, that it stagnates † in the cellular membrane, and produces *petechiæ* from a torpor or paralysis of the absorbent mouths of the veins. Such being the case, it must be the business of the physician to prescribe such remedies as will tend to support the patient's strength, and restore to a healthy state the absorbent system. In general it is the most advisable to begin with a gentle emetic, and afterwards to evacuate the contents of the bowels with a lenient cathartic; then the bark, both in decoction and powder, joined with muriatic acid, must be given in as large a quantity as the stomach will bear. If it should occasion a diarrhœa, a few drops

* Critical Review. N. A. Vol. 17. p. 260.

† Darwin's *Zoonomia*, Vol. 2. Ch. 1. 2. 1. 5.

drops of the tinct. opii. should be added to each dose, according to the age and constitution of the patient; and where the symptoms of debility are very great, moderate doses of opium will be found particularly serviceable. The diet should be nourishing and of easy digestion, and malt liquors, port wine, artificial Seltzer water, oranges, and other ascescent fruits may be taken almost ad libitum. When the throat is affected, the best gargle is a strong decoction of roses acidulated with the muriatic acid, and the sores should be dressed with straps of adhesive plaster renewed every second day, as they tend to check the discharge, and promote cicatrization. By a perseverance in these remedies, the patient's strength and spirits will be found to improve daily, and in a few weeks, with the assistance of fresh air, exercise, and cheerful society, the complaint will be entirely subdued. The following cases will serve to illustrate the foregoing observations; and the last one in particular, exhibits a melancholy proof of the fatal effects of this disease when left to the efforts of Nature alone.

CASE I. Miss. H. H. aged 15, of a thin delicate habit of body, perceived about the 10th of last August several small spot upon her ankle, which she did not take particular notice of, supposing them to be flea bites; but as they increased both in size and number every day until the 15th, I was requested to examine them, and observed that the whole of her legs, from the ankle to the knee, were covered with petechial spots, some of them red, others purple, and a few had a brownish tinge; her general health was tolerably good, appetite unimpaired, tongue moist and clean, and except this appearance she had no marks of disease. An emetic was exhibited in the first instance, and afterwards a gentle laxative. The next day she took a strong decoction of bark joined with the muriatic acid, and I recommended her to take a glass of port wine twice a day. She pursued this plan for a week or ten days, when the spots disappeared and she regained her usual serenity.

On the 14th of September following, I was desired to visit her again, the spots having made their appearance a second time in greater numbers, and one upon her ankle of the size of a shilling had ulcerated, and now discharged a thick dark coloured ichor, which corroded the neighbouring skin; the edges were very ragged, and had the appearance of an ill conditioned ulcer; her legs swelled considerably

siderably towards night; her countenance was pale and languid, and she complained of a soreness in the throat. On inspecting the fauces, I observed that the tonsils were much swelled, and had a dark coloured appearance, as if they were distended with coagulated blood, and upon the surface of the left one was a small ulcer similar to that on the ankle; the pulse was natural, her appetite not so good as it had been, and she complained of a soreness when she swallowed her food. The tongue was by no means foul, and the heat of the skin perfectly temperate. The bark and a nourishing diet were again had recourse to; the throat was directed to be gargled with infusion of roses, and the sore was dressed with the ung. cer. and a roller applied over it. This plan was pursued till the 20th, when I was sorry to observe that the eruption had extended to the upper extremities; and the sore still continuing to spread, was this day dressed with straps of adhesive plaster, and ʒj. of the pulv. cinchon. was added to each draught. 21st. Her general health is much improved, the spots diminish in size and number, the wound is now healing rapidly; and in the course of a few days more, I had the satisfaction to see her restored to health.

CASE II. I was sent for on the 23d of August, 1800, to visit J. W. æt. 33, who was covered from head to foot with petechial spots; those on the neck, arms, and breast, were of a bright red, and those on the legs and feet of a purple colour; he had no fever, pain, or head ache, but was so extremely debilitated as to be almost incapable of rising up in his bed; he had a weak fluttering pulse, and his stomach was so irritable as to be incapable of taking or retaining any solid food. On enquiry, I found that these spots had been out upon him more or less for some time, and as he supposed they arose for want of physic, he took three ounces of Glauber salts, which reduced his strength in a few days surprizingly. I gave him a draught with the decoct. cinchon. and conf. aromat. every four hours, and allowed him a pint of port wine in the day, with panada, sago, and such light nourishment as his stomach would bear. By a perseverance in this plan, the spots in the course of a fortnight disappeared, but several weeks elapsed before he regained his health and strength.

CASE III. T. E. a farmer's boy, æt. 14, was observed for some weeks to go about his work with unusual lassitude; his countenance was pale and languid, and he often bled

at the nose ; but as his appetite was good, and he slept as usual, no particular notice was taken of him ; however, on the morning of the 14th of April, 1801, he was sent from home with a message, and as he was walking along, his nose began to bleed very profusely, and continued so without intermission till he returned home again ; but as an hæmorrhage from the nose is a very common occurrence in young people, little attention was paid to it till he became faint from the loss of blood. He was then put to bed, and while his friends were undressing him, his body was observed to be covered with petechial spots. On being interrogated as to their duration, he replied, that they had been so for several weeks. A friend of mine was then sent for, who saw him in the evening, but the patient was now convulsed, and in the course of a few hours expired. In this case the patient was evidently lost from neglect ; had proper medical assistance been called to him when the petechial spots first made their appearance, in all probability the lad's death might have been prevented.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

I AM obliged to defer my Remarks on the enclosed Case of Cancer to your next number but one ; and probably what I have now sent will occupy as much room as you can conveniently spare in your next.

The objections that have been made to Cullen's definitions of the terms stimulants and sedatives, and no one having thought it worth while to amend them, or to propose others in their stead, or to give their opinion of those proposed by me, (see No. 50, p. 348) have prevented my going on with the subject. I should be sorry for so interesting a topic to be left undecided. Should your Correspondents continue silent, I shall be under the necessity either of proceeding in my own way, or of withdrawing the request I made in your 50th number, p. 335.

I am, &c.

Manchester, October 12, 1803.

M. WARD.

An extraordinary Case of Cancer of the Breast which has lately been under my care, gave rise to the following observations.

THE CASE.

Eliz. Houchard, æt. 58, formerly of a robust healthy constitution, was admitted into the Infirmary, July 12, 1802, with a cancer of the right breast of a year's standing.

The tumour was large, moveable, painful, and slightly ulcerated in the centre: one of the axillary glands was also enlarged, hard, and uneasy.

The breast was in such a state as to admit of extirpation, and had the disease extended no farther, I should not have hesitated to have recommended the operation: it was however a proper case for consultation, the result of which was, an operation, provided the patient should be desirous of having it performed, after the arguments both for and against it had been laid before her.

Being informed it was doubtful what the event of an operation might be, but that it afforded the only chance of a cure, she requested it might be done, which was only prevented from taking place immediately by the continuance of thirst, pain in the loins, and other symptoms of fever, with which she was attacked soon after her admission; and by the time these were subdued, the disease had extended too far to admit of it.

Her spirits now failed, the pain increased, and extended to the arm: in a short time the breast adhered to the pectoral muscles, and began to put on a livid aspect; the superincumbent skin either ulcerated or excoriated, the discharge thin, copious, and extremely offensive.

These changes were soon followed by great debility *and other symptoms of typhus*; and when these had continued some time, she became so delirious and noisy as to make it necessary to remove her into the fever ward. This was about the middle of October,

For several weeks the breast had been growing more and more livid in its appearance, till at length it became completely gangrenous, and by degrees came away, leaving an ulcer of a healthy appearance about as large as a common sized tea saucer.

From that time a great and sudden amendment of all the symptoms was experienced; the fever and pain left her; from a state of the most extreme debility, she recovered her appetite, strength, and spirits surprizingly, and in less than a month returned to the cancer ward in the Infirmary.

(No. 57.)

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(Improbable as such an event was, she now began to flatter herself with the hope of getting well, which she retained; so entirely did she feel herself relieved in the part originally affected, till within a few days of her death.)

The change in her complexion was very remarkable; and was noticed with surprize by others as well as myself both at that time and in the subsequent part of her illness. The "pale leaden tinge," with which it had been affected, vanished, and her countenance became clear and healthy; the sore looked well; the discharge, from being extremely copious and intolerably offensive, became moderate in quantity, and nearly free from smell; the healing process went on so rapidly, that the ulcer, which after the separation of the mortified parts was at least six inches in diameter, was reduced in about a month to one third of that size; it then remained stationary till the middle of December, when it began to put on a more unfavourable appearance: the newly formed skin began to grow uneven and callous, some parts being rather more prominent than others, and yielding a serous or lymph-like discharge: the axillary gland, which had been easy some time, again became painful, as did also the shoulder and upper part of the arm of the affected side, which on examination were found to be rather swelled; yet her general health did not decline so rapidly as might have been expected.

At length, the whole arm became so much swelled as to render it necessary for her to be almost constantly in a horizontal posture; and independent of the loss of appetite and strength which the want of exercise occasioned, she suffered more pain and inconvenience from this, (reckoning from the time of its attack) than from all her other ailments put together.*

Under all these disadvantages, (to which must be added the increasing discharge from the ulcer on her chest, and a difficulty of breath, with which she was at times affected, from a sense of stricture in the right hypochondrium, during the last two months of her life) she continued till the 2d of May, 1803, having experienced, upon the whole, during the last six months of her confinement, a much greater

* The progress of the swelling was from above downwards, and the limb was œdematous between the wrist and elbow, but not above. The swelling extended to the scapula

greater degree of health and spirits as well as freedom from pain, than is usual in the last stage of this deplorable malady.

TREATMENT.

How far the method of treatment adopted, assisted in producing the gangrene and consequent separation of the breast is uncertain; but, doubtless, that event happening was the means of prolonging the patient's life, and to it likewise must be attributed the comparative ease which she afterwards enjoyed.

The operation was relinquished towards the end of August, and I have already described the state of the diseased parts, and of the patient's general health at that time, which were such as to render it highly improbable she could continue long. I then thought it a fair case for experiment; and though it was evidently an incurable one, it was not the less necessary, if any useful inference were to be drawn from the plan pursued, that the treatment should be conformable to rational indications of cure. With this view it appeared requisite, 1st. That the diseased parts should be separated from the sound; (it being impossible to restore their natural actions). 2dly, That the powers of life should be supported.

In pursuing these indications, my first object was, to guard against the necessity of giving frequent and large doses of opium, which would have weakened those powers (namely, the natural, vital, and animal functions), and consequently have retarded instead of promoting what was intended; she was therefore confined to an anodyne at night, (consisting of a grain or a grain and a half of opium) unless when the pain was more severe than common, when the dose was allowed to be repeated once or twice a day; and the object was so far accomplished, that at no time, except in the last week of her confinement, did she take more than four grains and a half in twenty-four hours; in general not more than half that quantity, frequently not more than a fourth; and it relieved her pain, whether situated in the breast, the axilla, or the arm, (when refreshing sleep usually followed) so effectually, and seemed so harmless in other respects, (castor oil or rhubarb being given occasionally, and wine in moderate quantities, either in gruel or negus, sometimes alone, to counteract its sedative properties) that I had no inducement for trying the anodyne effects of the hyoscyamus as a substitute for the opium, as I intended.

With similar views, either diluted nitrous acid, an infusion of chamomile with cinnamon water; compound infusion of gentian; an infusion, or some other preparation of bark, with cinnamon, steel, extract of gentian, &c. was administered throughout, as circumstances indicated. Exercise was also enjoined as far as it could be borne, and the warm bath once or twice a week; but the fears of the patient prevented her from using the latter.

To the parts affected, such applications were made use of as I judged likely to ease pain, such as the ol. camph. applied three times a day for half an hour at a time to the breast, shoulder, and arm pit, and as far round each of them as the pain extended; and ung. cerus. acet. spread on linen as often to the breast, for the purpose of weakening, by its sedative power on the different systems of vessels, the vital principle in that part, and thereby of forwarding the process of separation; for I was afraid of applying caustics to such an extent as would have been required for that purpose.

This was the beginning of September, and about the middle of that month the pain was more severe in the surrounding integuments than in the breast itself, and continued so, at times, as long as she lived. And this was relieved in some degree, for a time, by the tinct. nicot. applied as an embrocation; but it soon lost its power.

As soon as a disposition to gangrene became evident, the bark in substance was given, at short intervals, and was continued in this form as long as any of the mortified parts remained, and some time longer; the quantity of wine was increased to a pint and a half, or two pints in twenty-four hours; an anodyne fomentation, and an ointment consisting of opium, camphire and hog's lard, in different proportions, were applied three times a day. Barley water acidulated, was ordered for common drink, to which wine was sometimes added, and a grain and a half of opium, two or three times in the twenty-four hours. In short, the constitutional treatment during this time was the same as if the mortification had arisen from any other cause.

When it was stopped, a decoction of oak bark with camphorated spirits of wine was ordered as a lotion, and powdered bark to be sprinkled *plentifully* upon the sphacelated parts, two or three times a day, till the whole of the offending matter had been either cut or thrown off.

The parts in the circumference were soonest cleared, and there prepared chalk was applied, instead of the bark, till the whole surface looked clean; after which the ulcer
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went on in filling up and contracting rapidly in all directions, as has been described.

To promote this end, various applications were made use of; the chief of which were, a strong decoction or infusion of oak bark,* at first with, afterwards without camphorated spirit of wine;† adhesive plasters, chalk or calamine prepared, cerate of prepared calamine, powdered bark, rhubarb, &c. &c.

When the cicatrix began to ulcerate, powdered savine was applied to the prominent parts, but without effect; pure kali was then applied in its stead, but as it operated merely as a stimulant, without destroying the life of the part, it was discontinued; and from this time the only dressings made use of were, the oak bark lotion, powdered bark, rhubarb, or calamine.‡

About the same time the enlarged axillary gland, which had been quiet so long, again became painful, and contained a small quantity of matter deep seated; and finding it every day grow larger, more painful, and the discolouration of the skin more intense, I ventured to apply pure kali, so as to produce a small eschar; the pain immediately ceased, the swelling and redness subsided; a poultice was then applied till the slough came away, leaving a deep cavity which discharged a curdy matter in small quantity for some time, after which it filled up, skinned over, and continued easy three or four weeks, and then gradually returned to its former state.

Emboldened by the success of the first experiment, I applied a caustic somewhat larger than before, with the same favourable result, and had occasion to repeat it three or four times, and always with advantage. The eschar was never larger than a shilling.

The disease being by these means interrupted in its progress in the breast and axilla, seemed to fall with more violence

* A decoction was first used, made by boiling two ounces of oak bark in three pints of water to two pints; and afterwards an infusion, made by infusing four ounces of the former four hours in three pints of boiling water. Towards the last it was made stronger still, viz. four ounces to two pints.

† As long as the camphorated spirit formed a part of the lotion, the sore was flabby and bled frequently; and from the time the infusion of oak bark was used alone, no hæmorrhage occurred, except the part was rubbed or bruised, and it was then very slight and soon ceased.

‡ Perhaps it is unnecessary to mention that warm water was used every morning to the ulcerated parts, and soap occasionally, and that a flannel roller was regularly applied to the arm, from the time it began to swell.

violence upon the lymphatics of the arm, producing the swelling and other effects mentioned above; to alleviate which the following means were made use of: 1st. the vapour bath applied daily; 2d. artificial sea water, with two or three times the usual quantity of salts; 3d. mercurial friction; 4th. dry friction with the hand and flesh brush; 5th. adhesive plasters applied tight from the hand to the shoulder. All these except the 3d, were of use, especially the dry friction and adhesive plasters, which afforded great relief, and continued to do so to the last.

[To be continued.]

Report of Diseases in the Parish Workhouse of Sunderland, from the 15th of August to the 15th of September, under the Care of the attendant Surgeon.

ACUTE DISEASES.		CHRONIC DISEASES.		CHIRURGICAL DISEASES.	
Aphonia	2	Adephagia	1	Abcess axillæ	1
Angina tonsillaris	1	Adynamia	1	—— Ischii	1
Erysipelas	1	Amaurosis	3	Adustum	2
Febris intermittens	1	Amentia congenita	1	Dislocatio femoris	1
Typhus	5	—— acquisita	1	Fistula lachrymalis	1
		Asthma	3	Fractura Radii	1
		Dysecœa	3	—— Femoris	1
		Dyspepsia	3	Hernia	3
		Elephantiasis	1	Hydrocele	1
		Epilepsy	1	Ulcera Cruris	5
		Furfuratio	1	—— Linguae	1
		Herpes	2	INFANTILE DISEASES.	
		Hepatitis	1	Atrophia	2
		Hydrothorax	1	Dentition	3
		Hypochondriasis	3	Spinæ incurvatio	1
		Icterus	1	Schrophula	2
		Ophthalmia	3	Vermes	5
		Paralysis	2		—
		Phthisis	3		83

In a parish work-house, where a considerable number of persons are maintained, a variety of diseases must naturally exist. In this, there have sometimes been near 300 persons,

persons. When the epidemic catarrh prevailed, out of 280 that were then in the house, not more than forty-two were attacked, none of whom died; in three it terminated in *phthisis*; not many were affected with *typhus*, and such as were, recovered very fast. Several children were in the months of June, July, and August, seized with the measles and scarlatina; in these, however, the symptoms were so mild as to require but little medicine. Four or five cases of *typhus* have occurred within the period we have named, but three are already recovered, and the rest approaching to a state of convalescence; this last disease did not appear to be contagious, nor have any of its symptoms proved alarming; they gave way to the usual treatment, with the assistance of the decoct. cort. salicis latif. which on the remission of the febrile symptoms produced a speedy recovery.

The number at present in the house is something more than 200; and although far above one-third, as appears by this list, are more or less in a state of disease, yet when we reflect that work-houses are the usual asylums for the infant race, the aged and infirm, and that few in the middle period of life, of the male sex in particular (unless labouring under disease) are inhabitants of such receptacles, it will appear in the present instance, that this house cannot be properly deemed unhealthy. Of the acute diseases not more than thirteen occur, even including dentition. More than half of the chronic may be considered as incurable, as they are attached to the aged and infirm, while the remainder may be deemed the result of certain primary affections thus degenerated. Of the surgical diseases, eighteen in number, five of which are accidental, nearly the whole may be considered as capable of being cured, if we except *herniæ*. The infantile complaints are very few, compared to the number of children contained in the house. Among the best means of preserving health, and checking contagion, may be considered those of having the fewest persons in one room and one bed, using cleanliness, white-washing the walls with lime, and free ventilation.

The two first I have not been able to enforce, although that of cleanliness and white-washing are not altogether neglected; from the nature of the building and its situation admitting of a free ventilation, I am of opinion, we are to ascribe its being not so much affected with contagious diseases as might be expected.

Sunderland, Sept. 25,
1883.

G. WILKINSON.

*Account of Diseases in an Eastern District of London,
from September 20, to October 20, 1803.*

ACUTE DISEASES.			
Typhus - - - - -	10	Anasarca - - - - -	4
Cholera - - - - -	14	Amenorrhœa - - - - -	9
Dysentery - - - - -	9	Leucorrhœa - - - - -	11
Pneumonia - - - - -	2	Menorrhagia - - - - -	4
Angina - - - - -	2	Dyspepsia - - - - -	10
Variola - - - - -	1	Rheumatismus Chronicus	12
CHRONIC DISEASES.		PUERPERAL DISEASES.	
Tussis - - - - -	15	Enteritis - - - - -	4
Dyspnœa - - - - -	9	Ephamera - - - - -	7
Tussis cum Dyspnœa -	9	Menorrhagia Lochialis -	5
Hæmoptysis - - - - -	2	Mastodynia - - - - -	6
Hepatitis Chronica - -	1	INFANTILE DISEASES.	
Enterodynia - - - - -	7	Aphthæ - - - - -	4
Diarrhœa - - - - -	15	Convulsio - - - - -	2
Hæmorrhoids - - - - -	3	Vermes - - - - -	4
Gastrodynia - - - - -	8	Diarrhœa - - - - -	7

The present state of disease is very similar to that which was taken notice of in our last Report. As we advance farther into the autumnal season, we may expect that the number of instances of those complaints which are peculiar to that period will increase. Intestinal affections prevail to a considerable degree. Diarrhœa still occurs very frequently, and connects itself very much with other complaints. Cholera and Dysentery are now beginning to form a large proportion of the catalogue of diseases. Of those referred to in the preceding list, not any one terminated fatally.

Feyers of the typhus kind are becoming very frequent, and the symptoms attending them have, in several instances, been severe and threatening. In one case, which terminated fatally, the internal fauces exhibited a very dark appearance, which spread also over the lips and the lower part of the nose. A florid eruption on the nose or lips, attended with soreness, or small fissures at the tip or on the side of the tongue, sometimes appear in fevers of this kind, and are followed by a remission of symptoms; but, in the instance referred to, a dark coloured and gangrenous appearance of the sore about the nose, lips, and chin, conspired with other symptoms to form an unfavourable prognosis, and in a few days the patient died.

CRITICAL ANALYSIS
OF THE
RECENT PUBLICATIONS
ON THE
DIFFERENT BRANCHES OF PHYSIC, SURGERY,
AND MEDICAL PHILOSOPHY.

Facts and Observations concerning the Prevention and Cure of Scarlet Fever, with some Remarks on the Origin of Acute Contagions in general. By W. BLACKBURNE, M. D. Octavo, pp. 170. London, 1803.

THE principal object of this philanthropic writer, as far as relates to the scarlet fever, is to teach and recommend the means of preventing its spreading in schools and families.

“ I conceive it, says he, to be my duty to communicate what information I have acquired, particularly with regard to the means of checking its progress; and, to enforce the necessity of attempting its total extinction, of which, as a specific contagion, it is completely capable. From these motives, the following result of my experience is made public.

“ But it appears also, that the method of curing scarlet fever is not so consistent, or perfectly established, as the nature of *such a* disorder demands. So weighty and numerous are the exceptions to the general laws and precepts of medicine, when applied to individual cases, and so pernicious has been the indiscriminate adoption of precise rules in particular morbid affections, that the utmost caution is required in delivering them. Under this impression, a *General Outline only of the Treatment of Scarlet Fever* is here presented, ready to be filled up with deeper or lighter shades, according to the more acute perception and superior judgment of future observers.

“ The history of its symptoms has been so faithfully executed by Dr. Withering, in his *Treatise on Scarlet Fever*; and by the late venerable Dr. Heberden, in his *Commentaries*, that it would be superfluous to detail them here.

Dr. Blackburne commences his work with a few general instructions and observations respecting the steps which should always be taken on the first appearance of this or any similar contagious disease in a public seminary or private family. As these rules appear to us judicious and important, we shall present our Readers with an abstract from them.

“ As symptoms of indisposition do not immediately result from infection in a general way, no examination takes place with respect to the number of those who have been tainted when scarlet fever shows

shows itself in a seminary; but as soon as the disease appears in one or more of the children, all are immediately dispersed. Those in whom the infection is latent, and to be afterwards produced, convey it to their respective families, where it seizes a less or a greater number of the individuals composing each family, particularly children and servants. By means of the latter, it is chiefly propagated through the circle of their acquaintance, and introduced into other families, and the disease is thus diffused through society without check or reserve. When the alarm is given in a numerous private family, a similar course is too often pursued; the members of it are usually sent away, inconsiderately, among their friends and acquaintance, and often to school, before it can be discovered whether the seeds of disease are not already sown in some of the fugitives. Several may even be infected from the same origin, in each of whom the disorder may appear at different intervals of time. But a very frequent and almost unsuspected source of infection, arises from the return of convalescents resuming the ordinary intercourse with the members of their family, *before* they have ceased to disseminate contagion. The precise time, in which the breath of a person who has passed through an infectious disease becomes incapable of conveying contagion, is by no means determined. The public are not sufficiently on their guard, with respect to this important fact. If the disease do not actually appear on the infected, they are apt to conclude, that a person in apparent good health cannot communicate disease. A very different conclusion will be drawn from the accounts I am about to recite in the sequel. And I feel it my duty most earnestly to recommend the utmost precaution and vigilance on these momentous points, universally, to the conductors of education and the heads of families.

“ All masters and mistresses of boarding seminaries ought, for their own sake, to be provided with one or more separate apartments, in proportion to the size of their establishment, for the reception of invalids. These ought to be so contrived, that the communication between the sick rooms and the rest of the house may be easily, completely, and speedily cut off at any time. If the establishment be too contracted to admit of such appendages under the same roof, a lodging should always be kept in view in the neighbourhood; the owner of which, being instructed in the methods of preventing the spread of contagion, and suitably rewarded, might have apartments in readiness whenever occasion demanded. There are few institutions, however humble, which may not practise this simple mode of prevention; and none ought to be suffered, which do not fairly and fully comply with it. These regulations become daily more momentous, in the vicinity of London especially, as the great increase of the population, and the extension of its buildings, render public seminaries beyond the precincts of its impure atmosphere absolutely essential to the preservation of the rising generation.

“ When

“ When scarlet fever manifests itself in one subject, the first precaution is to separate that subject from the rest without delay. The next very essential one is, to subdue unnecessary alarm and excessive fear; for as this disease is not communicable till the second or third day after its admission into any constitution, and previous or present fever almost always exists when it is admitted; and if it be made a general rule in all schools, to separate febrile patients of every description, according to Dr. Haygarth’s recommendation; there will be time sufficient to apprise the children’s friends of the accident, and to adopt that plan which shall most readily and most certainly extinguish the infection in the seminary, and also most effectually prevent its diffusion among society at large. In the performance of this great and indispensable duty, the parent and guardian must co-operate fully with the instructor; the interests, as well as the satisfaction of both, are deeply implicated in its due execution, and both will be amply rewarded for their mutual and best exertions by the most beneficial result.

“ Where the scholars are numerous, and the extent and disposition of the premises admit of it, the best plan, both for parents, teachers, and the public, is *not* to disperse the school. Having ascertained and cut off the source of infection; having separated the originally tainted, as soon as they begin to sicken, and while they yet remain incapable of imparting disease; having disposed of them in proper apartments, and strictly enforced the rules of prevention; the evil may be crushed in its infancy. The extent and magnitude of the mischief will thus be accurately measured, and totally obviated. But if the accommodations of the establishment be too limited for the complete execution of this scheme, or parents be unwilling to commit their offspring to any other than their own inspection in the time of illness, it is a sacred duty imposed on them, not to admit even a suspected child, much less a diseased one, into family intercourse with themselves, their other children, or their servants. A separate apartment, with suitable furniture, where circumstances allow of such conveniences, ought to be always in readiness, or in a state to be made ready, on the shortest notice, for accidental sickness. Here a strict quarantine ought to be performed, whether the subject be suspected or convalescent, the period of which may be regulated, partly by what is already known on the subject, and finally determined by future observation and the result of aggregated facts, which hitherto have not been sought after with that zeal and diligence which their great importance demands. If the child be really infected, immediate separation, with the regimen essentially requisite to insure prevention, ought to be practised with the utmost strictness and precision. The rules of prevention being of difficult execution in large private families having numerous attendants, and the multiplication of the chances of spreading infection by removing young persons from school to their own home, are strong reasons why they should remain at school. One great mean of propagating contagion by these

these removals is the custom of conveying infected persons in public vehicles, stage coaches, &c. This error, though committed daily, proceeds more from inattention and ignorance than any other motive; but when the impropriety and mischief of such a practice, and its highly pernicious consequences, are universally known and published, every individual ought conscientiously to abstain from these modes of imparting disease; and this resolution being once undeviatingly acted upon, public confidence would be fully established, all excessive alarms on the score of infection might safely subside, and even reasonable precaution might become less troublesome, and eventually be rendered unnecessary."

After Dr. B. has given a series of facts to serve as a foundation for his inferences; and made a number of valuable observations on the medical treatment of *Scarlatina Anginosa*, he proceeds "to inquire, by what variety of modes the infection of scarlatina may be introduced into the human body."

These he reduces to three, viz. 1st. Simple contact alone; 2d. Inoculation; 3d. Inhalation.

The first he thinks is very doubtful, and adduces sufficient arguments to establish the opinion. He even goes so far as to infer "that a degree of contact, which medical attention to, and nursing of the sick, renders necessary, is perfectly innocuous."

The second, or inoculation, very certainly communicates the specific disease when properly performed.

The third is that to which the Author appears desirous of calling the attention of the Profession in particular, and on which he founds his peculiar opinions respecting the origin of acute contagious diseases.

"Every species of contagion being suppressible by the temporary restriction of personal and intermediate communication, it follows, that the same restrictions are as practicable in all instances as in any single example. It cannot be denied, therefore, that the means of suspending the progress, or of locally annihilating all contagions, are as much in our power as the extinction of one.

"In the execution of a project so comprehensive as that which involves the suppression of every contagion, many obstacles will undoubtedly arise, which may, at first sight, appear insuperable. Similar objections have ever been opposed to every effort to meliorate the condition of man; but they have been most frequently overcome. Their opposition, on the present occasion, will not be more obstinate in an extended than in the limited plan, which is about to be put into execution. Great and numerous as the difficulties appear to be, they may all be included under the ignorance, the self-interest, and the indolence of human creatures. Ignorance on a subject of such high importance need not be suffered to remain long, where the means of information are so readily diffused as at the present era, and the arm of the law can never be more properly called forth to lend its aid, than where selfishness, indolence, or insensibility to moral inducements are opposed to measures of
undoubted

undoubted public utility. No infringement on the genuine liberties of the subject is, on this occasion, proposed. In the instance of quarantine, men are obliged by law, to submit to restraints, which may transiently injure their interests, and interrupt, for a time, their social enjoyments; the more varied and extensive application of these laws is all that is required.

“ A more forcible objection, however, and of a different character from the foregoing, remains to be obviated. Every species of infection must have had an origin. The same cause or causes which gave birth to a given contagious disease, in one or more individuals who first experienced it, will operate again under similar circumstances, and reproduce the same disease occasionally, notwithstanding the most successful attempts to extirpate it at any particular time. Allowing this objection its utmost force, the advantages will be infinitely great where prevention is instantly adopted, whenever such examples of original contagion occur, compared with the consequences which ensue, where no precautions are used. In support of this argument, a striking instance of the advantages of voluntary seclusion appears in its securing the health of the merchants of the Levant, in their factories, while the plague is destroying numbers all around them, no measures being taken by the people of the country to prevent its propagation.

“ But the argument in favour of universal prevention becomes irrefragable, if the primary and principal sources of contagion can be discovered, and are then capable of being obviated or removed. With this view, a closer inspection into the origin of acute contagions in general may be instituted with advantage, which shall now be cursorily attempted, leaving to more able hands the completion of a research, than which none involves more extensively or more closely the dearest interests of our fellow creatures.

“ The origin of contagious diseases has been commonly deemed so obscure, that any attempt to elucidate the subject would appear more curious than useful, more theoretical than practical, could it not be proved, that a more accurate acquaintance with infectious sources would most essentially promote that extensive plan for the extirpation of this class of diseases, which I am so anxious to recommend.

“ We shall obtain the clearest view of our subject, by dividing all infectious diseases into the acute and the chronic. The first head alone shall occupy our attention at present, and under it are comprehended the *plague*, or *bubony* fever; the *variolous*, *morbillous*, *scarlet*, and *yellow* fevers; and the *jail*, *hospital*, *putrid*, *low*, *nervous*, *malignant*, or *typhus* fever.

“ In taking this enlarged survey of every description of infectious fever, I shall endeavour to establish the following positions on as solid a foundation as the difficult nature of the inquiry will permit, and apply them as closely as possible to the main point, which is the universal suppression of acute contagions.

“ 1st. *Certain exhalations, or marsh miasmata, as they are usu-*

ally termed, have the peculiar effect of inducing fever on human bodies, exposed, in certain conditions, to their influence. From their denomination it is too commonly understood, that marshes are the only sources whence these exhalations arise. But they also proceed from moist earth, slime, mire, or mud, in a great variety of situations and climates, of inhabited as well as unfrequented and uncultivated tracts of country, in almost every quarter of the globe. They are more powerful, concentrated, and virulent in hot climates, and in hot seasons, than in temperate ones. And it appears that the types, or periodical evolutions of the fever which they excite, are chiefly governed by the degrees of concentration, which these exhalations possess. The type being more continued, and less intermittent or remittent, in proportion to the power of the exhalation; *animal febrile effluvia, cæteris paribus*, produce fever similar in type, in degree, and violence, to the strongest paludal exhalations.

This first position constitutes the foundation of our author's theory, and therefore he illustrates and confirms it at considerable length; but as we think most of our readers will agree with him, we pass over his proofs.

His second position is, "*The effluvia from febrile animal bodies, and the exhalations from marshes, swamps, and mud, are gases of a peculiar composition, of which hydrogen, or the principle of humidity, forms an essential constituent part.*" They do not appear to be the mere result of animal or vegetable putrefaction, although putrescent matter is most generally present, as requisite to their formation.

"Contagious pyrexial gas is not yet proved to be the result of simple deoxygenated human effluvia, unaided by, or uncompounded with, either febrile, or paludous, or limose gas.

"Although the precise composition of pyrexial gases, whether contagious, limose, or paludous, has not been discovered, yet, from a great number of facts, it is evident, that an aqueous constituent is essential to the composition of both. In the citations already extracted, to prove the effect of marsh miasmata, it has been amply demonstrated, that dampness, moisture, or humidity, is always an indispensable ingredient in the exhalations which induce fever. In the following passages the same truth is fully maintained. But another very important truth is also now, I believe, for the first time, brought to light, that, by depriving the pyrexial gases of their aqueous or hydrogenous principle, THEY ARE, FOR THE TIME, ANNIHILATED. THAT, UPON THIS SOLE PRINCIPLE, WE ARE ENABLED TO ACCOUNT FOR THE WELL KNOWN FACT, THAT EXTREME ADDITIONS OR ABSTRACTIONS OF CALORIC OR HEAT, ARREST THE PROGRESS, OR DESTROY THE EXISTENCE OF ALL EPIDEMIC AND CONTAGIOUS DISEASES,

"It will, in the next place, be requisite to adduce the evidence by which these circumstances, equal in magnitude and simplicity, are substantiated."

For

For most of this evidence we must refer our readers to the work itself; but the following passages we think too interesting to be omitted.

“ There are no facts with which I am acquainted that prove accumulated human effluvia, from healthy bodies, uncompounded with limose or paludous gas, to be capable of generating fever. On the contrary, the following abridged account strongly militates against such an occurrence.

“ A number of poor children, male and female, were removed in September, 1782, from Wimbledon to a large house in King-street, Golden-square. They continued in good health till the 8th of October. From this time a number of girls were seized in succession, at different intervals, with sickness, vomiting, sometimes purging, excruciating pain in the region of the stomach and in the back, which was soon followed by violent head-ach, delirium, and convulsions; they were in general constive. The symptoms were relieved by purgatives, but returned again each time with more violence.

‘ During the remission of the disease, they used to lie quiet during an hour, or even two hours, then suddenly to start up as before, screaming under the most afflictive torture, &c. They all agreed that, the fit approaching, their first sensation of pain was in the stomach; which having abated, the head, particularly the back part of it, was attacked in like manner; and it appeared, that a total perversion of the understanding very soon followed. None of them had any degree of fever, &c. It was observable, that their paroxysms were always most severe after sleep. The disease was shown only on certain of the girls, who slept in a particular apartment. It contained ten beds, in which it was intended that eighteen girls, two in a bed, and a female servant singly, should sleep; but being a favourite room, on account of its warmth, it was generally crowded at night by a much greater number than its just complement. That as much space as possible might be made for beds, the chimney had been stopped up with bricks, and it had been the custom of the servant at night to keep the door shut, and to close the window shutters, that as little fresh air as possible might have access, - - - From the time of the commencement of the illness, three candles and a lamp of oil had been used during the night; but they were hardly of any service, giving a glimmering light, and frequently almost extinguished.’

“ From the following statement it evidently appears, that the origin and cause of this disease consisted in an accumulation of human effluvia, uncombined with any other morbid gas, particularly pyrexial. For Sir George proceeds:

‘ It was likewise remarkable, that in a chamber adjoining, of the same dimensions, painted at the same time, in which eighteen girls slept in nine beds, (which chamber differed from the other only in having an open chimney, and not being so closely shut up during

' during the night,) none of the children had a symptom of the disease. Another striking fact was, that a female servant, who had passed one night only in attendance on the children in the chamber of the sick, was on the following morning attacked by the same pain, delirium, convulsions, &c.' Medical Transact. Vol. iii. p. 113.

The third position contains Dr. B's. Theory of the origin of acute contagions, viz.

" 3dly. *The greatest number, if not all acute contagions, originate, in the first instance, from the exhalations or gases above specified: but they assume the property of propagating diseases similar to themselves, only under peculiar circumstances, which occasion their conversion from simple into contagious fever. The cause of this conversion is the exposure to accumulated FEBRILIZED animal effluvia.*

" The conversion of simple into contagious fevers is a fact established on the most satisfactory and undoubted testimony, part of which I shall now present to my reader. The same facts, which ascertain the above mentioned conversion, also demonstrate the cause to be that which I have just stated.

The evidence in support of this theory, is principally collected from the writings of those who have witnessed the springing up of contagious fevers in hot climates. The following passage will shew Dr. B's manner of applying his theory to the origin of particular diseases.

" That state of the human body, termed febrile, however various in its degrees, seems constantly associated with those contagious diseases which I have termed acute. But two circumstances are essential to formation of fever, a peculiar condition of the body, and its exposure to certain external circumstances, commonly styled remote and occasional causes. It will not be denied, that the condition of the body, at the time when it is attacked with fever, must greatly influence or vary the form of that disease which is about to become contagious, while the febrile actions, themselves, and the remote and proximate causes of those actions, may retain an uniform and identical character. The causes which determine one contagion to assume a pustular form, as small-pox; another, a bubony, as the plague; a third, erysipelatous, as scarlet fever, &c. are subjects of important inquiry, which have hitherto been very insufficiently investigated. I shall slightly touch upon them at present, for the sake of illustration, and of exciting discussion, rather than from any ability to form positive conclusions; but more especially, that by attempting to separate what is incidental from what is permanent, in the character of acute contagions, our views of these important diseases may be more clear and correct, their causes rendered less mysterious and obscure, the means of their prevention or their treatment more evident, more readily understood, and of more easy adoption. I shall select the small-pox, as my first example. From Mr. Denon's travels in Egypt, we find, in the following quotation, a very plausible origi

origin of the small-pox, though it is not introduced by him with any view to such an application.

‘ The heat had become insupportable ; the west wind oppressed us, caused bleedings of the nose, and painful eruptions, which covered, alternately, all parts of the body, dried and hardened the skin, and impeded perspiration. The rays of the sun, the principal, perhaps the sole cause of these evils, raised on every pore a pustule, similar to the small pox, which became intolerable, when, in lying down, it was necessary to rest on these points.’ Denon, vol. II. p. 179. Aikin’s translation.

“ We have here, in my opinion, says Dr. B. the origin, outline, and external form of small-pox, exactly depicted, before its conversion into a contagious pest.

“ A person under this pustular affection, being exposed to the causes which produce infectious fever in him, would become capable of communicating a disease named small-pox, to a second person receiving the effluvia of his body ; and a third person being inoculated with matter taken from his pustules in a due state of maturity, would also be infected with the same disease. We see clearly, that the local affection or external form of a new disease may be easily acquired on exposure to new and peculiar external impressions ; but it is extremely wonderful, that a new disease should, in the second instance of its existence, as well as in every future example, retain the precise form in which it originally appeared on the person first infected by it ; such, however, is the fact. The small-pox has retained its original form, in passing through millions of victims, and under all the varieties of climate where it has appeared. If this origin of the small-pox be entitled to any degree of credibility or likelihood, its pustular form is proved to be adventitious, while the attendant febrile actions will be found on comparison to bear the typhous stamp and character of other acute contagions, and most probably may claim a remote cause, similar or identical with theirs.

“ Pursuing the same tract of investigation, we shall probably discover why the plague assumes a *bubonary* form. The excessive heat of the climate in Egypt, and its propinquity, in many parts, to sandy deserts, and the exposure of its inhabitants, and strangers or travellers, to the hot parching winds, which blow over them at certain seasons of the year, induce a peculiarly dry, irritable state of skin, and impeded perspiration. When perspiration is impeded, increased absorption takes place, and the lymphatic glands become distended and irritable. The cutis, deprived of its moisture, becomes parched, and susceptible of that inflammation which may be styled carbuncular, speedily terminating in mortification. *The intimate connection between the skin and lymphatic glands is well known, by various morbid affections, to exist in every climate.* An Egyptian, or any individual, being exposed to paludal gas, and attacked with fever, in this irritable state of skin and lymphatic glands, or when both are actually diseased, will be said to suffer the plague in his

own person; and if subjected to the circumstances which generally render fevers contagious, will communicate a disease of a specific form to a second individual receiving his effluvia."

Hey's Practical Observations on Surgery,

(Concluded from the last Number.)

The fourth chapter of this valuable collection contains the history of several cases of a disease connected with the state of the blood-vessels, to which the author has given the name of Fungus Hæmatodes. The disease is a tumour coming on rather suddenly, generally, though not always, after some slight injury near the part affected, and increasing to an indefinite and often very enormous magnitude. The substance of the tumour is a soft fungus, somewhat resembling the brain in texture, and always affording a profuse hæmorrhage when broken or in any way divided. It appears to be partially organized, and uniformly vascular, but without any contractile power in the channels through which the blood oozes out. The seat is various, mostly contiguous to some muscles of the body, or their aponeurotic expansions; and when upon the breast, its fungous nature, and rapid growth, have often caused it to be mistaken for cancer. Mr. H. has found it always absolutely incurable and fatal except the suffering part be removed by amputation; and even in using this desperate remedy, the utmost care must be taken not to leave any portion of the disease, which would soon reduce the sound stump to the same morbid condition. The appearance which this disease assumes is better described by the author's own words.

"The tumour contained a very large quantity of a substance not much unlike coagulated blood; but more nearly resembling the medullary part of the brain, in its consistence and oily nature. It was of a variegated reddish colour, in some parts approaching to white; and, as blood issued from every part of it when bruised, I judged it to be uniformly organized. This mass was partly diffused through the circumjacent parts in innumerable pouches, to which it adhered; and was partly contained in a large sac of an aponeurotic texture. There was a great and universal effusion of blood from the internal surface of the sac, and from the pouches containing this morbid mass."

One of the cases here described, which terminated fatally, is illustrated by a very striking plate.

Dislocation is the subject of the next chapter; a species of accident, the treatment of which is sometimes attended with much difficulty, and not unfrequently resists the most powerful and the best directed means of reduction.

The following case shews much judgement in the operator, and the great command of strength possessed by one of the old methods of extension.

"September

" September 22d; 1775, a middle-aged man from Aldborough, near Boroughbridge, was admitted a patient of the General Infirmary, on account of a dislocation of the os humeri, at the shoulder, which had happened a month before his admission. The head of the bone lay behind the thick part of the pectoral muscle, and below the coracoid process of the scapula. Some attempts had been made to reduce the bone immediately after the accident, but without success.

" After he had lain in the warm bath about twenty minutes, the following methods were used to effect the reduction: After the arm was properly defended, straps, to which cords were affixed, were fastened by buckles upon the lower part, and he was drawn up gently from the ground by the help of pulleys. Repeated trials by this method produced no sensible effect. We then used Freke's improved Ambi, and at one trial the bone suddenly advanced as if a reduction had taken place; but repeated efforts in this method had not the desired effect. We next made use of the methods recommended by Dr. Kirkland and Mr. White, placing a towel round the operator's neck, and holding back the inferior part of the scapula by means of a roller covered with cloths. Mr. Lucas and Mr. Jones afterwards tried to reduce the bone by the heel in the axilla, and Mr. Lucas perceived a noise during one effort, as if the bone had returned to its place. While the last method was in use, it occurred to me, that extension made in a direction parallel to that of the body was not likely to succeed, while the head of the bone lay so deeply sunk, and behind the pectoral muscle. I therefore advised that one person should extend the arm at right angles to the body, by the hold of the fore-arm, placing his foot against the side of the patient's thorax. In this way, the person making the extension would not only have a firm support, but would also be enabled to repress the lower part of the scapula by his heel placed against it. That during this extension, another person, lying by the side of the patient, should place his heel against the upper part of the os humeri, as near to its head as possible, and should push it in a direction parallel to that of the patient's body. By this method, the bone altered its situation with such a noise as is usually heard in reductions, and we concluded, that the head of the bone had re-entered the socket; but when the arm was brought close to the patient's side, we found that the head of the bone was still in the axilla. This appearance of success encouraged us, however, to repeat the operation, but the event was the same. We now imagined, that some portion of the capsular ligament might be folded so as to be intercepted between the head of the bone and the glenoid cavity, into which we judged the bone to have been twice brought. On this supposition, after making the reduction the third time, the os humeri was moved in various directions, sometimes upon its own axis, sometimes upwards and downwards, before we attempted to bring the arm towards the patient's side. Also, while the extension was continued, a flattened ball of tow

was thrust up into the axilla by the heel, to prevent the head of the bone from retiring again into the axilla; the arm was then brought into contact with the patient's side, the extension being continued, though in a different direction, and the heel being gradually withdrawn as the arm approached the side. By these means the reduction was completed and confirmed. As the tendency to dislocation was so great, the arm was kept for a few days in contact with the side by a piece of girth web put round the arm and the body of the patient, who was dismissed cured."

Observations on different species of injuries of the larger joints, form the subjects of some of the succeeding chapters. They bear the same marks of accurate observation and good surgery.

The latter part of this volume consists of short observations on a variety of cases that are constantly occurring to the surgeon; some of them neither new nor of great moment; but the author invariably gives the result of his personal experience; and the perusal of this collection cannot fail to give a strong impression of the value of that experience. From the faithful testimony of Mr. Hey's case-book, which is here laid before the public, we conceive his practice to have been vigorous, decisive, judicious, and abounding with resources; and we do not hesitate to recommend this volume as worthy of a place in the library of every surgeon.

The Charleston Medical Register, for the Year 1802. By DAVID RAMSAY, M. D. Charleston. 12mo. pp. 22.

THE author of this pamphlet has been long so respectably known to the people of the United States as a writer and a practitioner of medicine, that to announce a publication from his pen will be sufficient to excite the attention of our readers. We are exceedingly pleased with the plan of this Register, which comprizes within a small compass a variety of important notices of subjects pertaining to medicine, and leaves us nothing to regret but the brevity with which some of them are treated. So highly prized are the abilities and experience of Dr. Ramsay, that whatever the pressure of his multiplied avocations compels him to curtail or to postpone in a performance of this kind, is felt by the public like the privation of a benefit to which a claim had been formally entered.

A view of the plan and objects of this Register will appear from the introduction prefixed to it, which we give in the words of the author:

"Medical facts, correctly stated and diligently compared together, reflect great light on the practice of physic. Conformable to this established principle, it must be obvious, that annual statements of the principal events connected with the health of the inhabitants, made by physicians in different places, would be particularly useful. The more extensively this was done, the better; but in the United States the advantages of such publications are enforced by peculiar considerations. In the old world, the attention of learned men has been

been employed, for many centuries, in applying the general principles of medical science to the local peculiarities of each particular spot. Knowledge of this kind, in America, chiefly rests with individuals. To bring it within the reach of the community, requires the joint labours of practitioners in every part. If one physician, in each of the cities and towns of the United States, and several in the country parts of each state, were to favour the public with an annual account of the state of diseases, and of the circumstances connected with them, as far as their observations extended, there would, in time, be an accumulation of materials, from which we might obtain the following advantages :

“ 1. More correct knowledge of the diseases of the United States.

“ 2. A comparative view of the health and longevity of the inhabitants in different places.

“ 3. Authentic evidences of all changes of the climate that took place ; and particularly of the effects produced on the health of the inhabitants from clearing and cultivating the soil, and from the different modes and articles of culture.

“ 4. Persons labouring under any constitutional predisposition to particular diseases might select, with precision, a place of residence, least likely to call into action the particular predisposition under which they laboured. Such is the extent and variety of climates in the United States, that this might be done in almost every case, without changing the government or language to which persons proposing a change of residence were accustomed.

“ 5. Physicians would be enabled to direct invalids to such a route in travelling as would best suit their particular habits and diseases. From the want of this local knowledge, improper advice is frequently given. The longitude and latitude of places afford no certain rule. Their influence, controlled by a variety of local circumstances, is by no means uniform.

“ The advantages of the proposed annual publications would not be confined to the medical department. The farmer and gardener, from an average of seasons, would be assisted in forming their opinion of the best time for their respective operations.

“ The enterprising agriculturist, who wished to enrich his country with some new productions, would be informed when and where to make his experiments, by comparing the observations auxiliary to the practice of physic, with the usual habits of the particular commodity he wished to introduce.

“ A facility might thus be given to the introduction of ginger, Japan sago, of the almond, allspice, caper, clove, cinnamon, camphor, nutmeg, red cotton trees, and several other valuable exotics. There are, doubtless, portions of the United States suitable to the culture of these articles ; but that suitableness is unknown to foreigners, and equally so to the owners of the soil. The same observation applies to the introduction of new animals, and of new branches of manufacture. Success, in both cases, must be materially in-

fluenced by the degree of heat and cold, and of the moisture and dryness of the atmosphere.

"The foreigner, who wished to remove to this part of the world, would also be enabled to determine where to locate himself, in a situation least variant from his trans-atlantic residence."

The following account of the diseases which chiefly prevailed in the course of the year, is presented to our readers :

"Charleston, in the year 1802, was afflicted with four epidemics; the small-pox, the measles, the influenza, and the yellow fever. There were cases of the small-pox in almost every month of the year. It proved fatal to four children, though inoculated for it by skilful physicians; and also to about twenty other persons, who took it in the natural way. These died under circumstances horrid to see, and painful to relate. Covered with confluent sores, they could neither stand, sit, nor lie, without exquisite pain. Their bodies and bed-clothes were stiffened with fœtid discharges from every part of their skin. The whole emitted a stench intolerable to bystanders. Humanity was put to the rack while it discharged the offices necessary for their support. In one case, an unfortunate negro (who caught the disease, remote from help, and unknown to his owner) was so far bereft of all power to help himself, that rats devoured a large portion of his tendo Achillis some days before he died. The recoveries from the small-pox were much more numerous than the deaths. Though in many cases, the subjects of the former suffered comparatively little, there were others who escaped with difficulty, and after a painful and distressing confinement.

"A considerable number, (supposed to be no less than twenty) took the small-pox in the natural way, after having been inoculated for it, and after medical practitioners had declared that they had the disease. One of these unhappy patients died, and others suffered more from it, in consequence of no pains having been taken to obviate a malady, from the attacks of which they supposed themselves to be free, till its advanced stages evinced the mistake.

"The general complexion of the diseases, for the first seven months of the year, was inflammatory. Pleurisies, acute rheumatisms, and complaints of the breast, were uncommonly frequent. From these precursors, some predicted a sickly summer, and a great prevalence of yellow fever; but they were agreeably disappointed. July, and the first seventeen days of August, were cool and healthy; there was only one day in both months in which the mercury in Fahrenheit's thermometer reached eighty-nine. The old inhabitants were generally free from diseases of every kind; and only two strangers died of the yellow fever before September. Fourteen of the last days of August, and the twenty-two first of September, were steadily warm; but not to so great a degree as in some former years. In only three of them (the 26th of August, and the 14th and 15th of September) did the mercury rise as high as 89. On the other hand, in only two of them (the 5th and 6th of Sep-
tember)

tember) did it fall below 80. In this warm season the yellow fever began to extend, but was less mortal than usual. More than half who were attacked by it recovered. The mode of treatment which seldomest failed, was depletion, followed by a mercurial salivation. There were a few, and only a few cases, where calomel produced its usual effects, in which the patient did not recover. Where the disease proved fatal, its superior excitement rendered this and every other medicine comparatively inert.

"A few strangers, though from northern latitudes, passed the summer (their first) in Charleston, without being attacked with the yellow fever. In three cases it proved fatal to persons who had resided in this city for eighteen months immediately preceding. No instance occurred of the death of any under twelve years of age from this disease.

"The eagerness of the people to receive their winter goods early in the season, induced men in trade to order matters so, that several vessels from foreign ports arrived in Charleston, with their unseasoned crews, in the months of August and September.

"To such the yellow fever was particularly inhospitable. To others arriving in the same season, Sullivan's Island afforded a safe retreat, till the danger was over. Exceptions to this have heretofore been very rare, and generally could be accounted for from some irregularity; but in the year 1802, five cases of the yellow fever (and two of them fatal) occurred in one house on that island, while the other inhabitants were generally healthy.

"No instance can be recollected, in which there was any ground to suppose that the yellow fever was either imported or had been contagious. No physician, nurse, nor other person exposed to contagion, from their intercourse with persons labouring under yellow fever, caught the disease. It was exclusively confined to strangers; and among them there was no evidence of its being communicated from one to another."

The introduction of the vaccine disease into Charleston is stated to have taken place in February, 1802, and to have succeeded in the most perfect manner. The author thinks that "nothing is now wanting to exterminate the small-pox but a general and simultaneous vaccination."

Among the medical improvements made in Charleston in the year 1802, Dr. R. mentions the establishment of a Dispensary, and the more active and energetic proceedings of the company incorporated in 1799, for the purpose of supplying the city with wholesome water from a pure and sufficiently distant source.

A regular series of meteorological observations is likewise included, which appears to have been made with great accuracy, and which affords a very satisfactory account of the temperature, &c. during that year.

The following interesting particulars of an attempt to rob the bank of South Carolina, will, we are confident, appear to all our readers to be deserving of especial notice.

" On the night of the ninth of October, 1802, William Withers, a horse dealer from Kentucky, descended through a grate into one of the covered arch drains that pervades the streets of Charleston, and passed along the same, till he was opposite to the South-Carolina Bank. He then began operations to make a subterraneous passage across from the drain to the vaults in which the cash of the bank was deposited. In prosecuting this business, he passed ninety days and nights under ground, and in a prone posture. For the first twenty-two days after his descent, it was so uncommonly warm, as to be on an average nearly seventy-nine. For the last sixty-eight days the heat varied, from seventy-four to thirty-three. In the first period, yellow fever, intermitting, and other fevers of warm seasons, were common among the inhabitants. In the last period, pleurisies, colds, and catarrhal complaints, were, in like manner, frequent: yet, all this time Withers enjoyed good health, with exceptions of a few slight head-achs and pains in his bones, which generally went off with perspiration in the course of his next repose. His situation in the drain was distressing; but it was tolerable; after passing through it, he was surrounded with earth. He had no blanket, nor covering of any kind, but his light ordinary apparel, which he had never put off. His usual time of sleeping was when he judged it to be day, from the noise he heard over his head. His signal for recommencing work was the receipt of provisions, dropt by his accomplices in the night, through a grate. He was sometimes exposed to serious danger from the springing of water; and his bed was earth, which was often damp. His food was mostly bread, butter, and cheese, and (with the exception of one bottle of wine) water was his only drink. Butter burning in a lamp afforded him light.

" Three days frequently passed without discharging the contents of his bowels.

" The enjoyment of so much health, for so long a time, under such circumstances, was, in part, probably owing to the following causes:

" 1. A strong constitution, inured to hardships in every period of his life.

" 2. That constitution suited to the air of Charleston, by a very recent seasoning. He had but just recovered from a severe fever when he entered the drain. Though relapses are not uncommon, yet a new and distinct fever scarcely ever attacks strangers in the same summer, in which they receive their first serious impressions from our climate.

" The effects of moisture must have been, in a great degree, parried by his labour, and the moisture itself moderated by the dry sandy nature of the soil through which he had to work, and by the absence of rain: for the first fifty days after his descent, the whole quantity of rain that fell did not amount to two-tenths of an inch; and in the last forty was only five inches eight-tenths; besides,

sides, simple moisture, without heat or miasmata, is comparatively harmless.

"The absence of several of the exciting causes of diseases. The heat of well water and of the earth, a few feet below the surface, is generally the same in all countries as the medium heat on an average of the different seasons in these countries respectively. This, in Charleston, is sixty-five, or, at most, sixty-six on Fahrenheit's thermometer. Withers must have enjoyed a steady unvarying atmosphere of this temperature, while the inhabitants above ground were panting under a heat of eighty, or distressed with the cold of thirty-three, and subject to all the changes of an atmosphere, vibrating from one extreme to the other. That something in the air of Charleston, which is so destructive to strangers, in the summer and autumn, is too volatile to descend below the surface. Miners and colliers in all countries are generally healthy.

"The experiment is not recommended; but it is probable that a subterranean residence might be so constructed as to afford security against our local diseases.

"The great excitement of Withers' mind, from the prospect of accumulating wealth, must have counteracted the effects that otherwise would naturally have resulted from his situation. The energies of human nature, when in pursuit of a great object, (especially if invigorated with the hope of obtaining it) are beyond all calculation. The weakly wife, and the tender mother, will undergo watchings and fatigues in nursing the object of their affection, far beyond the power of human nature to bear, when in a state of indifference. The high toned state of Withers' mind must have had a decided influence in preserving his health: It is much to be regretted that it was not excited by worthy objects."

We hope the author will be induced, by the considerations which he urges with so much force and good sense, annually hereafter to continue his Register; and that other physicians, in different parts of the United States, will become emulous to follow his good example.

A Treatise on the Cow-Pox, containing the History of Vaccine Inoculation, and an Account of the various Publications which have appeared on that Subject, in Great Britain, and other Parts of the World. By JOHN RING. Part II. 8vo. p p. 567. London, 1803.

THIS correct, indefatigable, and successful promoter of Vaccination, has at length completed his elaborate history of the subject, down to the present time. His industry and talents for such a task are sufficiently known to those who are acquainted with him, or have read his first volume, to which this is in no respect inferior. As the Medical Journal contains a very full history of the cow-pox, at least all the more important facts, our readers will not expect us to give extracts from the present work. This

2d Part is accompanied with a coloured plate, which gives a very excellent representation of the progress of the vaccine vesicle through all its stages, and there is added a copious Index to both Parts.

MEDICAL AND PHYSICAL INTELLIGENCE.

[FOREIGN AND DOMESTIC.]

VACCILOUS INOCULATION.

Some reports having gone abroad that the Cow-pox has been found to secure the constitution from the plague in Constantinople, and some other parts of European Turkey, Dr. Jenner begs leave to lay before the public, the evidence which he has received of this important fact. He does not deem the point clearly ascertained, but cannot forbear thinking, that every reader will see a considerable presumption in its favour in the following extract of a letter:

From Dr. DE CARRO, of Vienna, to Dr. JENNER.

“Your discovery has already produced some consequences which you surely were very far from foreseeing when you made it known to the world. I believe that I once mentioned to you, that a French physician, M. La Font, thought he had observed, that vaccinated people were not attacked by the plague. He described to me the facts which raised the suspicion: they were few, and not very conclusive, but he spoke of his new observations with modesty and prudence, and thought only that the subject deserved his further attention. Another physician at Constantinople, M. Auban, who never had any communication with M. La Font, who is of Salonica, wrote to me about a year ago, that he also had some suspicion of the cow-pox being a preservative against the plague—did not mention facts, but said, that several people had observed the same, and many vaccinated themselves as a security against the plague. Guess what was my astonishment, when a few days ago I received, through the French Ambassador at Vienna, a packet of Dr. Auban, who begins his letter with these words:—“What I had the honour of mentioning to you long ago, concerning the cow-pox being a security against the plague, as a probability, I can now, after many experiments, speak of almost as a certainty. He describes the facts summarily in his letter, and adds two *process verbaux*, signed by him and several witnesses, desiring Citizen Champagny and myself to give them every possible publicity. The proofs are,

1st. Of

1st. Of 6000 vaccinated at Constantinople, not one has taken the plague.

2d. That infants previously vaccinated have sucked, without injury, the milk of nurses infected with the plague.

3d. That an Italian physician, Dr. Valli, who went to Constantinople to study the plague, was so persuaded of the truth of the new discovery, that upon the sole security of having been vaccinated, he shut himself up in a lazaretto, and had with people attacked with carbuncles and buboes, various modes of contact, without any effect.

4th. That the same Dr. Valli inserted into his own hand, a mixture of variolous and pestilential virus, and having felt no effect from that trial, he meant the following week to insert pestilential virus alone.

5th. That Dr. Auban, having been informed that in some villages near Constantinople, the cows were subject to some eruptions on their udders; he, with several gentlemen of the French embassy, went to those villages, and found the cow-pox then existing. The report of the inhabitants was, that they had never seen the plague, or the small-pox, among them; though both these diseases made dreadful ravages in the vicinity.

Such, my dear Sir, continues Dr. De Carro, are the extraordinary facts which have been communicated to me. I have now and then corresponded with M. Lafont and M. Auban; their correspondence announces much medical information. The second, acquainting the world with such an important discovery, runs certainly a great risk, if he deceives it by false and hasty observations.

Employment of Pot-Ash with Animal Flesh, prepared and cooked for Food, instead of Muriate of Soda.

Many instructive facts are furnished by the history of rude nations. The Indian tribes of North America furnish some very important particulars concerning the antiseptic and wholesome qualities of alkalies. Within the territory of the United States of America, many of the tribes, and more especially the parties on expeditions for war and hunting, are scantily supplied with common salt. Frequently their stock of that article is totally expended. The Delawares, Iroquois, Wyandots, Cherokees, Chickasaws, and Creeks, then season their meats with a form of pot-ash. As these people live chiefly upon animal flesh, it is a very natural inquiry by what means they preserve so perishable a material from corruption, and with what condiment they prepare it so as to render it agreeable to the palate and stomach. It is not correct, as stated by some writers, that because they preserve and eat their meat without sea-salt, that they employ no other kind of salt. The form of pot-ash the savages sprinkle on and mingle with the flesh of beasts intended to be eaten, is CLEAN WOOD-ASHES. When they mean to dry their meat for future use, they cut it into thin slices, and expose it to a pretty hot fire; and, during the operation, they
either

either baste it with a mixture of the gravy or liquor that drops from it *and ashes*, or they powder it, from time to time, with the *cleanest ashes they can collect*. Thus they alkalize their dried bear, deer, and bison. They find that hickory and shrubby-oak (black-jack) yield the strongest and most alkaline ashes.

If they roast their meat, they are careful to dress it frequently, as it cooks, *with ashes taken fresh from the consumed wood*. This they dispose externally on every part. A portion of it dissolves, and penetrates deep among the fibres and membranes; while the rest, united with some of the animal juices, forms a sort of saline incrustation on the outside. This alkaline condiment renders the flesh remarkably more palatable; and, what is of greater importance, reconciles it to the stomach, and prevents the ill effects it would otherwise work upon the bowels. Very commonly the Indian collects fine white ashes from the fire brands into the palm of his left hand, and dips the morsels of meat into them from his right. For the same reason, the Indians, when they broil flesh, choose to put it upon the hot coals, and oftentimes they put another layer of live coals upon the top of the slice. Thus they obtain a salting or seasoning with alkalies. It is a common practice for an Indian to apply a bit of meat, just before he puts it into his mouth, to the surface of a brand, that it may attract the ashes adhering to it, as we dip into salt. These practices have been, and are now, commonly imitated by white men (hunters, soldiers, &c.) who remain long enough in the woods to expend their sea-salt and provisions cured therewith. The *alkali of ashes* is then resorted to, and preserves their food and their health.

An Idea of the Rate at which distilled Spirits are consumed in the United States of America; from the Medical Repository of New York.

As a medical, commercial, and political subject of inquiry, the consumption of ardent spirits is very interesting. Economists, statesmen and moralists have long deplored the abuses of these products of the still. But it is probable the cause of their regret and lamentation will not be soon removed. As long as one class of people find a profit in distilling ardent spirits from the raw materials; a second in purchasing them by wholesale, or shipping them from country to country; and a third in dealing them by retail to those who consume them; there will be distillers, merchants, and retail dealers in abundance, to satisfy the wants of him who wishes to regale himself with brandy, gin, whiskey, &c. When we consider the great amount of these articles brought to market, and reflect that they are all destined to pass into the human stomach, it becomes interesting to know minutely the rate and manner of their consumption. The following may serve as an example of what is frequently done by a labouring man in an American town, who passes for a sober citizen. As he walks out in
the

the morning he takes what is called a **SMALL** glass (half a gill) of bitters, gin, or something of the sort, at the first grog-shop he passes; and commonly takes a second whet (another half gill) before he gets to work. Generally he takes two more of these **SMALL** glasses of raw and clear stuff (amounting to another gill) as he returns home to get his breakfast. Thus a half pint is disposed of before eight o'clock A. M.

On going out from breakfast he takes a **LARGE** glass, or a whole gill; and in the middle of the forenoon another. To this is added a third as he comes home to eat his dinner. This amounts to 3 gills between eight and twelve o'clock.

He drinks another **LARGE** glass as he goes out to work, at or before two P. M. another in the middle of the afternoon, and a third on returning from work at six or after; making three gills more by the time his day's work is ended.

The daily quantity of distilled spirits consumed by one of these persons is as follows,

Before breakfast	—	—	—	2 gills
Before dinner	—	—	—	3
By the time the day's work is done				3

Total, — 8 gills,

or one quart of distilled spirits, consumed by a single labouring man in a day, besides what he drinks in porter-houses, clubs and other meetings in the evening; and the greater part of them can still keep about, and do their work, without being actually drunk. By degrees, however, it overcomes them, and they yield to the repeated and excessive stimulus of their strong draughts.

The retail cost of these doses of spirits is a heavy tax upon the individual, and amounts to as much as would buy his family bread, butter, and sweetening.

Morning drams, four half gills, at 3d.	1s.
Grog before noon, three gills, at 6d.	1 6d.
Grog after noon, ditto	1 6

4 shillings,

or half a dollar a day, spent out of his wages for rum, to be swallowed to his own ruin, and to the pinching and impoverishment of his family. There are hundreds of men who go on at this rate of drinking as long as health and money hold out. In the city of New-York there is a great number of houses where strong liquors are thus retailed. Alcohol seems to be a greater curse to Christians than opium to the Turks.

Dr. VAN DEN BOSCH recommends the radix lópez as a very excellent remedy in colliquative diarrhœas; he administers it, forma pulveris, in a dose of half a drachm, to be taken three or four times per day.

Bill

Bill of Mortality for Portsmouth, in North America, for 1802. By LYMAN SPALDING, M. B. &c. extracted from the Medical Repository.

COMPLAINT.	AGE.	NO.
Aptha.	4, 4 weeks.	2
Apoplexy.	66, 33, 55, 43, 63 years.	5
Atrophy.	55, 69, 40, 55 years. 3 m. 60 years.	6
Cancer.	55, 63, 60 years.	3
Canker-rash.	8, 2, 5, 7 months. 2, 16, 23, 4 years.	8
Cholera of Infants.	6 to 24 months.	13
Chotic, Bilious	42 years.	1
Consumption.	{ 14, 74, 53, 47, 53, 30, 69, 17, 33, 30, 60, 14, 33, 18, 69, 64, 60, 33, 28, 48, 52, 18, 29, 50, 63, 28, 22, 30 y.	28
Debauchery.	55, 38 years.	2
Dropsy.	69, 50, 84, 52, 89, 24 years.	6
Dropsy in the Brain.	3, 7, 7, 8, 13 years.	5
Dysentery.	3, 2, 2 years.	3
Epilepsy.	64, 2, 2 years.	3
Fever and Ague.	33 years.	1
Fever, Bilious.	74, 30, 27 years.	3
Fever, Bilious Malig.	44, 31, 41, 13, 35, 21, 30, 40, 30, 13 y.	10
Fever, Pulmonic.	65, 45 years.	2
Gout.	52 years.	1
Gravel.	41 years.	1
Hooping-Cough.	10 weeks to 1 year.	8
Infantile Complaints:	6 days. 4 weeks.	2
Measles.	7, 1, 20, 4, 9 m. 2, 7, 1, 2, 1, 2 years.	11
Mortification.	7 months. 1 year.	2
Old Age.	94, 90, 78, 76 years.	4
Palsy.	60, 74, 64, 50 years.	4
Phrenitis.	30, 12 years.	2
Premature Birth.		6
Quinsy.	3 years.	1
Scald Head.	1 year.	1
Small-Pox, natural.	33 years.	1
Small-Pox, inoculated.	1 year.	1
Casualties. { Drowned.	48, 60 years.	2
{ Fall.	55 years.	1
{ Frozen.	82 years.	1
{ Poison by Opium.	4 months.	1
{ Suicide.	32 years,	1

Portsmouth, situated 43 deg. 5 min. N. 70 deg. 41 min. W. from London, contains about 5600 inhabitants. The town has been very unheathful; some epidemic having raged the whole year. The hooping-cough, in January and February, was very prevalent; and some sporadic cases continued till September. The measles made its appearance about the middle of March, and was very

very prevalent till July; at which time a bilious malignant fever made its appearance, and continued till August, when the cholera and canker-rash commenced, and continued through the year.

Mr. OLLENROTH, Surgeon General to the Prussian Army, has invented an apparatus for removing extraneous bodies from the œsophagus. It consists of sixty-one beads of tin, well-polished, each of the size of a large pea. At one end they are somewhat excavated, and in the middle perforated with an opening, through which a double lute-string is drawn so as to form of them a flexible cylinder, the convex part of the upper beads being received into the concavities of those under them. The knot with which the two strings are tied together must be covered with leather, and is hid in the cavity of the uppermost bead, and to it a sponge of about eight or ten inches in diameter is fastened. Five or six loops are adapted to that flexible cylinder, each made of strong silk strings, so as to form two 8 crossing each other; they are applied at a proper distance from each other, about five beads being the space between every one of them, and they must be as long as three beads. At the end opposite to that where the sponge has been fastened, a handle is adapted to the lute-strings issuing there. This instrument, on account of its flexibility and smoothness, glides easily down the œsophagus, the sponge dilating the topical contraction of that organ, while the loops serve for seizing and bringing out the extraneous body, as needles, pins, &c.

Mr. R. VAZIE has invented an instrument for facilitating evaporation. It consists of a hollow cylinder, caused to revolve slowly within a boiler of correspondent form and dimensions. A common roasting-jack may be so applied as to give motion to a number of these cylinders. Equal vessels being filled with water, and exposed as nearly as possible to the same degree of heat, the cylinder was applied to one of them, and it was found that the evaporation in this vessel exceeded that of the other in the proportion of three to two nearly. The heat of the agitated vessel was constantly 170° , that of the other 212° .

Dr. SCHAUB has discovered a new method of obtaining Prussic acid in a state of absolute purity. The process consists in pouring upon one part of Prussian-blue, half as much sulphuric acid, diluted with an equal quantity of water, and subsequent distillation. The Prussic acid passes over in alcohol; its odour greatly resembles the water of the *Lauro Cerasus*. It is a deadly posion to animals.

The following method of obtaining tungsten is recommended by RICHTER, a German chemist:—Let equal parts of tungsten oxide (tungstic acid) and dried blood be exposed for some time to a red-heat in a crucible; pass the black powder, which is formed into another smaller crucible, and expose it again to a violent heat in a forge

forge for at least an hour, and tungsten will be found in the crucible, in its metallic state.

The *Rhus radicans* of Linneus, or the *toxicodendron* of Tournefort, the juice of which is acrid and corrosive, and which by simple contact, commonly causes erysipelatous eruptions, has been hitherto known only by its destructive qualities, and by some properties which are useful in dying. Dr. DUFRESNOY, of Montpellier, has accidentally discovered in this plant certain valuable qualities. Having observed that a young man, who had been troubled for six months with a tetter on his wrist, was suddenly cured by handling the *Rhus radicans*, he determined to try the effect of it in other cases; and after several experiments, he has ascertained its efficacy in destroying ring-worms, and in healing paralysis.

A beautiful fossile fish was lately found in one of the quarries of Nanterre, near Paris, which is the second that has been discovered in a mass of solid stone; it belongs to the genus *Coryphene*, of Lacépède, and has a close affinity to the *Coryphenus Chrysurus*.

The DUKE of WURTEMBERG has lately appropriated the sum of 40,000 German florins, to establish a Medico-Chirurgical Hospital, in the University of Tubingen, as likewise a Lying-in-Hospital for Women. He has, at the same time, augmented the funds of the public Library of that University.

Mr. Fox will commence his Lectures on the Structure and Diseases of the Teeth, in the Theatre of Guy's Hospital, on Tuesday, November 29, at seven o'clock.

The following gentlemen are elected Presidents of the Physical Society at Guy's Hospital for the present session: Dr Haighton, Dr. Walshman, Dr. Curry, Mr. A. P. Cooper, Mr. Thomas Hardy, and Mr. William Saunders.

A History of Animal Chemistry, by W. B. JOHNSON, the friend of the late Dr. Darwin, in three volumes, octavo, with a copious Index, is nearly ready for publication.

A new Edition of Mr. SKRIMSHIRE's popular Chemical Essays will be published next month.

TO CORRESPONDENTS.

Richerand's Elements of Physiology will be noticed in our next number.

Communications are received from Mr. Naylor, Mr. Roche, Mr. Morgan, Mr. Dunn, Mr. Blair, and from the Continent.

THE
Medical and Physical Journal.

VOL. X.] DECEMBER 1, 1803. [NO. LVIII.

Printed for R. PHILLIPS, by W. Thorne, Red Lion Court, Fleet Street, London.

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Dr. WICHMANN'S OBSERVATIONS *on the* NETTLE-RASH  
FEVER; *translated from the German, by* T. M. WINTER-  
BOTTOM, M. D.

**F**EBRIS Urticata differs from Urticaria only in the continuance of the disease and in the fever; for the eruption is precisely the same in both. The fever has slight paroxysms, which however allow the patient to keep out of bed; but is attended with no particular symptom, except an insupportable itching, and a frequent sensation of anxiety, sometimes accompanied with a slight belly-ache. In the chronic state of the disease, the eruption frequently disappears, and after an uncertain period, affects some other part, and in this manner alternates for months. In the febris urticata the eruption is always present and continues several days, but when these are past, it disappears and returns no more. In the febris urticata, the eruption is commonly greater than in the urticaria, spread over a larger surface, and in a violent degree of the disease the face is swoln and disfigured by the confluent bumps or tumours; the hands and feet are also so much tumefied that the patient can scarcely bend his hand. Sometimes, though rarely, a salivation comes on, which with the itching and burning eruption is very troublesome. The utmost limits of the fever are nine days, and it yields to such mild remedies, that I shall no longer dwell upon it, but proceed to consider the disease in its chronic state.

In some, the eruption continues without any fever only for a few days, in others for an indeterminate time of weeks, months, and even years: that is, it frequently disappears during this long period for several days; again returns, and again disappears, but the disposition to the disease still continues. In some subjects, during the whole time, some of the eruption is visible on the skin. One  
(No, 58.) I i child

child teased me for two entire years, and another exhausted my patience for nearly four years. Heberden has seen it continue for two years in different patients, with very short intervals, and in some from seven to ten years. (Medical Transact. vol. ii. p. 175.)

The name of this disease, like that of Pemphigus, is very characteristic in several languages; and when mistaken, it arises from the skin not always assuming the same appearance as when stung by a nettle, insect, &c. For it is still urticaria, though very different in appearance from the sting of a nettle or the bite of an insect: 1. When long, red, hard stripes, like the stroke of a whip, appear on the skin. 2. When the whole surface of the back appears of a brown red, and the painful itching alone distinguishes it from scarlet fever. 3. When the bumps in the face run so much together, as to cause the face to swell, and bear no resemblance to the insulated discrete appearance excited by the bites of insects. Another appearance in which the eruption nearly resembles itch, will afford an opportunity of treating it more fully.

The urticaria, whether acute or chronic, is visibly elevated above the skin, is hard, firm, solid, more of a dead pale colour than red; in the centre it is almost white, contains no fluid, and is neither elevated into a point (or stigma), nor covered with a crust; it likewise never suppurates. This is not perfectly exact in the bite of an insect, where the bump or tumour is frequently not so smooth and level, but has a small elevation. The usual circumference, when the papulæ stand single, is seldom larger than the nail of a finger, and often less; but when they touch, the skin is raised, for the size of the hand, and they produce in the part such a degree of swelling, that they can no longer be recognized for papulæ, (what the English call wheals) but the whole figure of them becomes very irregular and undescribable. Perhaps my readers, who have not seen them, may understand me better if I say in another language, "Les tubercules forment (says Lieutaud in his *Precis de la Medic. pr.*) de larges plaques relevées avec ardeur & demangeaison."

If the *phymata* appear insulated, they have generally a very red circumference, but disappear in a short time, and without any particular cause appear again. They are confined to no particular part, but break out any where on the surface.

The greatest degree of the disease is seen when it appears in consequence of having eating muscles (*mytelus edulis*);



edulis); for, with regard to the identity of the eruption which appears from this cause, and that just described which arises from no evident cause, no doubt can be entertained. The disease arising from this cause, which has been accurately described by Berens, Werlhof, Mohring, &c. is, as well as the other, more frightful than dangerous, and is usually quicker in its course than the real febris urticata; being frequently over within twelve hours, (so that it seems inexplicable how Kock, p. 13, can suppose the chronic disease to arise from it). Except great anxiety, patients chiefly suffer from the intolerable itching; and the eruption sometimes becomes so confluent, especially in the face, that the eyes are nearly closed and the face disfigured by the swelling.

Since muscles have not been brought so abundantly to Hanover, where they are looked upon as delicacies, and brought from the East Sea by way of Kiel, physicians have lost the opportunity of observing the disease, and I cannot recollect when I saw a similar instance. In 1793 I saw a violent attack of the disease in a man, which arose from no evident cause, and which did not terminate till the ninth day. The violent burning and itching were united with fever and a salivation of three days continuance; this last has been remarked by Professor Kock, who refers it to the eruption affecting the inside of the mouth, and irritating the salivary glands.

The cause of this poisoning by muscles has lately become better understood in the Netherlands, where these muscles, particularly on the banks of the Scheld, are abundantly used; and the opinion formerly entertained by Werlhof, has been corroborated, that the muscle itself does not contain the poison. See *Memoires de l'Acad. des Sciences & Belles Lettres de Bruxelles*, 1771, tom. i. p. 229, and tom. ii.

One of my acquaintances here invariably suffers a slight degree of the disease, sometimes accompanied with head ach and fever, every time that he eats the common river cray fish, (*astacus*) an observation which has been long made, and lately by Gruner, Rode, &c.; by Sauvages it was observed from eating of the liver of a fish; and by others, from eating other things.

Whether muscles, crabs, &c. can throw any light upon this disease, must be determined by pathologists; it has nothing to do with diagnostics. The pain in the belly, which sometimes occurs in urticaria, together with the effects of muscles, &c. point out to the physician that it is

not a local disease of the skin, neither is much use to be expected from diaphoretics, baths, &c.

It is one of the peculiarities of this disease, that it may not only be ranked among the impetigines and also the exanthemata, as I hope will appear from what has been said, but when in the chronic state a great susceptibility for this disease once prevails, the disposition to it is so strong in the skin, that it may often be produced at pleasure, by merely pressing upon the arm with the finger and carrying it downwards; the course of the finger is marked by a hard redness, which remains for some time visible. It appears to me not less remarkable that the eruption commonly disappears in bed, and again appears on exposure to the cold air; a phenomenon certainly not observed in other eruptive diseases, and which seems to form a characteristic of this one.

It may be further noticed as somewhat singular, that in 1769, I saw a child, two years old, in which the eruption almost resembled rugillations, they were blue, and here and there of a blackish hue; but in a few days they disappeared by simple remedies, and were not attended with fever. I have also seen this eruption in a high degree in a woman, complicated with tertian fever: the eruption always appeared on the day of attack, and disappeared with the fever. It was at length cured, together with the tertian, by the use of the bark alone. In a child five years of age, I found this eruption on the third day after the appearance of the benign small-pox; in a short time the urticaria disappeared, without affecting the course of the principal disease, or producing any uncommon symptoms.

Did the chronic eruption urticaria always possess the same characteristic form and circumscribed figure as has been described, it would be foolish, at least very useless, to compare it with itch. The reader will not, it is presumed, expect as exact a description of itch as has been given of urticaria, and I presume it is well known by the constant spherical figure of its pustules. But what induces me to compare them here, (and I cannot too much excite the reader's attention to it) is, that both these complaints have often the most striking resemblance to each other, and then deceive the most experienced eye. In long continued and frequently returning urticaria, the patient, especially children, cannot abstain from scratching, but break through the bumps, and make little wounds; these often cause the eruption to lose its original form and assume the appearance of small papulæ containing a purulent

lent fluid; or there arises a small (*Button, Knopfchen*) in the midst of it, which resembles a dry itch pustule, but not a perfectly recent one, especially when it takes in a large surface of the skin; and is more apt to mislead, as the itching continues from time to time as in the itch, and these little tubercles (*knopfchen*) do not disappear as in nettle rash. In the first instance of this kind, in a young child, I was perplexed for half a year, and did not discover my error until I accidentally observed the first appearance of the eruption, and discovered evident, broad papulæ, which afterwards changed as already described. The conviction that the child during a long period had infected no one, and that no person in the house had laboured under any suspicious eruption, or any similar one to the present, rendered me more certain respecting the nature of this eruption.

I find that this appearance has not escaped the accurate Heberden; but many others who do not observe the disease long enough, or at different periods, overlook the difference between the real itch and this eruption, and even attempt to remove it by external remedies; which produces the mischief so often ascribed to repelled itch. I shall therefore here point out wherein the distinction and similarity between the two diseases exist.

1. The first appearance of both eruptions immediately decides the difference, and any one who can observe them at this early period cannot easily get wrong; for the itch, as soon as it is actually visible, has well defined, hard papulæ, which may be felt above the skin, and which continue to grow larger; retain the same spherical, or rather hemispherical form, and slowly form pustules; not so urticaria.

2. The itch is therefore a pustular disease; i. e. a certain time after its origin and visible formation upon the skin, it contains a fluid. Urticaria forms phymata, i. e. hard, solid, rather flat elevations, which never contain a fluid; are never round, but of an irregular figure, and distinguish themselves from the itch pustule by their greater circumference, both in their origin and progress.

3. The urticaria is in full vigour from the first hour of its appearance; an itch pustule is much slower, often for days or weeks, until several of them are spread over the skin.

4. The itch, after a long continuance, forms small scabs, or crusts, from inspissated moisture or pus; urticaria never; for though we sometimes see upon their papulæ little

knopfchen, yet upon a nearer inspection they will be found to have arisen from scratching.

5. Itch speedily infects ; urticaria, after even the longest continuance, never.

6. The itch, in itself, is always a chronic disease, never excites, as sometimes does urticaria, fever, nor is it a symptom of fever.

7. Itch spares the face; urticaria no part of the body, and least of all the face.

8. Scabies itches most in the heat of bed, less in the open air, and not at all in a severe cold, (which is explained by the animation or benumbing of the itch animalcules). Urticaria generally itches most in the open air, and often more in a cold air; in the warmth of bed the eruption either disappears, or at least itches less.

9. In urticaria no external remedies are effectual, neither quicksilver nor sulphur, both of which soon show their specific effects in itch, as being merely a disease of the skin; and whosoever does not speedily obtain the wished for effects, in a case of supposed itch, must have mistaken the complaint, or should suspect a complication of some other disease with it, or even the nettle rash, which is not solely a disease of the skin.

Both these diseases resemble each other, in having the eruption visibly (and palpably) elevated above the skin, with violent itching; and though both complaints be of long standing, they are unattended with fever; for the true urticaria never appears towards the conclusion of a chronic eruption; but where it is seen, it has been present from the first appearance of the eruption.

The difference between both is so great and evident, that they required to be compared merely from the circumstances above mentioned. There are certainly exanthemata which bear a closer resemblance to the itch than urticaria, but I shall pass them over at present. It is much more difficult to distinguish measles from the nettle eruption: when combined with fever, it does not form urticaria, which disappears for some time and again appears, but consists in an acute disease, which continues visible upon the skin for several days. The mistake is more easy when a case of urticaria occurs in a place where measles prevail at the same time. I have observed such an ambiguous instance in a child, where three persons had just recovered from measles in the same house: the absence of cough and other catarrhal symptoms, and the difference of the eruption



eruption to the touch, determined me to consider it as urticaria, rather than measles.

Measles and febris urticata agree in the following respects :

1. Both of them form an elevated eruption of an irregular figure, affecting all parts of the body, particularly the face; and,

2. Almost limited to the same period of time.

3. The measles consist also of solid tubercles, spots elevated above the skin, which contain no fluid, and have no crusts upon their summits; and although Wedekind, who has described this eruption most accurately, discovered in many a clear yellowish fluid, yet we ought not to call the eruption pustulous, as this supposed fluid disappears imperceptibly, and does not increase as in itch, small-pox, &c. nor change into pus, and form crusts; hence no pustular disease is produced. Probably the fluid is produced here, in the same way as has been observed in urticaria, by the eruptions having been scratched and broken.

4. The eruption in both complaints is almost equally elevated above the skin, and becomes gradually broader. I know no exanthema which has spots of the breadth and circumference which the measles sometimes, and urticaria have. The spots are usually discrete, insulated; but frequently they touch and become maculæ corymbosæ, which the English term '*clustered spots*.'

5. Both complaints occur at all times of the year; and from the number of extensive epidemics which I have witnessed, it is false that the measles are confined to the harvest or winter. It is equally as erroneous, that urticaria appears only in certain months.

Their most striking differences consist in the following :

1. Measles are very infectious, although, indeed, many remain free from them, as well as the small-pox, during their lives; others again escape during one epidemic, and are affected by a succeeding one. The first mark of infection commonly shews itself on the eighth day, or within fourteen days after exposure to a person ill of the disease. Urticaria does not infect; but this mark can be of no use at the beginning of the disease, and in a solitary instance, it is useful only where doubts have occurred.

2. The symptoms are very different even at the commencement of the disease. The measles commonly begin with catarrhal symptoms, running of the eyes and nose; cough, which becomes more violent, and is absent only in very rare instances; oppression or similar disorders of the

breast; bleeding at the nose, and dullness of the eyes, which are very sensible of light. In urticaria none of these, particularly the cough and bleeding of the nose, the almost inseparable attendants of measles, are to be observed. The eye-lids are indeed often swoln, but the eye almost never suffers, and does not appear red.

3. In measles, the (morbific) matter determined to the surface of the body is often evolved so slowly, that the catarrhal symptoms have occurred several days (I know an instance of eight days) before the eruption is visible; it is particularly delayed by copious bleeding at the nose; and it is frequently visible on the skin within twenty-four hours of the attack. In *fēbris urticaria*, the eruption is commonly earlier than the fever, or at least is always visible in the first twelve hours.

4. The eruptions also differ on close inspection. In measles the spots are red and slightly elevated above the skin; in urticaria they are of a pale red. In the former, a small, almost imperceptible branny punctum gradually forms towards the end of the fever; a kind of slight desquamation takes place. In urticaria the eruption completely disappears, without desquamation or formation of pustules, crusts, &c. In general, we ought to detect the difference, to feel the eruption as well as see it, or try it with the finger more than with the microscope. By this means we discover in urticaria a much more circumscribed hardness, and a greater elevation above the skin; the islands, if, to make it more intelligible, I may use this coarse comparison, have in urticaria a steeper shore, in measles a flatter one. In the former they resemble a rugged granite rock, in the latter a gradually rising shore. To speak in the language of physicians, they stand in the same relation to each other as phlegmone to erysipelas.

5. The painful burning and itching in urticaria is totally wanting in measles.

6. When the urticaria disappears, the whole disease, fever, &c. is removed; and if any doubts have been entertained, they may now be removed. In measles the consequences are often worse than the disease; and are particularly dangerous to the eyes and lungs.

7. The face never swells so much in measles, and the whole skin is never so much puffed up as in a great degree of urticaria, *fièvre ortiée*.

8. Urticaria spares no part of the skin; but measles in general leaves the harder skin of the soles of the feet and palms of the hands free.

9. The

9. The measles are indeed often seen sporadic, but generally they are epidemic in a place; I know of no instance of urticaria being so, from my own experience or reading, and I doubt whether others have ever observed it epidemic.

*South Shields, Nov. 5, 1803!*

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*A Case of ABSCESS OF THE LIVER, with a Formation of HYDATIDS; communicated by Doctor ROBINSON, of Derby.*

ON March 30th, I was desired to see Mrs. T. at Stoke upon Trent, who appeared much emaciated, and laboured under a fully formed hectic fever, attended with an almost constant nausea and frequent vomiting, especially when she attempted to take any thing solid. In the region of the right hypochondrium there was a very considerable tumour, extremely painful to the touch, and giving, upon pressure, an evident sense of fluctuation. Mr. Beaver, the attending surgeon, and an ingenious practitioner at Stoke, observed that this enlargement began about ten days before, when he ordered leeches to be applied to the part with a perpetual blister, and two grains of calomel, five grains of hemlock, and six of rhubarb, to be taken every night.

Mrs. T. is about thirty years of age, of a delicate habit, and has led a very temperate life, but from her sixteenth year has been subject to repeated attacks of jaundice; has always been costive, and sometimes has passed ten days without having had any evacuation from the bowels. Several of her family have suffered under affections of the liver, and Mrs. T. has discovered a hardness and fulness in the region of the right hypochondrium for several years. For about two months before I saw her, she had frequently experienced an acute pain in this part, which was generally relieved by camphor, opium, and æther, ordered by Mr. Beaver; blisters had also been applied, and pills consisting of calomel, aloes, and Castile soap, taken as occasion required.

The evident marks of a formation of matter being present when I was sent for, together with the conical shape and pointed appearance of the tumour, made me hope that the abscess would burst externally; and to encourage this

this, I directed emollient cataplasms to be applied, and fomentations to be used; at the same time, a pill consisting of calomel and digitalis, of each half a grain, was ordered to be taken every night and morning; and a draught, consisting of tinct. of columbo, antimonial wine, and Minderus's spirit, was prescribed three times a day. For common beverage the patient drank the nitrous acid and water. Perceiving, after a few days, that the tumour, in place of coming more to a head, receded, and appeared to extend more towards the cavity of the abdomen, I thought it most prudent to have it opened, which operation Mr. Beaver performed by making an incision, one inch in length, in the most depending part of the tumour. Rather more than two pints of purulent matter were discharged, with immediate relief. The exhibition of the submuriate of quicksilver, &c. was now suspended, and she was directed a light, nutritious diet; and took every night at bed time, extract of henbane and antimonial powder, of each two grains. For about a week or ten days she regained strength, and appeared to be doing as well as possible, when the matter suddenly ceased to flow from the abscess, and she again experienced extreme acute pain, with sense of fulness, in the part; yet Mr. B. upon examination with a probe, could not perceive any obstruction in the opening. About three days after this, a large hydatid made its appearance, followed by several others, varying in size from a pigeon's egg to a small pea; a considerable quantity of purulent matter was also again discharged.

At this time I was again sent for; but from the violence of the hectic fever, together with the increasing debility and irritability of the system, I entertained but slight hopes of her recovery; I ordered, however, a solution of half a grain of the muriate of quicksilver in about four ounces of warm milk, with a small portion of tinct. of myrrh, to be injected into the abscess once a day, and one drachm of the strong mercurial ointment to be rubbed in the right hypochondrium every night. The hydatids, after a few days, gradually disappeared, and the matter discharged became much tinged with bile, but which afterwards, by degrees, assumed the appearance of healthy pus. Nothing further was now done, except keeping the abscess open by means of a sponge tent; and our patient, with but slight interruptions, continued to regain her health and strength, which I believe she still continues to enjoy, with more comfort than she has done for many years past.

*Derby, Nov. 3, 1803.*



*Case of an extraneous Substance lodged within the Vagina during four Years; by W. BLAIR, Surgeon of the Lock Hospital, &c.*

**I** Was this day requested by my colleague, Dr. Pinckard, to visit a woman who had lately applied to him at the Bloomsbury Dispensary; and, if possible, to extract from her vagina a large piece of wood, which she had introduced *four years ago*, for the purpose of preventing a prolapsus uteri. On examining the patient, I found that this piece of wood had partly made its way into the rectum, so as to occasion the fæces to evacuate themselves by the vagina and external organs of generation. The smell arising from this mass of corruption was the most abominable I ever experienced; the urine and fæces mingled with the usual discharge from a gangrenous part, in a subject who by nature was the most filthy and negligent possible, produced a nauseating odour which is better imagined than described.

There would have been no difficulty, I suppose, in extracting this substance before inflammation and swelling had taken place; but as the woman had stupidly concealed her real situation till the last extremity of suffering, and had herself made ineffectual efforts to withdraw the wooden pessary, (if it may be so named) I found a little difficulty in getting it out with perfect safety; that is, without lacerating the perinæum. When it was removed, it appeared to be a quadrangular portion of coarse deal, three inches long, two in breadth, and one in thickness. What may be the result of this case, cannot now be foretold; but I fear the woman will languish only a short time, and finally sink under the symptoms of irritation, &c. with which she is afflicted.

This woman is about fifty-one years of age; about twelve months ago she was under the care of Dr. P. being afflicted with anasarca. She was then cured; but, during the last three months, she has suffered from a return of the same complaint. For a long time past she has not been able to sit down, but has been in the habit of resting upon her knees.

*Great Russel Street, Oct. 15, 1803.*

CASE

*CASE of OPISTHOTONOS, successfully treated, by R. NAYLER,  
Surgeon to the Gloucester Infirmary.*

**T**HOMAS ORGAN, 36 years of age, in the parish of Witcomb, about five miles distant from Gloucester, in his usual employ as a husbandman, in the month of February, 1802, had his left hand severely crushed, the second joint of his middle finger much lacerated, and the bone fractured. On receiving the accident, he immediately set off for my house, where, in my absence, the necessary care was taken of him by a young gentleman, then my apprentice. From this time every thing went on as kindly as could be wished, and in the course of a month he was so far recovered with an anchylosis of the injured joint as to enter upon some of the less laborious parts of his employment. The weather unfortunately for him was at this time very cold and moist, which affected him so much that he returned home early in the evening greatly fatigued and much indisposed. He passed the succeeding night very uncomfortably, distressed by wandering pains in his shoulders and back, and feeling the usual symptoms of what is called a cold. Unwilling however to yield at once, he made another effort the next morning, but soon left his work under an aggravation of all his complaints. He was now bled, took a strong sweating medicine without any relief, he therefore lost more blood, but without the least diminution of his sufferings. In this state I saw him on the third day after his attack, and then found him under a confirmed locked jaw.

The muscles of the neck and shoulders every now and then suffered the most irregular convulsions, succeeded by such rigid contractions of those of the back, as to draw his head forcibly backwards at the same that his chest was considerably elevated, and through which a very acute pain frequently darted to his back. His countenance was frightfully distorted, and bore the strongest possible marks of the agony he suffered. His pulse was about 80 in a minute. He had no preternatural heat, thirst, or indeed any symptom of fever, nor had he felt the least pain in the injured finger. Bladders of warm water were ordered to his feet, and forty drops of laudanum to be taken every four hours in a camphorated mixture with tincture of castor. His bowels to be kept open by castor oil, calomel, glysters, &c. and blisters were applied on his chest, and also on the cicatrix of the injured finger. These means were

were made use of several days without any material reduction of symptoms, though, to give a full trial to what opium could do, there was an increase of twenty drops of laudanum to each dose, given as before, every four hours. At my next visit I found him much more irritable, and that every time he attempted to speak or swallow, he became more convulsed, with an apparent aggravation of all his very distressing symptoms. The muscular rigidity had now extended itself to his lower extremities, and, though in a less degree, to his arms also. His pulse was become quick and small, his face occasionally flushed, and he perspired excessively; whilst there was an appearance of stupidity which I could not but attribute more to the imperfect action of the opiate, than any affection of the head. He was now ordered wine freely, to the amount of a bottle in the day, with a strong decoction of the bark and valerian, at the same time a liniment well charged with opium was rubbed into his chest and limbs twice a day, but without producing the least relaxation in the violence or frequency of the spasms. The rigidity was now become universal, except with regard to his fingers, over which he had a trifling degree of power.

In this most deplorable state he reached the fourteenth day from the attack, under the impression on all about him that every paroxysm would take him off; when visiting once more, the application of cold water occurred to me, as having been tried under similar circumstances; and therefore, having combated for some time the prejudices of his surrounding friends against its use, I at last prevailed on them to remove him out of bed, and allowing him as much wine as he could take, (about a tea cup full) whilst supported between two persons, to dash about a quart of cold water over his face, chest, and back, and to repeat the same every four hours, increasing both the force and quantity of the water at each succeeding operation, as he appeared equal to it. The first experiment gave him so much and immediate relief, that he looked forwards with no small anxiety to a repetition of it at the appointed periods; and pursuing it to the twenty-seventh affusion, his spasms had entirely left him, those affecting his jaw first giving way, and successively those of his chest, back, and extremities.

To recover him from the very debilitated state to which he was reduced, the bark and a cordial diet were continued, till by a gradual recovery he was able to return to his usual

usual occupation, which he now follows without any remaining inconvenience whatever.

It is worthy of remark, that on being taken out of bed to receive the first affusion of cold water, he appeared like a corpse, or one frozen to death. So rigid and inflexible were all his joints, and his feet so pointedly stiffened, that when placed between the assistants to sustain the operation, he rested on the extremities of his toes only. It is likewise to be observed, that the large doses of opium joined with the antispasmodic remedies were of no avail, even as palliatives, and that there is not the least ground to conclude that the disease was subdued by the efforts of the constitution. The amendment began with the first external application of cold water, it became progressive as the cold affusions were more frequently and effectually applied, and a complete cure was evidently the result of their continuance. That the cold bath has been employed in vain in similar cases, is a fact known to medical men. Are we then to attribute our success in this case to the *less violent*, and mere *local* application of cold? or, if not to these, to what other circumstance are we to impute this favourable event?

*A CASE of the LUXATION of the FEMUR ANTERIOURLY and UPWARDS. Communicated by our Correspondent at Paris.*

THE following rare Case is inserted in the *Recueil Periodique* of the Medical Society of Paris; and Dessault, in his surgical works, give an account of a similar one, the success of which contradicts the unfavourable prognostic generally formed in these cases. It may be interesting to know some of the details, as well with respect to the appearances as to the mode of reduction employed.

A porter in a public office, aged 53, strong and robust, carrying a heavy burthen on his shoulders, slipped and fell with force on his right knee; but the direction of his fall was such as to drive the thigh backwards, while the body charged with the weight was carried in such a direction as to form a very acute angle with the femur, which was pressed backwards; at the moment of the fall the person complained of an extremely acute pain in the right groin, and was incapable of raising himself or moving the thigh.

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In this state he was carried to the Charity Hospital, where he was examined by the surgeon in attendance, who remarked the following appearances. The right inferior extremity was shorter than the other upwards of six lines, and much turned outwards, considerably more than in the fracture of the neck. Any motion in the part was impracticable; in the right groin a tumour was perceived on which the integuments rolled easily, which was found to be the head of the femur pushed from its cavity and resting on the pubis; the crural vessels lay withinside, but there appeared no swelling or tension of the part, and the circulation seemed to be carried on, though to a certain degree impeded; the patient complained loudly of pain in the groin; the buttock appeared flattened, and the great trochanter was carried forwards; in short, a dislocation of the bone anteriorly and upwards was ascertained, and the reduction was immediately attempted in the following manner. The patient was placed on a mattress in a bed without posts, so that the assistants should have free liberty; a sheet folded on itself was placed on the inferior part of the leg, above the malleoli, with a view to extension; the counter-extension was made by another placed in the opposite groin, having previously applied a cushion in order to moderate the pressure of the sheet during the extension; the two heads of this lac were directed towards the opposite side by passing over the loins and abdomen. A third lac was applied with a view to fix the pelvis on the crista ilei, and the two heads were brought to the other side, crossing the former, making with it an angle more or less acute, but the diagonal of which was compleatly in the direction of the luxated member. Four assistants made the extension, two the counter extension, and two fixed the pelvis; the surgeon was placed on one side, and while the assistants drew with all their might the respective lacs, the surgeon pressed with the palms of his hands the head of the bone downwards and backwards, at the same time endeavouring to bend the thigh on the pelvis. After two fruitless trials he suspected the insufficiency of the extensive force, and by adding two to the inferior, and one to the superior, the head of the bone was returned into its cavity with a very remarkable noise. All the parts immediately resumed their natural appearance, the motions though painful were effected with facility, the articulation was covered by a poultice, and in three or four days the patient left the hospital.

The case alluded to in Dessault's works, bears the closest analogy

analogy in every circumstance to the one just related. The process of reduction however offered some varieties which it may not be unimportant to notice. Dessault conceived that the return of the bone was prevented by the small opening in the capsular ligament, and judged it necessary to lacerate and enlarge this opening by giving to the member different strong and painful motions; he made his extension from the ankle; and it may be useful here to remark, that this practice is universal among French surgeons, to make the extension from the extremity of the member in the reduction of all dislocations; and though contrary to the practice, as generally established in England, we believe the principles on which the French practice, or rather the old practice is founded, to be more conformable to the laws of mechanics,—but this by the way. Dessault also made his counter extension different from that we have just described, in as far as he carried his lac placed in the opposite groin across the patient's body, and over the opposite shoulder; the consequence was, that the body, dragged out of the line of direction of the extremity, the extending power lost so much of its force; a circumstance avoided by the application of two lacs acting in a diagonal line, and in the direction of the body or of the extremity. We may observe, that the bad consequences apprehended from compression of the vessels, do not in fact exist, though it is likely that the great pain proceeds from the pressure of the bone against the crural nerve. The weakness of the joint, said to exist through life, does not appear to be founded in fact.

ON THE USE OF WHITE VITRIOL IN AGUES; *communicated*  
by Mr. CUMING, of Romsey, Hants.

I Have long had it in contemplation to publish, through the channel of the Medical Journal, the beneficial effects resulting from the administration of *zincum vitriolatum* in the cure of intermitting fevers. The indulgencies you have hitherto granted me, demand my acknowledgements, and inspire me with a hope that you will find a place for this Essay.

Bark is the remedy which of all others has long maintained its precedence in this department of physic; but almost every physician of any practice, must have had at some period, convincing proofs of its inefficacy; more particularly

particularly on delicate subjects, whose stomachs are naturally irritable: for who has not experienced the nausea and disgust excited from the exhibition of this medicine in such large quantities, as from the symptoms and circumstances of the patient, the case seemed to require; and however partial or prejudiced the practitioner may be with respect to the virtues of this hitherto considered specific, it must be no small satisfaction for him to know, that the *Materia Medica* contains a remedy equally infallible, and more entitled to the epithet specific. I only ask some of my medical brethren, such as are not acquainted with its virtues, (for there are certainly many who never heard or thought of its powerful effects) to give it a fair trial whenever opportunity may serve. In ships of war, I have often given it under every type of the disease, and never knew it fail. I have had two instances within this month, of its curing two poor women who placed themselves under my care, in circumstances the most unfavourable for any medicines to have the wished-for effect.

One of the patients had suffered from a quotidian to such a degree that her legs became œdematous, her countenance sallow and bloated; to such a cachectic state was she reduced, that she had the appearance of falling an easy prey to dropsy: her stomach was much weakened, and her digestive faculties consequently greatly impaired.

I administer this medicine in the following manner: After the *primæ viæ* have been thoroughly cleansed by means of an antimonial emetic, I begin by giving the patient two or three grains in the day during the intervals of the fit, in this formula. *R. pulv. zinci vitriol. gr. ij. vel iij. cons. rosæ, q. s. ft. bol. no. iij. capt. ager. j. 2d. a vel 3tia. quaque hora, ut opus fuerit, et augeatur dosim gr. j. indies.* I never had occasion to give more than five grains in the day. When given in the shape of a bolus, I always order it to be washed down with half a cupfull of any proper diluent. The first of the above named patients was cured in three days, the latter in seven.

Give me leave to observe, Gentlemen, if this plan of cure was adopted in hospitals, infirmaries, and other receptacles for the sick; it would not only be a means of saving large quantities of cinchona, but would enable the gentlemen at the head of these departments to appropriate the money set apart for the purchase of this expensive drug to the laudable purpose of supporting the patients' strength, by allowing them a sufficient quantity of ale, porter, or wine.

It is not my intent on to depreciate the virtues of bark  
(No. 58.) K k when

when properly administered ; yet in many cases I am confident it has been productive of incalculable mischief, particularly in fever, where there is a want of secretion. I have known the recovery of patients considerably retarded by giving the decoction too liberally, and have known relapses take place in consequence of it ; then, how much more danger is there to be apprehended when taken in substance, where it seldom fails to clog the stomach in such a manner as to destroy all appetite ; for if want of appetite in fevers depends upon a deficiency of gastric juice, surely such a remedy will entirely frustrate the intention of the physician.

CASE OF DROPSY, *communicated by Mr. BUSH, of Bath.*

MISS E. W. of this city, aged 29 years, was, about five years since, (she supposed from having taken cold) seized with the *Ascites Abdominalis*, which continued to increase for three years, notwithstanding all the medicines in general use were given by different medical gentlemen, from its commencement ; until she applied, about two years and half since, to my father, who was at that time my partner. We likewise tried the use of medicine for some months with as little success. As she still continued to increase in size, and was very much reduced, I advised her to undergo an operation, which would at least render her a temporary relief ; I performed the operation in November, 1801, and drew off three gallons of clear water, which was impregnated with salt ; after finishing the operation in the usual way, I gave her *ferri rubigo* in form of pills bis die ; twice a week I gave her an aperient ; and in addition to this she took daily some diuretic medicine. She was ordered to take as little fluid as possible ; and I was happy to find, that contrary to my expectation, she grew less, and has regained her former size and health. As the operation is considered a palliative, and not a radical cure, I think this case deserves notice, as some hopes may be entertained of recovering such patients lastingly by a similar treatment. The ascites was in this case a primary disease, as she had no complaint previous to its commencement, except fits, which she had been troubled with for many years, and which still continue.



*To the Editors of the Medical and Physical Journal.*

GENTLEMEN,

THE following letter I received some time since from Dr. Andrew Ferguson, of Aberdeen. I have tried the sulphat of soda poultice, which he recommends, in four cases of Chancre with the same success. That it might benefit others, I requested his liberty to transmit the letter I received from him to the Editors of the Medical and Physical Journal; with which he readily complied.

T. PEAAL.

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“ To Mr. T. PEAAL.

“ SIR,

“ Two years ago I had a Case of Syphilis, which appeared in a large chancre behind the glans penis under the prepuce. Before applying to me, he had been directed to use strong mercurial ointment, which he did without any good effect, the sore still continuing to have a foul and cancerous appearance. I ordered it to be dressed with an ointment prepared in the following manner.

R. Ungt. hydrarg. fort. ungt. resin flav. aa ʒj. calomel ʒj. M. And a little of the hydrargyrus nitratus ruber to be sprinkled upon the surface of the sore.

Notwithstanding this had a fair trial, the chancre continued not only to look unfavourable but to increase in size. I changed the ointment. It was dressed with the following. R. Cerat. lapid. calaminar. ʒj. ceruss. acetat. hydrarg. nitrat. rub. aa gr. x. M. But with no better success. I considered, that ointment in this case was not likely to succeed, either in cleaning the sore or arresting its corroding nature. I then ordered him to apply a poultice to the chancre, prepared in the following manner. One ounce of the sulphat of soda was dissolved in 4 lb. of boiling water. When perfectly cold, a little of this water was mixed with a small piece of the inner soft part of a loaf of wheaten bread, prepared of the finest flour; this was kneaded with the fingers until reduced to a soft poultice. It was then applied to the chancre, cold, and renewed six times every day. In the course of two days I could perceive a material difference in the appearance of the sore; and the patient said, that the pain was considerably abated. In ten days the whole surface of the chancre was red,

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new,

new granulations of flesh springing up, and the discharge from it of a better quality, and much diminished in quantity. I used the same application until the chancre was completely whole, which happened in about one month after the first application of the sulphat of soda poultice. I looked upon this as a fortunate discovery, for I had frequently found a considerable difficulty in healing these venereal ulcers, especially when they were of a very inveterate and corroding kind. Upon making trial of this, I hope you will find the same success, for it is not in one solitary case that I have tried it, but in more than twelve, with always the same advantage. I must however observe, that when I have any suspicion of the venereal poison being absorbed, I never trust the cure to the poultice alone; I always cause my patients either to rub in strong mercurial ointment, or take mercurial pills until their mouths are affected by the mercury. The sulphat of soda poultice has a very great influence in preventing the absorption of the poison of syphilis; and in this, a great part of its virtue consists. For as the bread is of a mucilaginous nature, it mixes with the matter, and absorbs it, and this as soon as it is formed, which ointment never does, but confines it in a body upon the surface of the ulcer in as acrid a state as when it is secreted. Hence, one great advantage of this application is, that buboes are less readily formed. The sulphat of soda poultice, no doubt, produces a change in the action of the part, besides its absorbing the acrid matter. With this view, I tried it in two cases of herpes with the same good effect as in chancre. The quantity of sulphat of soda used in making the solution for the poultice was in these two cases much increased. Considering the powerful effect of the sulphat of soda in syphilitic ulcer, I thought it might also be a very good application in gonorrhœa. I tried it in six cases; it was dissolved in hot water; but did not answer so well as when used in the same manner as for chancre. The solution of sulphat of soda was mixed with wheaten bread, and dissolved to a thin mucilage; and, in this latter form, I will venture to say, that it is among the first injections that have been discovered.

“ I remain, your's, &c.

“ ANDREW FERGUSON.”

**OBSERVATIONS ON THE EFFECTS OF OPIUM ON THE HUMAN BODY, by Mr. F. WEBER, of the Foreign Depot, at Lymington, Hants.**

[ Continued from pp. 435—443. ]

**T**O the first and the latter of the last three men, I administered the following morning at ten o'clock, when they were perfectly well, four grains each, in pills. In half an hour the first perceived a pressure in the forehead. In an hour this pressure was increased to giddiness and slight confusion. At the same time he experienced dryness in the mouth and fauces, and grumbling and contraction of the bowels. At one o'clock he took his usual dinner, being then less giddy than he had been at eleven and twelve. At three he felt no effect whatever.

The other was very giddy and confused an hour after he had taken the pill, he also felt a grumbling and slight pain in the abdomen. His face was at first glowing; he felt a strong pulsation of the arteries in the head. Afterwards his pupils became extremely contracted, and did not dilate either in the dark, nor when I rubbed the eyes with my finger; his sight was dim; his mouth and fauces dry and covered with a tough viscous saliva. Half an hour later he was trembling, sick, and so giddy that he could not walk without a stick. He ate no dinner, and continued in that state, sometimes in bed, sometimes walking about, until the evening. He was in a strong perspiration the whole of the afternoon. At seven in the evening he drank two dishes of tea, which he threw up again, and violently vomited for nearly five minutes. At nine o'clock he complained of violent gripings, against which a quart of warm milk gradually drank, afforded him instant and lasting relief. He continued confused, giddy, very dry, sick, and strongly perspiring the whole night. He did not succeed in making water until one o'clock in the morning, and not before he had made several efforts in vain, and he then perceived a burning in the urethra and frequent interruptions in the stream of urine. He was tolerably well next morning, but had not had a stool since he took the first three grains, three days before.

Livinus Roculé, aged 31, and Küster, aged 20, both enjoying a general good state of health, suffered at the same time violent pains, though the latter in a much higher degree than the first. Roculé from two lymphatic swellings in the knee-joint and groin, in consequence of ab-

ruptly drying up some small ulcers of long standing on the leg; the other from a tense erysipelatous swelling of the leg from the same cause.

I ordered each a pill of three grains of solid purified opium, at eleven in the forenoon; which relieved neither the pain, nor did they perceive any other effect. Between seven and eight in the evening, I administered to each five grains in a pill, which perfectly delivered them from pain in an hour's time.

Kûster had a good night, experienced no other effect but dryness in the mouth and fauces, and was perfectly well next morning.

Roculé had also enjoyed rest and sleep; he appeared to be (next morning) in high spirits, and to speak with unusual confidence. He told me, that some time after the pain had left him, he had felt a strong itching in the nose and all over the body, dryness in the mouth and fauces, hoarseness, hickup and thirst; a number of red spots, resembling, according to his description, flea bites, only larger in size and without a tittle in the centre; and though he had not perceived any giddiness or sickness before, he had thrown up his breakfast, which he had taken with a good appetite at seven o'clock. He had also experienced slight difficulties in making water, frequent involuntary stoppings in the stream of urine, and a burning in the fossa navicularis.

Both were regular in their bowels. In Kûster the pain did not return, and the swelling subsided in a few days after the ulcers had again began to suppurate, in spite of art and remedies. To see what effect opium would now have upon him, I gave him three grains (after four days had elapsed since he took the former) three hours and a half after dinner. In about an hour he perceived violent gripings, which lasted till one o'clock in the morning. Two pints of warm milk, which were used three hours and a half after the gripings had appeared, seemed, instead of relieving, to increase them. He experienced not the least giddiness, nor any other effect, and was well next morning.

Roculé, whose ulcers had remained dry, complained again of pain, though not so violent as before, in both swellings, which were highly inflamed; I ordered him three grains, (which was on the fourth day since he had taken the first) four hours after dinner. He found himself relieved in an hour after, though not quite free from pain. He had a tolerable good night, but experienced again  
much



much thirst, and an itching in the nose and all over the body. The pains having rose again next day, I ordered him six grains in a pill, two hours before dinner. In three quarters of an hour he began to perceive some effects in the head, and in another half hour found himself perfectly free from pain. He has continued to take from time to time, four, five, or six grains, perhaps every second, third, or fourth day, which has kept him free from pain, and in good spirits; while, at the same time, the ulcers have remained dry, and the inflammation in the swellings taken its course. The one in the groin has suppurated for some time, through a narrow opening which had formed spontaneously, and seems now going to be dry and to close again. The other in the knee has pointed and is fluctuating. His general state of body appears not to be affected. He is free from fever, his appetite good, and bowels regular.

John Behn, twenty-six years of age, in a general state of health, complained of pain in the wound, four days after I had amputated the large toe of the right foot. I administered to him a pill of three grains in the evening, which perfectly relieved him in an hour's time. In another hour he was giddy, and though very drowsy, had little sleep during the night, on account of frequent startings and disturbed imagination. In the morning he experienced slight difficulties in making water, and threw up his breakfast. At ten o'clock, when I saw him, he was well. Four days after, though free from pain I gave him three grains, three hours and a half after dinner. In about an hour he began to feel a pressure in the forehead, under the tubercula frontalia. In half an hour more the pressure was much increased, he was slightly confused, giddy, and dry in the mouth and fauces. In another hour he complained of pain in the head, above the right arcus supra-orbitalis, which gradually increased, prevented him from sleeping the whole night, and did not quite leave him till the evening of the next day. He was very dry during the first night, experienced frequent startings when he was dosing, and had great difficulty in making water. He had experienced no other affection of the bowels but costiveness.

Cornelius Berlett, thirty years of age, of a healthy habit, was afflicted with a most extraordinary kind of ulcers all over the body, of years standing; the obstinate remains of lues venerea, or possibly of the inconsiderate use of mercury. While some of these ulcers were healing, others broke out again. They were always preceded by hard circumscribed swellings, in and under the skin, which

made their appearance suddenly, were inflamed, and extremely painful. He had taken from six to eight grains of solid opium per day, for a great length of time, and perceived but little benefit from it. On my advising to take a larger dose (having some pills constantly near him) he told me, that he could take any quantity without perceiving more effect from it, than from what he usually took. In order to convince me of the truth of what he said, he took in my presence twelve grains. Three hours after, when I saw him again, which was at two o'clock, he had not perceived the least effect. I now administered to him sixteen grains in four pills, and in less than a hour he was free from pain. He continued perfectly easy, and it appeared to me in high spirits, two days, without feeling any other effect but thirst and itching in the nose and over the body the first night. He now takes from eight to twelve grains every second or third day, according to circumstances, is always free from pain and in good spirits, and experiences no effect whatsoever, not even thirst or costiveness. When he first began to take opium he experienced frequent difficulties in making water, and even once or twice a temporary ischuria; and until now he has experienced strong itching in the nose, and over the body, each time when he has exceeded his usual dose. This I state on his authority.

Helfer, aged fifty-six, orderly man in the hospital, had been afflicted with a diarrhœa four days, attended with gripings. He had had about twelve thin stools every day, was free from fever, and had a tolerable good appetite. I administered to him four grains of solid opium, dissolved in a small quantity of brandy diluted with water. Some hours after he found himself free from pain, and had no more stools afterwards. He experienced neither giddiness, confusion, sickness, thirst, nor any other effect whatever. Next morning, at half past eleven, when he was quite well, I gave him, in order to make a comparative observation, three grains dissolved as before. In less than an hour he made a full dinner, and soon after felt giddiness and confusion, a grumbling and contraction in the abdomen, and sickness, which continued till late at night. He was well next morning.

— Weber had laboured fourteen months under a stricture, in consequence of which his general state of health had been considerably impaired. By the introduction of catgut, the size of which I gradually increased, I succeeded in a few days to introduce bougies of a moderate size.

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His being excessively irritable, obliged me to administer opium in considerable quantities, whilst I was operating on him. Having abruptly discontinued the use of opium, as soon as he could bear the introduction of bougies without pain, I found him, the third day after, in a comatose sleep, which increased the next day to such a degree, that loud calling and shaking only could rouse him. It gradually diminished, and totally disappeared two days after. This happened at a time when I had not made the effects of opium my particular study; and I must confess, that not myself alone, but other medical gentlemen, were alarmed in no small degree, and utterly at a loss how to act. Six months ago he had been in a similar state, and, as was afterwards found, from the same cause.

An unfortunate Frenchman, of the name of Cerisier, twenty-six years old, who has been above a year in the hospital, labouring under a most excruciating anomalous gout, I found in a state resembling a low nervous fever. His countenance was almost hippocratic; his eyes looked muddy, and were filled with a thick yellow matter; he could hardly speak, and the words were indistinctly articulated; he was sunk together in bed like a corpse; could hardly lift up a finger; and was continually dosing. I should have thought this wretched sufferer dying, and in that supposition perhaps have done nothing, (I mean nothing to the purpose) had I not experienced already a like exhaustion on myself, only in a less degree, as the late consequence of abruptly discontinuing the use of opium. I knew he had taken large quantities of opium formerly, (from ten to twenty-four grains per day) and directly guessed, from the change of medical attendance which had taken place some days since, it had been discontinued. Having made enquiries about it, I learned that it was the second day since he had been in this state; that he was worse this than the day before, and that the use of opium had been discontinued five days ago. I ordered him twenty-five drops of tincture of opium, and the same quantity of spiritus ætherius nitrosus, to be taken immediately, and to be repeated once in the afternoon. I did not order him a larger dose, because he was weak and exhausted, and because I would bring those changes gradually about, from which he should derive stronger phenomena of life.

I saw him again several times in the afternoon and evening, but could not perceive any material alteration. At nine o'clock I ordered him forty drops of tincture of opium, and twenty-five of spirit. æth. nitrosus. I gave orders that

that he should be left quiet during the night; that he should take a dose (twenty-five drops of each) at six in the morning, and another at nine. At ten o'clock next morning, I thought I could discover a slight increase of strength and energy, and more brightness in the eyes. In the evening, having taken a third dose of forty drops in the afternoon, a visible change had taken place; his eyes had more life; his speech was more distinct; he had more power in his limbs; and less tendency to sleep. I gave orders that the same treatment should be continued. Next day, about noon, I had the satisfaction to find him in the state he had been in before he sunk into this inanition of strength. His eyes were animated; his speech was clear and intelligible; he desired and relished some victuals; and was able to perform the few motions which were not yet impeded by affections of their respective organs.

Another Frenchman, between thirty and forty years of age, apparently strong and healthy, whom a lively imagination disturbed day and night, and in whom the strength of his nerves, unproportionate to the weakness of the other soft solid parts, falsely reported to the sensorium commune, and magnified the least deviation from health in any part of the body, complained every day of a new disorder and affection. In order to blunt the acuteness of his sensations, and if possible raise his spirits, I prescribed to him a grain of opium to be taken four times a day. Not perceiving any effect from this, I doubled the quantity next day, which I soon perceived had the desired effect. His spirits began to raise; sensibility, judgment, and reflection became diminished, and with them his disorders vanished; only, at times, he perceived slight confusion and giddiness; for instance, after dinner and tea, some motion and grumbling in the bowels, thirst and costiveness.

What I have said of myself respecting the circulation of blood, general temperature of body, the processes of the economy at large, and appetite, I have found to be in general the case on those persons on whom I had an opportunity strictly to observe the effects of opium.

If we compare the foregoing observations on persons in health and on persons under disease, we shall perceive a material difference in the effects of opium on them. It will be seen, that, if certain affections were present in the body, against which opium proved to be an effectual remedy, such as fluxes and pain, sometimes uncommon large quantities were requisite to produce the desired effect,  
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if the said affections prevailed in a high degree, without producing hurtful or hardly any of those effects which much less quantities would have caused in others, or in the same persons, free from those affections. We shall also perceive, that when those affections which had resisted the operations of opium on the body were subdued, the usual effects then would take their regular course, in case a stronger dose had been administered than was required to answer the first purpose.

Mr. B. Weber, Staff Surgeon to the Foreign General Hospital, has frequently been obliged to order from twelve to forty-eight grains of solid purified opium in four and twenty hours, before he succeeded in producing the desired effect: removing pain. He has even been under the necessity, some months ago, to order three grains every hour; so that the patient, who suffered violent rheumatic pains, took seventy-two grains in twenty-four hours, without perceiving hardly any other effect but a removal of pain. It was administered by a trusty apothecary, and partly in our presence. Under this pleasant mode of treatment, the patient was cured in a short time; pleasant, I call it, because the mind being rendered unconscious of what passes within the body, no pain is felt while the disease takes its course.

To men labouring under purulent fluxes, in consequence of affections of the bowels, in the West-Indies, we have also been obliged to administer opium in large quantities, before we could perceive a reduction of stools and removal of pain; and without being able to discover other usual effects of opium, such as confusion and giddiness, difficulties in making water, sickness, &c. Having now stated every observation on this subject which has appeared to me interesting in some respect or other, I shall proceed to take a short review of the whole, extracting all effects, in order to bring them under one point of view

The effects which make their appearance first, are:

Tranquilising passions and emotions, removal of pain, and reducing the frequency of stools. After this is effected, or where the mind was in a tranquil and easy state, and where none of the named affections were present, there appears: sensation of fullness in the head; increased vigour and activity; elevation of spirits; unusual watchfulness; a pressure in the forehead; a slight confusion of thought and giddiness; heat and sensible pulsation of the arteries in the head; flushing in the face; redness and swelling of the eyes; slightly impaired sensibility; dryness  
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of the mouth and fauces, and thirst; sickness; grumbling and slight contraction of the intestines; hoarseness; headache; increased giddiness and confusion; hickup; higher degree of insensibility; impaired voluntary motion; stammering in speech; propensity to sleep; startings and sudden perspiration all over the body when sleep comes on; stupor; weary eyes and contracted pupils; dimness of sight; trembling; isthuria and dysuria, with frequent involuntary interruptions of the stream of urine; ultimately, elevation of spirits and watchfulness; costiveness; diminished desire and impaired functions of generation; finally, lassitude, exhaustion, stupor, and sopor.

Under this number, I should presume, the effects of opium, though admitting of a great variety, would be all comprehended.

Having before given the history of my observations on opium, I shall now take a short review of the stated effects; endeavour to trace them to their origin, and offer my opinion on the manner in which opium affects the body.

From an attentive consideration of the effects of opium, extracted from the foregoing observations, it appears to me evident, that opium causes an affection of the intestines and brain, at least an unusual change of the actions of the said organs. Reduction of stools; contraction of the bowels; griping and costiveness, manifest the affection of the intestines; a general disturbance of the intellectual operations, sensibility and voluntary motion in short of those actions and phenomena which result from, or are dependent on the actions of the brain, prove, that an affection of the latter has taken place. Confusion of thought; giddiness; elevation of spirits and unusual watchfulness; happy and frightful visions during sleep, and when sleep comes on; stupor and sopor are unusual, or preternatural intellectual phenomena. There is a diminution of sensibility, that is to say, the mind does not perceive as strongly and speedily as usual the impressions of external agents, and of what is going forward in the body. Passions, emotions, and pain, being different kinds of lively sensations, engrossing the attention of the mind, must become less acute, in proportion as sensibility becomes diminished, and the intellectual operations impaired. Voluntary motion is impaired; the organs of speech perform their functions with difficulty, in consequence of which, words are indistinctly articulated; the sphincters cannot easily be opened, in order that the contents of their respective

spective cavities may be discharged; they refuse the command of the will, because it has lost its power; the stomach, the diaphragm, and other muscles, preter-naturally contract, and thence there ensues vomiting, hickup, startings and tremblings: all clearly shows a disturbed balance between the operations of nervous and muscular power. Pressure in the forehead; heat and sensible pulsations of the arteries in the head; flushings of the face; redness and swellings of the eyes, and head-ache, are symptoms of an accumulation of blood in the head, and leave no doubt of an affection of that organ. Sexual function is impaired or abolished, because the impression on the mind and consequent exertion of the latter, necessary to cause a due excitement in the parts of generation, do not take place.

Lassitude and exhaustion, stupor and sopor, the late consequences of a strong dose, or of suddenly discontinuing the use of opium, prove a languid flow of nervous power; a dullness in the actions of the brain, and the abstraction of a strong exciting cause.

Are not these effects unequivocal symptoms of an affection of the intestines, and, particularly, of the brain? If any doubt remained with regard to the latter, would not the consideration that, by an attentive observation, the first effects are always felt in the forehead, and that only when a large dose has been taken, affections in distant parts take place, but which are all unusual changes of actions and phenomena, in so far as they are depending on nervous influence; would not, I say, this consideration be quite sufficient to convince us that opium chiefly affects the brain, and thence produces the salutary effects of removing pain, and promoting rest and sleep?

I shall proceed to take a short review of the other effects, which being either of less moment, or such as only take place at times and under a particular concurrence of circumstances, it is of less importance, though it may seem more difficult justly to account for them. I shall also consider some circumstances, which have a particular influence on the operations of opium on the human body. Dryness of the mouth and fauces, hoarseness, itching in the nose and over the whole body, I conceive to be symptoms of faulty and inordinate operations of nervous power, in the soft parts of the mouth, fauces, larynx, &c. We shall easily account for the constant attendance of dryness of the mouth and fauces, and hoarseness, on the use of opium, if we consider the number of nerves distributed in the mouth,

mouth, &c. and the consequent free communication between the brain and those organs; if we consider, that the same phenomena, (dryness of the mouth, &c.) make their appearance in different passions, for instance, fear and anger, (thence the phrase choaked with anger) and in different cases where the brain is affected. A general perspiration breaking out when sleep comes on, seems owing to an increased want of energy or relaxation of the skin, in consequence of a diminished operation of nervous power. This effect is often perceived when sleep is brought on from any other cause, for instance when we fall asleep after dinner, and thus confirms the manner in which I have accounted for it in this case. Startings, which take place at the same time, are owing to the same cause, and show a disturbed balance between the muscles and their regulating power—nerves. So as the foregoing, does this effect often take place, when sleep comes on from any cause, or if any thing makes a sudden impression on the mind, and gives a check to the quiet ebbing of nervous power, which we express by the term, fright.

Sickness and vomiting taking place, when stupor, great confusion and giddiness, contracted pupils and dimness of sight, difficulties in making water, &c. are present, clearly show that they arise, at least in this instance, from the same cause, in the same manner as the other effects. Vomiting taking place sometimes also when hardly any other effect is to be perceived, seems to be a proof that perhaps from the immediate contact with the opium, in some instances, it may be owing to a change in the living properties of the stomach, or according to the theory of the learned Reil,\* in the form and mixtion of its most minute component particles.

Solid or fluid substances exciting vomiting, when taken during the operations of opium, act as powerful stimuli on the disordered state of the stomach, and force it to preternatural contraction.

Continual vomiting after the total evacuation of the stomach, appears to me a sure sign, that it (vomiting) is at least not owing to any remaining part of opium in the stomach.

The effects of opium are the stronger the more early in the day it is taken: during sleep the body is in a different state from that during watchfulness; there is a diminution of  
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\* Professor at Halle, in his *Archiv für die Physiologie*, 1. St. 1. B.



action, an important change of processes takes place, the animal principle, or that something from which excitability, power of action, in short, life results, and which is consumed by every action of the body, accumulates; impressions therefore are more lively after sleep, chiefly on this account, but partly also, the body being less used to them, they are more strongly felt.

Sleep removes slight remaining effects of opium: as the animal principle accumulates during sleep, the different parts must sooner recover their healthy and perfect animalized state again. During sleep also the animo-chemical processes, consequently secretions, are diminished: thus if any part of opium remains in the body, or if considerable changes in the organisation or living properties of the brain, stomach, or other parts, had taken place, requiring strong animo-chemical processes to attain their natural state again, sleep then must prolong the effects of opium.

By the long continued use of opium the effects become less, &c. Various powers which are obnoxious to the health of the body, when applied abruptly, or which would deprive the animal machine of its characteristic properties if they came suddenly, and in a certain quantity, in contact with it, produce, by repeated or gradual application, such changes as not only to become harmless, but even take the place of natural stimuli; that is to say, they become absolutely requisite to excite either single parts only, or the body at large, to actions, without which life could not exist, or be at most but imperfect. Thus it is, that our body becomes inured to various and unhealthy climates; to breath obnoxious gases; to require the use of burning spirits and corroding substances; that the hands of one man become used to work, which would blister another's skin; thus is the organisation of the nose and mouth transformed into new organs of sense by tobacco.

Exercise and heat causing a lively, quick circulation of blood, hasten the operation of opium on the body; but at the same time, causing a particular strong excitement on the surface, thereby lessening the actions of the intestines, and finally hastening the animo-chemical processes, cause the opium to be speedily expelled out of the body. Cold, fear, suspense, and anxiety, lessening the general excitement, and abating the vigour of the processes of the economy, retard the absorption and circulation, consequently the effects of opium on the brain. Cold, if not a very high degree, counteracts the effects of opium less than the said passions, because, though by lowering the excitement on  
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the surface, and preventing a lively free circulation of blood, it may in some measure prevent a speedy contact of the opium with the brain, its effects are generally of short duration, the same degree soon becoming a relatively stronger stimulus in proportion as the animal principle (Brown's Excitability) becomes accumulated; and because opium affects such organs as are seldom positively affected by cold, and the excitement of which is even increased during the operation of the latter, (in a moderate degree) on account of the blood accumulating in them.

Pain and strong sensations of any kind, seem to cause an exertion of the brain; emotions, such as suspense and fear, an overstraining as it were of the latter, both resisting the operations of opium on that organ. The latter, wholly engrossing the intellectual operations, check or arrest the influx of nervous principle into the body, and thus cause an abatement or a total cessation of most actions depending on nervous influence. A fainting from fright gives us an instance of the latter case; in the first case sensibility is diminished, voluntary motion is difficult, weak and inordinate; breathing is short; and the blood not passing freely through the lungs, and not undergoing there the due changes, excites the heart to irregular contractions; thence faulty secretions and absorptions, cold, clammy, offensive perspirations, indigestion and purging; in short, faulty animo-chemical processes; thus the opium, not being absorbed, lies ineffective in the intestinal canal, and, as it were, out of the system.

As we now see that all effects of opium are symptoms of an affection either of the intestines, or particularly of the brain, and that neither pulse nor general temperature, nor the processes of the economy at large, are directly affected by it, we must conclude that the immediate effects of opium are local, and confine themselves to the said organs, as the effects of jalap to the bowels, ipecacuanha to the stomach, cantharides to the urinal system, and stincus marinus to the parts of generation.

It may be objected, that the usual voluntary motions, such as the functions of the limbs, breathing, &c. are so little impaired, and do not suffer materially, unless a large quantity of opium has been taken, and unless the effects take place in a high degree. I answer, that those actions only require a single impulse, and take place mostly without intellectual co-operation, and therefore cannot so easily be effected as other actions and phenomena, which require complicated intellectual operations, such as thought, which

which are less habitual, more difficultly excited in the natural state, and require more the co-operation of will and premeditation, such as the excretions of urine and fæces, the functions of generation, &c.

The numberless sublime phenomena which are immediately founded on the actions of the brain, and the great variety of actions and phenomena depending on the state of the former, contain the cause why substances, and amongst them opium, affecting the brain, are attended by so many and various affections, and have thence been thought generally to affect the body. Why opium affects the brain particularly, and not the lungs, liver, or any other organ, I believe all we can say (at present at least) is, that it stands in such a relation with the brain as to affect it in such a manner, when it or some of its particles have been absorbed and come in contact with it.

The affection of the intestines appears to me wholly owing to the opium coming immediately in contact with those organs.

With regard to the manner in which opium affects the organs to which it bears a relation, I am inclined to think, from the costiveness, from the glow of the face, the red and swelled eyes, the giddiness and heat in the head, marks of accumulation of blood in the latter, that it simply contracts their minima vascula.

The sensations of pressure and tension in the forehead, attended by an increased flow of spirits, happy reasonings, courage, cheerfulness, &c. the effects of small doses, show an increased action of the brain, and is most likely owing to an increase of tone; in other words, to a slight degree of contraction of the parenchymatous tubes.

Increased energy, exhilaration, watchfulness, &c. taking place after the first turbulent effects caused by a large dose have disappeared, prove that the contraction has given way, and is come to that point which was caused by a moderate dose.

Exhaustion and sleep, the last effects, evidently show a dull and languid state of the actions of the brain, in consequence of the abstraction of a powerful exciting cause.

Exhaustion and sleep being the result of a relaxation in the brain, and this relaxation the consequence of the foregoing contraction, will easily explain why they are proportionate, in degree and duration, to the former effects; why they make their appearance the sooner the smaller the dose had been, the later the larger it was, and the longer the use of opium had been continued. If, for in-

stance, two grains of solid opium had been taken at eight in the morning, a higher or less degree of confusion, giddiness, propensity to sleep, &c. had lasted from three to six hours, and proportionate degree of energy, exhilaration, &c. succeeded, a slight exhaustion may make its appearance in the evening. If in consequence of a larger dose, more violent effects had been produced, and lasted a whole day or longer; if the succeeding exhilaration had been proportionate in duration, it will be obvious that the exhaustion, which cannot make its appearance before the foregoing effects have vanished, will not take place until thirty-six or forty-eight hours have elapsed.

That opium affects the brain in no other way but by being absorbed, and coming in contact with it, seems to prove the late appearance of the effects, which do not take place before at least half an hour has elapsed, the appearance of the effects being hastened by every thing which accelerates the circulation of blood, and increases the vigour of the animo-chemical processes; such as exercise, heat, food, spirits, &c. On the contrary, the appearance, of the effects being retarded, under circumstances which lessen the actions of the body, and abate the processes of economy, such as cold, rest, sleep, fear, &c. The effects taking a quick course, and speedily vanishing under an increased operation of the processes of the economy, thus expelling the opium quickly out of the body; as, for instance, during exercise, when the body is warm and perspiring. On the contrary, the long duration of the effects, when the processes are slow, as is the case when the body is under the influence of cold, of those passions known by the name of depressing as fear, &c. During rest and sleep, &c. the speedy appearance and higher degree of the effects after a meal, increasing the absorption of the opium in the *primæ viæ*, and pushing, as it were, that which is in the lacteals forward into the circulation; perhaps, also, the chyle, floating in the blood, and not yet perfectly homogenated, increases the affection of the brain, when it comes in contact with it.—I shall conclude this with a few practical hints, deduced from the whole.

1. Knowing that opium produces the salutary effects, removal of pain, rest and sleep, by causing certain changes in the brain, and thereby rendering it unable to perceive what is going forward in the body, and that the body at large is not *directly* affected by it, nor any other part except the intestines, we shall, *without fear of imparting any morbid*



*morbid state to any part*, the said organs excepted, order whatever dose be necessary to produce the desired effect.

2. Knowing that the effects of opium are the stronger, the weaker the body is, and the more the functions are disordered, provided the parts on which it operates possess a sufficient degree of excitability to receive its impression, we shall regulate the dose accordingly.

3. Lively sensations and emotions resisting the operations of opium on the body, in proportion to their degree, will assist us in determining the proper dose. We have seen above, what uncommon large quantities were required to produce ease in persons labouring under violent pain, and what different effects the same dose produced in the same persons, when labouring under pain, and when free from it.

4. If it be our object to excite lively actions in the brain, in order to produce an increased flow of nervous exciting cause, and thence an increased energy, activity, &c. we shall order from one to three grains or more for the first time, and continue with half a grain, a grain, or a grain and a half, or more, to be taken from every half to every two hours, according as the effects make their appearance.

5. If it be necessary to hasten the operations of opium on the body, we shall administer it dissolved in any usual menstruum, or order at the same time a small quantity of spirits, or any fluid containing alcohol; and in about half an hour after, some fluid or solid substance, as will be judged most adapted to the case.

6. Should a quantity have been taken from which dangerous effects are to be feared, speedy evacuation of the stomach, by mechanically irritating the orifice of the pharynx, will prove the surest means of safety; lemon juice, or where that cannot be procured, vinegar, or I should suppose any other vegetable acid, or sour fruit, taken in as great a quantity as the stomach will bear, will in a great measure render ineffectual that which lies in the intestinal canal. Heat, exercise, or any thing that tends to increase the animo-chemical processes, and causes sweat, will be the most effectual means to free the body from what has been carried into the circulation.

7. To rouse a patient from sopor, occasioned by abruptly discontinuing the use of opium, it will be easily conceived, that the latter must be renewed. The quantity which is necessary to produce this effect will be best determined by the effects produced from a given dose. The degree of sopor, the former state of the patient with regard to strength

and weakness, and the quantities formerly taken, may assist in determining the proper dose.

8. In an alarming degree of sopor, being the direct consequence of a large quantity of opium, attended by coldness, insensibility, &c. sprinkling the regio hypogastrica and parts of generation with water, as cold as possible, or a mixture of vinegar, nitre, and ammoniac, will, as one of the most powerful excitantia, deserve particular notice.

The following history of two analogous cases may not be unacceptable, though not exactly belonging to the subject.

At a time when I officiated in the Shropshire militia regiment in the Isle of Wight, for the surgeon who was ill, I was called to two men, privates of the said regiment, who were lying on the ground in a state of asphyxia, in consequence of the immoderate use of brandy. They appeared totally bereft of sensibility, were cold, and without pulse; breathing and pulsation of the heart were only perceivable in one, and not without the nicest attention. I had them undressed, wrapped in warm blankets, placed near a large fire in a horizontal position, yet so that their heads were elevated farthest from the fire, and under a free access of air. I had them rubbed with warm wood ashes, and brushed with hard brushes. After this process had been continued for about a quarter of an hour, I cautiously washed their heads with cold water and vinegar, and sprinkled the before mentioned mixture from a certain height on the said parts, which instantly produced deep inspiration, sighing, and other strong symptoms of life.

This was at twelve o'clock at night, after they had been lying from four or five o'clock in the morning on the beech, where they had found a cask of brandy, and emptied it, in company with eight or ten others.

About two scruples of white vitriol poured into each, produced no effect till they were warm, and showed strong symptoms of life.

*To the Editors of the Medical and Physical Journal.*

GENTLEMEN,

**T**HE accompanying Communications supply some important dates and circumstances towards the history of the Influenza; I cannot now expect to receive any more, and therefore shall trouble you, against your next Number, with my own Remarks, in which I shall introduce a very satisfactory Report from Dr. Carter of Canterbury, on the appearance of this complaint in Kent, together with one or two others.

The first of the following numbers relates to the district about York, and would have been transmitted with the last parcel, had it arrived in time.

I am, &amp;c.

14 Nov. 1803.

THOMAS BEDDOES.

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112. Mr. BELL, Pocklington, Oct. 8, 1803.

The first patients I had attacked with the Influenza were about the middle of March, with febrile disease, cough, and more or less painful inflammation in the lungs and pleura, the removal of which was not difficult by bleeding, saline antimonial nitrous remedies, and demulcents for the cough; in short, I then considered them as the usual spring complaints of peripneumony and pleurisy, which diseases occur frequently with us in the months of January, February, and March. In the beginning of April, a remarkable number of patients, of all ages, were attacked, the middle aged and robust most severely; and of the whole number, I lost one aged patient and two infants; the rest all recovered well under the above treatment, and I do not remember one case that terminated in hectic fever or pulmonary suppuration; though from such species of disorders, on other occasions, I have often had cause to observe and lament it. I confess I did not, at the beginning or in its progress, consider it contagious, although whole families were seized; I supposed exposure to the same circumstances of atmosphere might occasion similar attacks, and I looked on it as endemial but not epidemical, putrid symptoms hardly ever occurring, and then only slight diarrhoeas in weak habits, the principal symptoms always appearing purely inflammatory, and very few cases of long duration, in a few days the inflammation always

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being checked, and expectoration soon relieved the cough. —Not being in the habit of taking notes except in some particular circumstances, my day book and memory, with the assistance of my young man, are what I write from; but if you have any more particular questions, I will with pleasure answer them. The disease began to decline the latter end of May, and was nearly ended by the middle of June.

113. *Dr. HIRD, Leeds.*

The following particulars I took down from the mouth of Dr. H. who, when I saw him here, could not specify the time of its appearance at Leeds; but I have reason to hope he will supply the date soon.

The influenza did not spread rapidly at first; for a week or ten days it seemed to abate, and then it became very general. It shewed itself by great and sudden debility, pain in the head, rigours, heats, and perspirations. The cough was very constant; it followed pain in the head and shivering, but seldom or never, in my observation, preceded those symptoms. The bowels, in some persons, were affected with pain and diarrhoea. Females seemed to be more liable to its attack than males; and the delicate among females more liable than the robust. Few phthisical females escaped it; those of sedentary habits were more universally affected. Men, who lived free or full, were less liable; and such as went very much out of doors with such a diet, were least of all liable.

My usual practice was to give first an emetic, then the effervescent saline draught, and extract of poppy when the cough became very troublesome; this appeared preferable to opium itself. When every inflammatory symptom had gone off, the spt. ætheris vitr. c. with white poppy syrup, was useful. Old asthmatics died; and it was speedily over with them if they had been bled or otherwise debilitated. Bleeding with leeches was singularly useful in robuster subjects, where there was pain in the side, &c.

Four out of seven in Dr. H's family had it at the same time. Of bed-fellows, sometimes one had it, and one had it not. In a particular family that resided in an insulated house it was universal, and all were seized within thirty-six hours; the family consisted of either fourteen or fifteen. In other instances, it seemed as if propagated from person to person.



114. Dr. RUTTER, Liverpool, Oct. 31, 1803.

I think I met with an instance of the influenza on the 27th of February, 1803. My patient was then in the second day of the disease, which at first appeared to be a combination of rheumatism and catarrh. The pains, which were betwixt the false ribs and the spine of the ileum, were uncommonly severe, and resembled those of rheumatism; these, however, gave way in a day or two, and left a catarrhal affection attended with great debility, exactly resembling the influenza which afterwards became so general. On the 5th of March I saw a strongly-marked case of the influenza; and the patient, a young lady, was then in the fifth day of the disease. In the second and third week of March, the influenza was very general here; towards the middle of April it had greatly abated; and before the end of that month, as far as my knowledge and recollection extend, it had nearly if not entirely disappeared.

It will be unnecessary for me to swell this letter with a detailed description of the disease; in its general features, it corresponded with all the accounts which have been published; I shall only mention some particular symptoms which have not been generally noticed by other gentlemen. In many instances the disease came on with more or less of syncope; in these cases, persons were seized in a state of apparent good health with great faintness, and some fainted away; and in this manner I have known the attack to take place in some robust labouring men: then followed chillness, shivering, head-ach, pains in the head, loins, and limbs, cough, dyspnœa, soreness and stitches in the chest, &c. Soreness in the throat, as it was called, was a constant symptom in all the cases which I saw. The patients referred this soreness to the larynx or upper part of the trachea; and in some cases, the soreness distinctly and gradually diffused itself from this point, through the trachea and the ramifications of the bronchæ, until the whole chest was affected with it; but it was felt most severely under the sternum, along its whole length, especially on coughing or inspiring. The dyspnœa was in general very laborious, and was frequently attended with sharp stitches in the chest. One of my patients who had the disease very severely, and whose breathing was extremely laborious, told me that she felt as if she were breathing through a sponge. The cough was mostly dry at first, and was very harrassing. When expectoration took place, it was in some cases very profuse, and in two or three in-

stances I observed it slightly tinged with blood. The pulse in every case which I saw, was soft and small, though frequent. I did not meet with one case with which pneumonic inflammation was combined in such a degree as to authorize the use of the lancet. The disease was not very fatal here.

I have nothing material to add with respect to the treatment. Emetics were very useful at the commencement of the disease; and when followed with a smart dose of calomel or Castor oil, checked the further progress of it in some instances. It was of great advantage throughout the disease to keep the bowels regular. When the disease was formed, the dyspnoea and stitches, as well as the soreness in the chest, were relieved most effectually by blisters, which it was sometimes necessary to repeat before these symptoms gave way. In circumstances indicating great oppression of the chest, the lancet was prohibited by the uncommon prostration of strength, and by the softness and smallness of the pulse. In some instances the debility was so considerable, and so great was the tendency to syncope on being raised up in bed, that it was necessary to throw in mild nourishment with as much assiduity as in the debility of typhus; the respiration at the same time being difficult and laborious, and the cough rending and incessant. After a gentle diaphoresis was produced by antimonials and diluents, no advantage was obtained by keeping the patients longer in bed; on the contrary, those seemed to regain their strength more speedily, who, notwithstanding their debility, endeavoured to get up, and to remain out of bed during some part of each day. Opiates were hurtful in the commencement of the disease; they increased the febrile heat, and retarded the advancement of expectoration; in the decline of the disease, they were highly beneficial.

This is all that occurs to me on the subject. I took no memorandum of the disease, except relating to the date of its appearance. If you think the preceding remarks of any value, they are at your service. It is useless now to lament that I have not been more particular in my observations, or that I did not record them at the time; the want of such a record must therefore be my apology for sending you such a barren fragment.

115. Mr. WHATELEY, Burton on Trent, October 2, 1803.

In my practice I did not meet with any instance of disease the last spring that could be denominated influenza or catarrh

catarrh arising from human contagion, nor were a greater proportion of persons indisposed than usual at that season. The scarlatina of the mildest kind had been for some time very frequent in the town and neighbourhood, and the measles and hooping cough were common last spring with generally favourable symptoms. I feel satisfied the disorder, which was so prevalent in most parts of the kingdom early in the year, was never met with in this place or its immediate vicinity, at least not commonly.

116. Mr. WARD, Woodchester, Nov. 7, 1803.

There being a great inconsonancy of opinion respecting the disease lately prevalent, whether contagious or not, I take the liberty of troubling you with a few observations I had an opportunity of making in my practice. I cannot flatter myself they will tend to elucidate the decision of so important a question, but should they be found worthy of a place among your numerous and valuable collection of communications on the same subject, I have to acknowledge it with gratitude.

The first case characterising the disease denominated influenza appeared here on the 20th of March. (The last case in the beginning of May.) In the ensuing week I visited eight persons, who from the severity of their attack were necessitated to keep their beds, independent of *many* who from the lenity of their symptoms were exempt from such confinement.

Some who were attacked with this disease, evidenced symptoms closely allied to typhus. When the pulse from diminished energy indicated the necessity of avoiding profuse evacuations, I found no medicine so effectual as the mist. camph. aq. ammon. acet. & vin. ant. tart.

In three cases where the symptoms were more purely inflammatory, accompanied with pneumonia, catarrh, &c. I did not hesitate using the lancet; the relief obtained fully sanctioned this unapproved treatment. In those cases nothing appeared to me of greater and more conspicuous advantage than frequent nauseating doses of the vin. ant. tart. alternating the saline mixture in a state of effervescence. Blisters did not appear to me of the least service; in two or three cases I thought they aggravated the disease. Several patients, whose attack was not violent, were wholly relieved by profuse perspiration. I found the pulv. ipecac. c. fully competent to this purpose and apparently a preventive of the further progress of the disease. A respectable clothier's son in this neighbourhood, whose attack was alarmingly

alarmingly severe, was greatly relieved by an eruption on the skin, which disappearing, a recurrence of the symptoms took place. A chlorotic girl, where evacuations were cautiously avoided, became anasarctous on the departure of the influenza. With women in their accouchement, I had an opportunity of seeing two cases; they were fortunately not violent; the secretion of milk was almost wholly interrupted; they were both relieved by the pulv. ipecac. c. The important question, whether the influenza was contagious or not, I leave to the decision of those able practitioners whose opinions will be influenced solely by facts, collected from candid and impartial observations; at present, till conviction of premature and mistaken judgment convert me to opposite sentiments, I consider it as contagious, and primarily originating in an observable difference in the atmosphere many days preceeding the appearance of the disease.

A family (seven in number) with whom I am particularly intimate, were apprehensive of taking the infection from my frequent visits; their expectations were realized, and not one escaped the infection. At this time I participated with my friends, though, fortunately, our attack was very mild.

117. Mr. BREWER, Newport, Monmouthshire,  
October 23, 1803.

I should have been particularly happy in giving you any satisfactory account of the influenza which appeared here about the 20th of February, under the same form that it did in most other places, of which there has been so much already said, that I can do very little more than give my opinion contrary to its contagious effects. My reasons for which are—Its appearing first in the most retired part of this country, and in a family which, from the strictest enquiry, could have no communication with any source of infection.—Its attacking large families at the same instant almost, that is, eight or ten in the course of two days; and some of those not able to account for any communication with the disease.—And its attacking one of two who lay in the same bed, while the other remained perfectly free from the disease; and this in three or four instances within my knowledge. The complaint was in many cases very severe, but fatal to very few. I saw but one who died immediately of the epidemic, a lady far advanced in years and long troubled with asthma. I believe it has hastened the termination of many previous affections of the chest, and has



also laid the foundation of many others that will terminate seriously. The last attack of the disease which occurred to me was on the 15th of April.

118. Mr. PEW, Shaftesbury, Nov. 4, 1803.

Although I did not see occasion to record any thing in the late influenza, (which appeared in a much milder form than that which occurred, I think, in 1779, in as much as it left no permanent weakness, no loss of nervous or muscular power behind it) yet to shew my readiness to comply with any request of your's, I shall state from memory the general symptoms. It commenced as it were suddenly and pretty generally the first week in April, so that I believe most people hereabout became affected from the influence of the atmosphere, although I have little doubt of its truly infectious nature, especially when concentrated by a number of *maladies* in large cities. It was generally attended by catarrhal symptoms, sometimes more, sometimes less severe, often with pain in the side, always with great prostration of strength, and I believe in every instance with a very disagreeable sense of fullness and pain over the eyes, and a sensation of pressure as it were on the ball itself. No case occurred in my own practice in which I thought it prudent to bleed, but I had occasion to see two cases in which the practitioner had recourse to that evacuation; the blood was not sily, and I am in doubt whether it was of advantage, but it did not seem to retard the return of strength; with me the pulv. ipecac. c. gr. v. 4ta. *quaque hora* seemed to produce very good effects. I think the complaint nearly left us by the latter end of the month. I have no record of the rate of the pulse.

I had almost forgot to mention that a few feeble old people were carried off apoplectic, excited by the influenzal poison.

119. Dr. CALLANAN, Cork, Oct. 1, 1803.

I think I cannot answer the queries with which you favoured me by Mr. Beaufort, in a more unbiassed manner than by sending you a copy of the remarks on the influenza, which occurred to me during its progress.

As to your first query, (respecting its contagious nature) I must answer positively in the affirmative, for the reasons advanced in the remarks, and from what I had seen in the influenza of 1780. The lady who infected me (*sit verbo venia*) was one of the first who had it in Cork. She has lately traced

traced its genealogy to me, by telling me, "She got it by sitting at table next to a gentleman just arrived from Dublin, where the disorder raged universally." I remember our being free from it in town by the time it had reached the remote parts of the country; even the difference of a week at not twelve miles distance where the communication with town was not so frequent, as in the late epidemic when the play-house and assizes brought town and country more in contact. Innumerable instances of individuals transferring the contagion can be cited on the best authority, and most unprejudiced evidence; the gentleman who kept the school in the Great Island, in his letters to me, for three weeks triumphed in the idea of his escaping; but, as I predicted, he suffered in his turn.

2d. I never saw an instance of such catarrhs originating from fomes, nor do I know that any has been so well traced to its origin as that of 1780. Maertens says, that at Petersburg, on a cold night, the thermometer rose 30° of Fahrenheit; the next morning forty thousand people were taken ill with the influenza, thence it over-ran Europe progressively.

3d. In the beginning of the epidemic, I have been mistaken, as I mentioned; the symptoms are certainly for the most part catarrhal; it may probably happen that those who have the disorder mildly are considered only to have a common cold; and, vice versa, a heavy accidental catarrh may rank as influenza; but in the latter case it would be difficult for a patient, so affected and exposed to contagion, to escape its effects, and not have a complication or an aggravation of one disorder by the other. To those who doubt of the contagious nature of the influenza, it may be a sufficient clue to judge from the prevalence of the complaint in the place, and the leading symptoms enumerated in the remarks; these speculations are liable to many objections, but cannot be attended with any bad consequences in practice.

4th. This question will suggest similar doubts in drawing conclusions; it appeared to me that Sydenham's idea was well founded, "that these leviathans absorbed all the lesser epidemics;" to a certainty, modified them prodigiously.

5th. Has been anticipated in the remarks, also the 6th and 7th.

You may be assured, Sir, that, though I am conscious I may have deceived myself, I would not disguise the truth, such as it appeared to me, or lead you into error by a false report. I am also confirmed, as yet, in my conceptions of  
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the subject by the co-incidence of my fellow practitioners in these quarters, who all have the same opinions both as to facts and theory.

*Remarks referred to in the above Letter.*

I did not see any case of influenza, although in daily expectation of its arrival, until the 27th of March 1803, when I visited a gentleman who had for some years past three or four violent attacks of hæmoptœ. It began with symptoms of pleurisy, and was treated with bleeding to 3x, antimonials, &c.; the pleuritic symptoms did not yield until the 7th day; the loss of appetite and peculiar creaminess of the tongue remained to the 14th day; whether the slow recovery was owing to the bleeding, I cannot conclude, as it was the only instance in which I prescribed V. S. A gentleman of the faculty, subject to hæmoptysis, bled himself on the first attack without any seeming disadvantage. I have reason to believe that bleeding, pushed to any length, has been injurious in this epidemic.

This and the second patient, on the 28th, were attacked nearly in the same manner, and attributed, as I did, their complaints to cold caught in a crowded Court-house. On the succeeding days such numbers were taken ill, there remained no doubt on the nature of the disorder. Its course was evidently traced from England to Waterford, where it raged at the assizes, before the assizes of Cork. The assemblage in courts, with the assistance of the theatre, disseminated the contagion through town and country more rapidly than any epidemic I ever saw.

That it was communicated from person to person there can be no possibility of doubting, as its progress from the continent can be evidently marked; its appearing first in great towns most connected with the capital, and its raging some weeks later in the more distant parts of the country when it had exhausted itself in the cities. Numberless instances can be quoted to prove this assertion; amongst many others, a boarding-school truly insulated in the Great Island near Cove, remained uninfected for three or four weeks during the reign of the disorder in Cork, until a boy went from town, sickened, and infected the whole family; Mr. Alby's school, four miles from Cork, is said to have escaped. The disorder did not penetrate into the parishes of Baltimore, Cape Clear, and that part of the sea-coast, although Ross, Cloghnalkilty, and that neighbourhood, suffered.

The contagion, on many occasions, shewed itself the day  
after

after exposure. It was early introduced into the Convent at Cork, a boarding-school, where the inhabitants may amount to about 70; four or five were generally taken ill every day, besides those who were either affected slightly or seemed to escape.

No greater variety can exist in any disorder than in its mode of attack, which in some was violent with the usual symptoms of fever; these, in general, were soonest well, probably from submitting instantly to proper treatment; others scarcely felt any indisposition, but most a considerable defluxion from the nose and eyes, with a very peculiar confusion in the head; and after the first day a singular creamy appearance on the tongue, continuing for several days, and being a sure index of the disorder still existing, where from other symptoms it may not be suspected; the cough in many, but not in all, was extremely distressing, the fits continuing a long time in the most harassing manner. It was attended, more than any disorder I ever met, with a degree of debility and enervation scarcely to be conceived, which in many remained for a long time; in the country, some strong athletic peasants fainted on its commencement; some have never totally recovered their former strength. An unusual enormous pain in the back and loins, extending down the back part of the thighs, was not uncommon, and remained for a week or two after recovery; restlessness was a frequent and distressing symptom, which was relieved more effectually by camphor than by opium; others were affected with deafness, few with ophthalmia, and not many with diarrhoea.

The consumptive were great sufferers by it, the asthmatic and the aged; several of this class died, particularly such as were reduced in flesh and strength; some almost suddenly and unexpectedly. Dr. F. aged 77, had it four days, and imagining himself well, walked out about 200 yards from home; he fell almost apoplectic, and nearly perished in attempting to walk back a few steps; he was taken home in a sedan; has recovered his strength but slowly. Mrs. W. a feeble old lady, nearly sunk under its first attack. I have not seen an instance of its producing sudden dissolution, but from these instances believe it possible.

Its most remarkable character was its renewing every complaint latent in the constitution and affecting the weak parts; independent of pulmonary complaints, which it grievously exasperated, I have known it renew every disorder of the nerves; a paralytic affection of the leg; a singular anomalous lethargy; deafness; uterine profuse  
evacu-



evacuations; gout; a slight apoplexy; melancholia and two cases of mania in predisposed persons. Several cases of hemicrania; some agues, easily yielding to the bark; a very extraordinary case of fits of suffocation, threatening immediate dissolution, which was cured by blisters, antispasmodics and diuretics.

No one died of the simple influenza; a few only of complication with pulmonary complaints; and a few of the aged and infirm. Children, even infants, were attacked by it, of whom I hear a few perished.

The disorder at first appeared tractable, especially while the weather was mild, until the 8th of April. The cold which succeeded, determined it more to the lungs, and caused some relapses; taking an antimonial at the commencement, confinement, and perspiration, generally took down the fever in 48 hours, and gave room for nourishment and free air; many, however, suffered by too sudden exposure to cold, and relapsed. The antimonial course did not seem to succeed beyond the third or fourth day; at that period succeeded so great a state of debility as required wine, light food, and a gradual return to full living; this was so evident in the great majority that a contrary treatment must have been destructive; effervescing mixtures were of use in removing the bad taste and whiteness of the tongue, which often remained for a long time.

The disorder became rare on the 20th of April; the last case I visited was on the 29th of April.

120. Dr. GIBNEY, of Navan, Ireland, writes, that after the influenza, a low fever, almost constantly prevailing in that town, disappeared for a considerable time. — This is quoted from memory, his letter having been unfortunately mislaid.

121. Mr. STANLEY, Drogheda, Ireland, Sept. 30, 1803.

I had the favour to receive your letter this morning, desiring to be informed at what time the influenza made its appearance in Drogheda and its environs. On recollection, I think as near as I can remember, the first appearance of this complaint took place in Drogheda early in the month of March last, and towards the end of that month became epidemic, and appeared in general amongst the people; at the same time it prevailed all through the county of Meath, and it continued uniformly through April and to the end of May, at least till the weather set in warm and dry, at which time it seemed to cease, and its progress to stop

stop. I am happy to have it in my power to give you this information.

122. Dr. BARNSIDE, Sligo, Ireland, October 21, 1803.

I find, on referring to my note book, that the first cases of influenza which came under my care occurred on the 30th of April last. The disease might have appeared two or three days earlier, as I happened to be absent in the country; I am however fully satisfied, that it did not in any instance take place before the last week in April. In Mayo, the next county, and to the westward of this, it did not appear until the latter end of the first or beginning of the second week in May. Having heard that the disease prevailed along the eastern coast of this kingdom for some weeks before, I was fully prepared to expect it here, so that you may rest satisfied I am accurate as to the time of its first appearance; and that it ceased in less than three weeks, having affected at least five-sixths of the inhabitants of this town and neighbourhood.

In a great majority of cases the attack was so slight, that the patients did not feel it necessary to go to bed, or use any remedy; in others, where it commenced with more severity, an emetic, followed by profuse perspiration, put a period to the complaint in less than 24 hours.

In the worst cases the general symptoms were, sudden and severe pain in the head and small of the back; great languor and disposition to sleep; cough; soreness of the chest, and difficult expectoration of mucus, occasionally tinged with blood; thirst; the pulse seldom became very quick, never that I could observe hard, but full, soft, and bounding; the tongue was loaded with a loose, thick, white, and curdy-like fur, which frequently remained for some time after the pulse came down to the natural standard. A few cases were attended with slight stitches, but in no instance was much difficulty of breathing observed; delirium occurred only in one case.

The appearance of the tongue, and soft bounding feel of the pulse, were symptoms so peculiar, as readily marked the difference between this and any other catarrhal fever I had ever seen. After the disease had gone off, the symptoms were likely to recur, if the patient indulged too early in getting out of bed, or in eating animal food, and drinking wine.

The duration of the disease was altogether uncertain, from one to twelve days; and it appeared most severe in those

those advanced in life, or where any disease or delicacy of the pulmonary system existed.

Every patient that came under my care (and the number was very great) in this disease recovered. On the first day I gave an emetic, opened the bowels, and afterwards ordered ammonia acetat. with vin. ant. to produce perspiration. If severe cough and difficult expectoration came on, a blister was applied to the chest, and the mist. muscilag. with tinct. opii was given with seeming advantage. When the fever lasted many days, I observed decided advantage to follow smart purgatives of calomel and jalap. or pulv. antimon. I never considered the lancet necessary in this disease; I have heard that it had been used in some cases which terminated fatally; but I know that blood-letting had been used, and in some instances repeated, in the newly raised regiment of Sligo militia, and that the patients did recover.

I have shortly detailed the most important circumstances which took place in influenza; should I in any degree add to or confirm the information you have already received, I shall feel happy, convinced that whatever you acquire, will be freely communicated for the public advantage.

123. I addressed myself to the Rev. Mr. CAREY, Guernsey; particularly wishing to know if there were any facts, indicating whether the influenza had arrived thither from England or France. Mr. C. informed me that he had applied to the faculty there, but that no such disorder had been observed in the island.

I have not yet succeeded in procuring information from Jersey.

124. Dr. SCOTT, Isle of Man, has favoured me with a copy of his detailed communication to Dr. Duncan, by whom it will doubtless be published in the Annals of Medicine. I shall only permit myself to transcribe the first paragraph.

"The influenza," says Dr. Scott, "appeared among us towards the end of March; the first patient I saw was on the 24th; he received the infection from a gentleman, who two days before had arrived from Parkgate, and had been seized with the complaint in London, and was still labouring under it. In a few days one of our Liverpool packets arrived, having many patients under the epidemic. From my enquiries I have every reason to think that thus it was imported among us."

*To the Editors of the Medical and Physical Journal.*

GENTLEMEN,

IN the true spirit of just investigation, you have, as liberally as laudably, endeavoured to discourage the communications of anonymous writers, by refusing them the authority of medical evidence; you will therefore readily coincide with me in the propriety of correcting the misrepresentation contained in a paper of your Journal, (No. 50, p. 362) signed "Constant Reader," by publishing the subsequent remarks on that subject, extracted from the last volume of Dr. Duncan's *Annals of Medicine*. Indeed, it would be compromising a gross mis-statement, to withhold this intelligence from your numerous readers.

The paper alluded to appeared to me, *prima facie*, to be as exceptionable for its want of internal as external evidence. My own words, in reply to the author, bear testimony to this opinion. These were,\* "It must be readily perceived, that the communication (in question) breathes a spirit of levity and wrangling, wholly inconsistent with the grave decorum due to the investigation, and decision, of a philosophical subject; nor does the veil of anonymous concealment, which the author has thought fit to assume, impart to the statement the genuine stamp of unquestionable authenticity."

It will be clearly seen how commendably the scientific labours of the Authors of the *Annals of Medicine* are regulated by a scrupulous attention to the interests of truth and philosophical impartiality, by the following extract, in which they discover a solicitude to rectify a mistake, which, if unexplained, may have operated to the prejudice of a doctrine they profess rather to disapprove than to defend.

*Extract of an article in the last volume of Dr. Duncan's Annals of Medicine, entitled, "Notice of Dr. Kinglake's Proposal of the topical Use of cold Water in the Gout."*

"The following letter, addressed to the Editors of the Medical and Physical Journal, has appeared in the 50th Number of that publication :"

"Gentlemen,

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\* See Medical and Physical Journal, No. 51, p. 442.



" Gentlemen,

" As Dr. Kinglake calls loudly upon his medical brethren, to communicate any observations which may enable him to make up his mind as soon as possible, the following case, on the authenticity of which he may depend, is much at his service.

" The late celebrated Dr. Gregory, of Edinburgh, father of the present Professor of Medicine in that University, was very liable to gout. A friend of the present writer called on him one evening, and found him bathing his feet in cold water. He observed to the Doctor, that he was doing what he would hardly recommend to his patients. No, said the Doctor, but this application mitigates pain, which I am unwilling to bear, and I have hitherto experienced no bad effects from it. The next morning the Doctor, to the regret of every admirer of science, and of professional liberality, was found lifeless in his bed.

" But why trouble ourselves any farther about the gout? One gentleman can completely pump out the gout from the system in a day or two! and another has discovered a remedy, a few spoons full of which will enable a cripple to rise from his bed, put on a pair of tight shoes, eat a good dinner, and afterwards dance a hornpipe. Surely one remedy for a disease is sufficient; my only fear is, that unless we can find out some new diseases, for which as yet there are no remedies, the Faculty must starve!

" A CONSTANT READER."

" Although from the conclusion of this letter, it is evident that the writer of it means to treat Dr. Kinglake's proposal with ridicule, yet it will naturally be concluded, that what he has asserted respecting the late Dr. Gregory is strictly true; and, if true, it would certainly have been an important fact.

" It was indeed a very current report at the time of Dr. Gregory's death, that he had been accustomed to bathe his feet in cold water, and had done so the evening before that event took place. But, upon the authority of those who had the best opportunities of knowing, we can inform the public that this report is entirely groundless; that, on the contrary, Dr. Gregory, who had often been subjected to severe attacks of the gout, was at much pains to keep his feet warm; that he had no symptoms of gout for many months before his death, having enjoyed a much longer interval of health than usual; that, on the very day preceding his death, he had dined abroad with some friends,

and had supped with his family; that he had not bathed his feet the night before he died, and was left by his son, the present Dr. Gregory, at half an hour after twelve o'clock, preparing his lecture for next day, and apparently in perfect health; but was found lifeless next morning; and that from the undisturbed condition of the bed-clothes it was concluded he had died without a struggle."

The Editors then proceed to say, "But although the sudden death of Dr. Gregory affords no objection against Dr. Kinglake's proposal, yet we are very far from asserting, that the application of cold wet cloths to a part inflamed, and painful from gout, is a safe practice."

Such is the refutation which a zealous and unbiassed love of scientific truth, has enabled me to quote on "A Constant Reader's" unqualified assertion, that his statement of Dr. Gregory's case possessed an "authenticity on which he (Dr. Kinglake) may depend." *Humanum est errare.*

I am, &c.

Taunton, Oct 28, 1803.

ROBERT KINGLAKE.

## TO DR. BRADLEY.

SIR,

**I**F you and your Readers are not weary of the subject, I have now transmitted for insertion in the Journal a few further Remarks on the Doctrines advanced by Mr. Ward, respecting the *modus operandi* of opium. This writer, Vol. vi. p. 480 of the Medical Journal, says, "Opium joined with other antispasmodics and tonics;" a few lines lower down of the same page, he declares his belief that opium acts more directly and simply as a sedative when applied externally than when given internally. Here then is an inference that its action is in both modes sedative; but more directly so outwardly than inwardly. Now I cannot conceive how it is possible to reason fairly in this manner, seeing that whatever is its actual power (and we know it to be very great) one way or the other, it certainly will exert that power more quickly and forcibly on such an organ as the stomach, than on any part of the whole external surface that can be mentioned; that it may act more simply ab externo will be readily allowed, but more directly is quite another thing; the cases Mr. W. has so clearly communicated, where opium was externally applied, are exactly so many

many proofs of his using it as a tonic, unless he will say they were all sthenic diseases, which I am confident he will not.

At p. 441, Medical Journal for July, 1799, the case of G. P. is related: A typhus, in which Mr. W. exhibited five grains and a half of opium to a subject fourteen years of age in forty-eight hours. Did he believe he was administering a medicine calculated to diminish the tone of the system, or a sedative? The effects he has recorded are an answer, for if any share of the success arose from opium, it was evidenced by abatement of delirium, tranquil sleep, reduction of fever, return of appetite, and lastly his pulse, which had hitherto varied from 100 to 120, was now only 80, but *stronger*. Were all these valuable changes wrought by any substances acting as sedatives, or medicines which "directly and powerfully" diminish the powers of the body? The remainder of the narrative contains farther proofs of the tonic action of opium internally and externally.

The succeeding cases are by Dr. Percival, both of which are additional proofs of the force of truth; it cannot for an instant be supposed that a practitioner of Dr. P's allowed skill and accurate observation, would have directed the use of laudanum as a sedative, or diminisher of the powers of the human system, to a female forty-six years of age, labouring under epilepsy, anomalous gout, and temporary insanity. The same observation applies to his second case, of a gentleman of delicate make, ill of low fever, with delirium and a languid pulse; these symptoms were removed by the use of opium, externally applied and internally taken, but not I presume from its lessening the tone or vigor of the body; but this truly eminent physician shall give us his own words on this important matter. Describing the case of a debilitated epileptic young woman, in his *Essay on Blisters*, p. 228, he says, "She was seized with convulsions of the epileptic kind, and had six fits successively; she was cold, feeble and languid, and complained much of sickness and pain in her head." The following medicines were prescribed. R. Tinct. valer. vol. fuliginis a. ʒss. laud. liq. gutt. xl. M. cap. coch. parv ij. omn. hor. in aq. spiritusque viij. gallici. Next day this patient got free of her fits and was better every way; not I presume from the debilitating effects of ten drops of laudanum every hour, but by the tonic property of this invaluable remedy conjunctly with the stimulants. Farther, Dr. P. in his cases of dropsy, vol. 2, of the same work, p. 157, says, "I found her quite exhausted with incessant retchings; her pulse was

so feeble as to be scarcely perceptible, her legs and thighs were affected with a most painful spasm; gentle cordials were directed to support the patient's strength, warm fomentations were applied to her legs and thighs, and an opiate was administered." The result of this judicious treatment was immediately some hours sleep and cessation of the vomiting. Will any advocate for the sedative action of opium, affirm that these salutary results arose from sedative remedies, or those which diminish animal energy and weaken the powers of life? Would Dr. P. have been justified in using opium in this case of extreme debility, if he had not known, from long experience, its excellent faculty of restoring the weakened energy of the frame, the most safely and speedily of any medicine within his knowledge or reach? I cannot take leave of this author without citing two more instances from his useful Essays, in confirmation of this point; these will be found at page 208 and 209, vol. ii.; the one a confluent small-pox, accompanied with convulsions and extreme debility, both relieved by opium in clysters and by the mouth; the other, a lady of a delicate habit, much enfeebled by scurvy, hysteria, anorexia, delirium, convulsions, &c. with a quick, fluttering, irregular pulse; a grain of opium every night with other tonics and stimulants proved curative. Opium is an agent of the most powerful kind; if this power over the functions of the human body were of the depressing, debilitating, sedative kind, which Mr. W. believes it to be, I am afraid Dr. P. would have had but a small chance of being serviceable to his patient. Before quitting this part of the subject it will not be inappropriate to observe, that although Dr. Cullen, after, as Mr. W. says, "a close investigation," places them, i. e. wine and spirits, among the narcotic sedatives or opiates, and says, that at first they both banish languor and promote cheerfulness if the quantity be gradually increased; yet, "at length the sedative power entirely prevailing, the animal functions both of sense and motion are gradually weakened, &c." Here we have one of our greatest writers on the *Materia Medica* arguing for a powerful medicine containing two opposite qualities, whereas it is well known that no man depended more upon the tonic powers of opium in his whole *First Lines of the Practice of Physic*, nor has any practitioner given more cautions against its administration in sthenic diathesis, where sedatives are so eminently serviceable; but it is curious enough to observe how often theory and practice are totally at variance in the works of many justly esteemed medical authors. As  
proofs



proofs of what is here advanced, the reader will doubtless recollect sufficient instances in Dr. Cullen's valuable work just mentioned; but lest he should not, I presume to quote his treatment of Rheumatism. Paragraph 468, "Opiates, except when they are directed to procure sweat, always prove hurtful in every stage of this disease." Now, if opium be a sedative, or medicinal agent, which when introduced into the human body diminishes power or lessens sthenic diathesis, why does Dr. C. not give it rank amongst all those agents which he has enumerated as curative of a sthenic, or as he terms it, an acute disease? He would certainly have done so, had he not practically known that opium was a tonic stimulant. The whole tenor of his great work may be adduced in proof of this fact; he always directs its use in cases of direct and indirect debility, and condemns it in the opposite states. Turn to Par. 570, "In the painful and restless nights of the gout, opiates may be given with safety and advantage, especially in the case of persons advanced in life and who have been often affected with the disease." Shall proofs be multiplied, go on to Par. 580, and we find opium the author's sheet anchor, when this highly asthenic disease has attacked the stomach.

Par. 620, on Small-pox; 802, on Hæmorrhagies; 923, on Phthisis Pulmonalis, where we find that opium "certainly increases the phlogistic (or sthenic) diathesis of the system, but commonly it does not so much harm in this way, as it does service by quieting the cough and giving sleep," i. e. by removing debility pro tempore, cessation from coughing follows and sleep succeeds of course. Farther, "Opiates are supposed to be hurtful by checking expectoration; but they do it for a short time only, and after a sound sleep, the expectoration is more easy in the morning than usual." Now, unless a man be so impreguably shut up in theory as to be invulnerable, he will never call Dr. C's system in aid of proof of the sedative properties of opium; but as this author ranks deservedly high in the public estimation, and must be looked up to as an authority of great weight, I shall therefore recall to the observation of those who choose to pursue the subject what he says at Par. 1014, when treating of difficult menstruation: "We impute this disorder partly to some weaker action of the vessels of the uterus, and partly perhaps more especially to a spasm of its extreme vessels." "We have commonly found the disease relieved by employing some of the remedies of suppression, (i. e. tonics, vide Par. 1004, 1006) immediately before the approach of the period, and

at the same time employing opiates." But Mr. W. says, opiates diminish energy, lessen action, and weaken the system.

How came Dr. C's practice in Dysmenorrhœa to be successful? Or it may with no less propriety be asked, how he came to forbid opium in the early stages of catarrh if it be a sedative, whilst he recommends sedative remedies of far less power? No, he directs its use in the advanced state of this disease, when debility has supervened, vide Par. 1066. The reader may afterwards turn his eye to the diseases termed dyspepsia, hypochondriasis, epilepsy, &c. all of which admit the same remarks. In Par. 1342, we have the whole question settled thus, "When the disease (epilepsy) depends upon a plethoric state, in which bleeding (a sedative remedy) may be necessary, the employment of opium (a tonic remedy) is likely to be very hurtful; but when there is no plethoric or inflammatory state present, (sthenic diathesis) and the disease seems to depend upon irritation or upon increased irritability (asthenic diathesis) opium is likely to prove the most certain remedy." Or, in the same way, at Par. 1463, cholera is directed to be thus managed, "Or when a dangerous debility seems to be induced, the irritation (arising from that dangerous debility) is to be immediately obviated by opiates in sufficiently large doses, but in small bulk, and given either by the mouth or by glyster;" and it is thus we are directed to act with a medicine which Mr. W. has taken no small pains to prove is one of the most powerful debilitants in the circle of the *Materia Medica*. In short, as I have already observed, we might thus traverse the whole of the First Lines and make similar remarks. What have been adduced are sufficient; it is time to return to the Observations, where we shall in vain look for any reasoning which will overturn the Cullenian practice; on the contrary, the very next instance in Mr. W's first paper, p. 445, is corroborative of the justness of Dr. Cullen's practical remarks, illustrated by a case of chronic rheumatism of "seven months continuance," which fell under Mr. W's care: Ease and rest were only to be procured by opium; when it was combined with sedatives or debilitants its effects were destroyed." And no wonder they should; when its effects are diametrically opposite, how could they be expected to act conjunctively? And who anticipates a beneficial result from aperients (sedatives) in chronic rheumatism? I sincerely hope Mr. W. will never suffer one hour's pain of the same kind I have endured from this miserable disease; if however he should  
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be so unfortunate, I can assure him he will be thankful there are such medicines as tonics, and he will gratefully acknowledge that opium deserves to stand at the very head of the number. The inferences from this case are all convincing arguments of the tonic powers of the remedy, if the disease to which it was so assiduously applied be allowed to rank with the asthenic class, which I presume no practitioner will controvert; as to the difference of its effects when internally and externally applied, Mr. Ward's observations afford opportunities of speaking more at large hereafter.

Humanity shudders at the bare mention of Hydrophobia. Should the observer's suggestions on this head be adopted, and crowned with success, he will have acquired a never-fading laurel; although I ardently pray this may be the case, I would not have this honourable badge sullied by a misconception of the true nature and wonderful powers of the agent by which such fame is obtained, which will most certainly be the result, if he persists in calling opium a sedative and hydrophobia an asthenic disease. The truth of the latter assertion is as clear in my estimation as that tetanus belongs to this class, and that if opium be able to cure them it must be from its highly tonic properties; that it will effect this most desirable of events is well known by experience as to tetanus; I trust an occasion will be long wanting to both of us to put it to the full test in hydrophobia. In the other parts of the treatment of this disease, as recommended by Mr. W. he has inserted two lines of some importance to my views, viz. "to support the strength, glysters consisting of good broth, or milk with thirty or forty drops of laudanum in each, p. 448; no animadversion is necessary.

Vol. vi. p. 6, of the Med. and Phys. Journal, affords a continuation of the observations as to the external use of opium. The case of J. Jackson, a debilitated maniac with a fractured leg, is the only case recorded in this paper; but it is an additional one to prove the tonic powers of the remedy, if a feeble pulse of 120 in a man of fifty-three years of age, incessant muttering, universal tremulous, tongue and gums furred with brown streaks, and continued watchfulness, are so many proofs of asthenic insanity. That I have always found them such during an extensive practice in this department I may safely aver, and that opium with other tonics, under due regulation, have always proved curative; nor do I hesitate in saying, that if as large a dose of opium had been given internally to Jackson, as  
Mr.

Mr. W. we shall hereafter find, exhibited to some persons by way of experiment, merely to endeavour to prove its sedative action, he would have reaped every desirable benefit, and been as tranquil as he was the morning after the friction, which we are told had the effect of reducing the quickness of the pulse, and reducing it just so much nearer the healthy standard, as the medicine proportionally took off debility by communicating its tonic energy. The few drops given in a draught (five every four hours) were not equal to the production of any such effect; but when we have such clear evidence of the salutary effects of half a drachm of opium introduced by friction into the system of a maniac, it cannot be otherwise considered than as a great acquisition to the *modus curandi*. There are other points in this case evidencing the tonic action of opium, besides returning reason and slowness of the pulse, such as increase of appetite, notwithstanding Mr. W. contends farther on, that it always diminishes the appetite when taken internally. But here is a case proving the contrary; far on in the treatment the sufferer took two grains every night, which, as before remarked, had he done at the first, the same beneficial effects had followed; that it must have acted as a tonic, when externally used, and not as a sedative, is manifest, if friction itself be a tonic stimulant, and quicker absorption the consequence; but if the reverse be the fact, that is, friction produces torpor, and opium when thereby applied to the lymphatics diminishes their action, then indeed it is a sedative, and every thing must be conceded to Mr. Ward's reasoning.

Vol. vi. p. 387, affords a case successfully treated by opiate frictions under the care of Mr. White, of Bath, which perfectly corresponds with all I have hitherto seen in confirming the tonic powers of opium. Mr. White's patient laboured under a number of symptoms originating in debility, evidenced by the quickness and feebleness of the pulse, all the distress was apparently removed by the rubbing in of  $\frac{3}{4}$  tinct. opii on the abdominal surface, Mr. White gives no opinion on the *modus operandi* of the opium, but concludes his narrative thus: "Her pulse was reduced to 96 on the third day, which before was exceedingly quick;" that it was feeble had been before remarked, so that its reduction nearer to the standard of health, and proportionate removal of feebleness, are effects attributed with every other success to the opium; of consequence, if this be true, the stimulus of the friction with the tonic power of the remedy restored the patient.



In the same volume, likewise, at p. 431, and sequel, will be noted a continuation of the subject by Mr. Ward. Two cases are there recited; the first, by Mr. Jenkinson, is one where great prostration of strength was the cause of all the mischief; but not being informed what quantity of opium was exhibited in any way, no opinion can be given, whether it was merely sufficient to remove the direct debility, or whether in such large doses as to superinduce the indirect. From what is said however, it may safely be inferred, that the good effects arising from the remedy in this poor woman were owing to its tonic power; for Mr. J. says, "Her life was thereby certainly rendered more comfortable, and her existence prolonged several days." No sedative power could be applied but must have been productive of opposite consequences; of this truth I am as fully persuaded as of any one acknowledged not to admit of doubt.

Mr. Boutflower's tetanic case comes next, and from which nothing can be deduced in the remotest degree but what tends to confirm the general opinion of the asthenic nature of the disease. That it was removed by opium is not less apparent, and that it would have been so removed by its internal exhibition is equally certain; for it is observable, Mr. B. commenced its exhibition in doses of one grain every six hours, which would probably have been too large a quantity for his young patient under any other circumstances; but in the outset of this hourly encroaching disorder it certainly was too small, for he subsequently bore with advantage two grains every night besides *ʒij tinct. opii* by friction every twelve hours. Will it be said by any medical artist, that when the external application was left off, if a proportionate increase had been made in the internal, a cure would not have been effected? Let it not be thought that by this or any similar remark, I would presume to call in question, or doubt the salutary effects of opiate friction; so far from it, I highly esteem the improvement, inasmuch as it enlarges the bounds of utility of this noble remedy; I only wish to be understood to firmly believe in the uniformity of its action and effects, however applied, and that it is always capable of increasing the tone or vigour of the system. The whole of what has been said on the last case is confirmed, if confirmation was wanting, by the practice of M. Mursuina, of Berlin, an outline of which we have at page 280 of this volume. At page 481, the case of Jackson is again brought forward; in addition to to what I have already said, I may be allowed to observe, that if this man had been bled, purged, and undergone the too common routine of debilitating practice, I believe the  
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sheers of Atropos would speedily have performed their office; or had he escaped such a termination of his complaints, confirmed insanity or perpetual idiotism had been his lot. The rest of the cases inserted in this paper all tend to confirm the tonic powers of opium; the one immediately succeeding Jackson's was a female patient, "sinking fast, her pulse very rapid and feeble, and she had a tendency to delirium." Farther, "Wine, which in this state seemed highly requisite," (as a stimulant I presume, and of course temporarily to remove debility, for this must be the idea of all who believe in its stimulant powers as they are termed) "but she refused to take it; its place therefore was supplied"—by what? Why, Mr. Ward says, by a most powerful sedative, and the patient's "pulse and intensity of heat were gradually reduced, the diarrhoea was stopped," and I presume her fast sinking prevented; not by a remedy which produces torpor, diminishes vital energy, destroys power, &c. the uniform effects of sedatives, but by one which acts diametrically opposite. But lo! the medicine, which a page back ranked with the tonics, is now, in the inference drawn from Baylis's case, become a powerful sedative, owing to which property it was found to "diminish irritability, sensibility, and mobility of the system." Nothing is said of the debility which was the foundation of the whole mischief, and which the highest known tonic stimulant alone could remove from its very base, consequently all the edifice of symptoms must give way, and finally also be removed; indeed, this case is a striking illustration of the truth, that opium is not in any other sense a sedative.

Mr. Ward mentions, with strong emphasis, the effects of the remedy on the pulse, viz. That whatever was its alteration in any other respect, its "frequency was diminished." I ask, can there be a more prominently striking proof of the invigorating agency of the medicine? for unless Mr. Ward means to prove that its frequency being diminished, its force became weaker, and that this increased weakness was useful and proper, he can, in my humble opinion, prove nothing at all, but what must strongly tend to determine, in the most direct manner, the question at issue against his theory.

*Chester, Oct. 8, 1803.*

G. NESSE HILL.

CASE

CASE of a VARIETY of INTERMITTENT FEVER, &c. by C. L. DUMAS, Member of the National Institute, President of the Society, &c.

[ Concluded from p. 430. ]

7th. **T**HE patient appeared sufficiently calm this day. The author thought proper to reduce the dose of bark; two drachms only were ordered at five o'clock in the morning, and a drachm every six hours, until the moment of the paroxysm on the ensuing day, and which came on much more early than was expected, being at least two hours sooner than the period of the preceding paroxysm. The only bad symptoms remarkable in this fit were those of hydrophobia, the others were hardly observable. In the intervals of calm that occurred between the symptoms already described, the patient seemed to enjoy his mental faculties completely; the horror of water only remained, and for which he had an antipathy that no reasoning could shake. The access finished later, and consequently continued longer than the last.

The 8th. M. Dumas profited of this day's intermission to push the bark in larger doses, and resumed his first quantity of half an ounce at once, and a drachm every six hours. This day was remarkable only for a copious sweat, and a continued tendency to drowsiness.

On the 9th, the hour of the paroxysm was not remarkable for the slightest degree of fever, deglutition only became more difficult; aversion for liquids was perceivable; in the night a slight degree of fever made its appearance, with some delirium, but unaccompanied by any effort to bite, &c. The access was become almost null or at least much moderated in comparison to the preceding, and it was terminated by abundant sweats and quiet sleep.

The following day, Sept. 10th, the patient was extremely low, having hardly force sufficient to stand upright; the desire of sleep was unceasing, and he complained of great thirst, but no disposition whatever to eat. He was ordered to continue the bark, but at greater intervals, and in smaller doses; two drachms were taken morning and night, and in the day the dose was reduced to a drachm. During the three or four following days there was neither fever, delirium, nor hydrophobia; a convalescent state was manifest, and the patient was recommended to continue for some time longer the use of the bark.

CASE

CASE OF TINEA; by M. BAYSILLANCE, M. D. *Member of the Society of Medical Instruction, at Paris.*

A. B. aged eighteen years, of a lymphatico-nervous temperament, born of healthy parents, having many brothers who enjoyed good health, experienced no complaint in her early years, which had any relation to the one in question. At five years of age, having frequented children affected with tinea, and using the same comb, small buttons, at first few in number, appeared in different points of the head; in the beginning, slight itching only was experienced, but this considerably increased, as well as the pimples, so that these last now covered the entire hairy scalp, forming scabs which frequently dried, fell, and returned again; a considerable quantity of insupportably foetid matter constantly oozed from the surface. This person underwent different kinds of treatment, the most exact and regular of which was when she was nine years old. She was purged every eight days. Soap suds and volatile alkali were applied topically, and latterly water-cresses boiled in hog's lard, was used; this treatment was continued three months; the scabs disappeared, but soon returned with the same intensity. On the application of any greasy substance the scabs disappeared. At the age of fourteen, the menses appeared, at first in sufficient quantity, but afterwards with great irregularity, without however occasioning any change in the state of health; at this period the scabs disappeared, and the girl was supposed to be radically cured; at the end of a month, however, the complaint returned, but less severely; the pustules and scabs came and went frequently. When the author saw the patient, she was in the following state: The body was much emaciated, the health was however good; the lymphatic glands of the neck, arm pits, &c. did not seem affected. The head, cleared of the scabs, &c. presented a considerably red appearance; viewed through a lens, there was remarkable, 1. Small round ulcers at the root of each hair, from which oozed a yellowish matter. 2. The hairs which appeared to float in the centre of these ulcers, were easily withdrawn without creating any pain, their root was covered with a matter thicker than common pus. The treatment\* was commenced by some pur-

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\* This method had been previously employed by M. Dubois, in the Hospital of the Medical School, called *Ecole de Perfectionnement*, of which he is chief Surgeon.



purgatives composed of 24 grains of jalap and some sugar, and which was renewed every eight days during the cure. After cutting the hair as closely as possible, the head was rubbed with the following ointment, composed of linseed and juniper berries, reduced to a coarse powder, of each six ounces, thirty leaves of laurel bruised; the whole boiled in two pounds of lard. On the sixth of February, the patient was ordered to use the following medicine: Mild muriate of mercury, an ounce; fixed salt of tartar (tartarite of pot-ash) and ipecacuanha of each a drachm and a half, boiled in a pint of water till reduced to half; of this a large spoonful was taken night and morning. On the tenth, the mouth became sore, when the medicine was suspended. On the eleventh, it was resumed. On the twenty-ninth, in the dose of a tea spoonful in the twenty-four hours. On the fourth of March, the quantity was doubled. On the fifth, the head was clean, and the small pustules, already mentioned, only were perceivable. On this day, the author began to pull out the hairs with a dissecting forceps. On the twelfth, all the parts where the hair had been withdrawn, appeared perfectly well; here and there small tubercles remained in those places where the hair had been broken; on being opened and viewed through a lens, the disposition of the scabs was very perceptible. On the twenty-fourth, a blister was ordered to the left arm, and continued for three months; the work of pulling out the hairs was continued, and the pomatum already mentioned was changed for one made of fresh, red, rose leaves, in which a drachm and a half of common salt was mixed. The thirtieth every treatment was laid aside, except the blisters, which continued some time longer. The patient was purged twice.

The seat of tinea being, according to the author, in the corpus mucosum, adjoining the roots of the hair, he thinks there is no other way of combating the disease, than by causing their destruction. This is the opinion of many moderns, as well as the ancients. The very great pain attending this remedy, has given rise to many methods, none of which appear to the author to be preferable to the one he has mentioned. Tearing out the hair must be preferred in every case, except where the disease is complicated with caries of the bones of the head. The length of the operation may be objected to, but humanity sets this consideration aside. The author recommends the head to be constantly besmeared with the ointment during the extraction, and to extract only the hair of the diseased part; here they easily  
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give way; and lastly, to repeat the operation if the complaint returns.

We have reported this in the author's own words. The mode of treatment is the same as that practised by Professor Dubois, and in which we can find nothing new or remarkable, but the laudable patience of the author in pulling out the hair of the diseased part. We cannot see the use of the singular mercurial composition of which he makes use; and if the pulling out the roots of the hair in the diseased part, effects the cure, which we believe, what is the object of the ointment, unless it be intended to act as common grease? But above all, what is the view of blistering the arm, except it be to act as an issue, in which case as effectual and less troublesome means might be employed?

Humoral pathology is a doctrine very prevalent in the French school. The ideas of derivation, revulsion, metastasis of humours, &c. are found in the most modern practical books; diseases of the skin are treated with all the precautions connected with the belief of the affection being caused by humours, which, thrown back on the constitution, become dangerous. In the histories of most cases we are informed the person had some years before the itch, or some such affection, which was incautiously treated; hence we can understand the intention of purging mercurial preparations, issues, &c.

*Copy of a Letter from Mr. Weston, Surgeon, of St. Ann's Bay, Jamaica, to Mr. Ring, dated Sept. 19, 1803.*

SIR,

**EMBOLDENED** by my experience of your goodness, I take the liberty to request you will be pleased to send me, per packet, (which sails monthly) a few ivory points coated with vaccine matter.

After I had the honour of being introduced to you in London, by my friend Mr. Wilson, you sedulously and most benevolently instructed me in every thing that appertained to the vaccine disease. A spark of your philanthropic ardour fired my mind; and I came hither with sanguine expectations of diffusing and perpetuating (what I conceive) the greatest good which God in his benevolence has given to mankind.

With

With the matter I obtained from you on ivory points, I inoculated my own children, and twenty others, the day after my arrival. I roused the public attention to vaccination by my communications in the periodical works of this country; and propagated the matter to every part of the island. I received by letter from upwards of sixty practitioners, congratulations on the re-appearance of the vaccine disease. But, alas! the hot season set in; and I was mortified and disappointed in being obliged to acknowledge the lamentable fact, that in a temperature of 90, the vaccine matter loses its activity, and becomes absolutely effete. Assured *now* of this fact, I have presumed to ask a supply of you. We have eight months of the year, in which the thermometer is below 80; I therefore propose to propagate the disease on the coast during the winter; and in the summer months translate it to the mountains, where the temperature is occasionally under 70. I am prompted to this exertion by a consciousness, that with pains we may perpetuate the vaccine matter in this country; and I have ascertained beyond cavil, that the Negro habit is susceptible of the disease; having in several hundred instances seen it in them characteristically marked. My knowledge of the great sacrifices you have made to disseminate this benign practice, is a sufficient assurance that you will pardon this trouble.

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*To the Editors of the Medical and Physical Journal.*

Gentlemen,

IN the foregoing account, we are not informed at what period the matter was taken, nor whether it was inserted in a fluid state; and consequently, notwithstanding I entertain a high opinion of Mr. Weston's abilities, it is impossible to determine whether the failure in the hot season was inevitable.

I cannot dissemble my own opinion, which is, that if the virus be taken as soon as it is secreted, and immediately inserted, vaccination may be perpetuated in any part of the globe.

But it is necessary to bear in mind, that in Negroes, the progress of the disease is more rapid than in Whites. In the former, the desiccation of the pustule takes place on the sixth day. Such, at least, was the result of experiments made in Paris; of which I have given the particulars in my *Treatise on the Cow-pox*, p. 791.

( No. 58. )

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From

From this statement it appears, that in Negroes, the vaccine fluid should not in general be taken later than the fourth or fifth day.

In the beginning of April, when I was inoculating at the Central House of the Royal Jennerian Society, previous to the appointment of a resident Inoculator, I supplied Mr. Bulmer of the Strand with some cow-pock matter on vaccinators, for Dr. Longmore of Quebec; which he inserted in the month of June with success.

In April, 1802, Dr. Longmore had introduced vaccination into Quebec, by means of matter received from a gentleman of Richmond, whose name is not mentioned. This matter was ninety-one days old.

From that stock he inoculated nearly fifty persons; and other practitioners, to whom he gave the virus, inoculated with equal success. In consequence of the heat of the summer, and the want of a succession of patients, the virus lost its virtue; and Dr. Longmore informs us, in an Address to the Public on Vaccination, published in the Quebec Gazette, for the 11th of August last, that although, since the period alluded to, he had made repeated attempts to procure a fresh supply from England, he could never again inoculate with effect with any matter he received, till the arrival of that which produced the affection in June last.

When Dr. Longmore published his Address he had vaccinated upwards of thirty patients with the virus he received from me; and with the same complete success as in the preceding year. He had also put the patients vaccinated, in both seasons, to the most severe tests of variolous infection, both in the natural and artificial way.

In his Address he offers to inoculate the inhabitants of Quebec gratis, twice a week, at the Hotel Dieu in that city.

The introduction of the new practice into Canada is of the more importance, on account of the severity of the small-pox in that country; for Dr. Longmore informs me, that when it prevails there, even in those cases where, from the humanity of the British government, every indulgence both with regard to medical assistance and other necessities, is extended to those who labour under the disease, it generally proves confluent and fatal. This is supposed to proceed from their habits of life, and from the paint and other substances with which their skins are besmeared.

From the enquiries which Dr. Longmore has hitherto made, it does not appear that the cow-pox in the cow is known in Canada.



One practical observation which he has made, both in the inoculation of the small-pox, and in that of the cow-pock, is, that those persons who have the fairest skin are the most susceptible of infection.

I lately received from Dr. De Carro, a work entitled *The History of Vaccination in Turkey, Greece, and the East Indies*. This publication has no tendency to corroborate the opinion, that the cow-pock is a preventive of the plague. It rather confirms the opinion I gave in my *Treatise*, p. 1026.

An instance is there given of a child vaccinated by Dr. La Font, a French physician of Salonica, who succeeded in producing the cow-pock by inoculating a cow with equine matter, as others had done before, in England and in Italy. Two other patients of Dr. La Font have since had the plague; and one of them died of the disease.

By a letter which I have just received from Dr. Jenner, I find, that he has little or no confidence in the statement lately given of the anti-pestilential virtue of the cow-pock. It is, indeed, an opinion not warranted by analogy, nor by sufficient evidence.

I have reason to believe, that in the accounts lately transmitted, there is great exaggeration; and it is much to be regretted, that men of learning and ingenuity should hazard the lives of themselves and others, in such vain experiments, and visionary pursuits.

New Street, Hanover Square,

I am, &c.

November 19, 1803.

JOHN RING.

*DESCRIPTION of a remarkable Species of INTESTINAL VERMES; communicated to Dr. MILLER, by JAMES S. STRINGHAM, M. D. Professor of Chemistry in Columbia College; and President of the New-York Physical Society.*

**T**HE relation of occurrences, which from our reading and observation, we find seldom to have presented themselves to the eye even of the most experienced medical practitioners, is a duty incumbent as it is important. It is by this means that the limits of our inquiries are extended, and that we are prepared to encounter events, the existence of which we might never have suspected, till, by a fatal termination of the disease, dissection points out to us the presence of circumstances, of which, had we been pre-

viously aware, a different plan of cure would have been adopted, and the life of the patient probably preserved. This is a mode of acquiring experience truly humiliating; but how is it to be avoided, unless every physician, while he derives benefit from the observations of others, endeavours, at the same time, to contribute his mite towards the promotion of general knowledge, by a careful and faithful delineation of such particular occurrences as he conceives to be new and interesting? Under this impression I feel myself impelled to offer to your consideration the history of a case, the singular termination of which excited no small degree of surprise in all who witnessed it.

About nine months ago I was called upon to visit a lady in this city, who had been for some time in ill health. I found her somewhat emaciated. She had little or no appetite; complained of almost constant pain in the breast, near the xiphoid cartilage of the sternum; she had no cough; respiration was perfectly free and easy. I took from her a small quantity of blood, ordered a cooling purgative, and put her upon the use of the digitalis, with a light diet. This plan was persevered in for some time, till she took forty drops of the tincture, three times a day; beyond this it affected her head and stomach. Finding, however, that this did not produce the desired effect, I added a blister, which I kept discharging for several weeks. By this her complaints were so much relieved that I considered any further attendance as unnecessary. My patient went out of town, and I heard no more of her for several months, when she again sent for me. She informed me that she had continued free from her pain for a considerable time after the blister had healed, but that it had again returned, and, as she thought, with increased violence. The complexion was pallid; her pulse weak and irregular; her appearance much more emaciated than when I saw her last. I again put her on the same treatment, and again the blister relieved her pain: the suspension however proved but temporary; her former symptoms returned; in addition to which she also complained of great pain and soreness in the abdomen. I treated her upon the plan generally adopted where such indications exist, but without the least success; the pain in the abdomen particularly became extremely urgent, and she frequently told me, that when riding the smallest irregularity of motion in the carriage produced sensations almost insupportable. Her stomach had become so irritable, that every species of food was rejected as soon as swallowed; a constant tenesmus supervened,

vened, although she voided no fæces unless assisted by cathartics or injections.

Finding every effort to relieve my patient ineffectual, that on the contrary her disorder appeared to be increasing, and her strength rapidly declining, I began to apprehend that death alone could alleviate her sufferings: I therefore entirely confined myself to palliatives, the principal of which was laudanum. She continued in this miserable state of existence several weeks, during which time the only moments of ease that she experienced were those passed in insensibility. On one of my morning visits to her, while in this situation, she told me that she was convinced in her own mind, that her complaints were kept up by some animal within her; that she could distinctly perceive its motion, particularly if she fasted for any length of time, and that she was compelled, by the uneasy sensations it produced, in her stomach, to endeavour to take food although she had no appetite for it, after which she felt greatly relieved. Supposing that her mind, enfeebled by the long-continued sufferings of her body, had become impressed with some of those incredible fictions, which report snakes and different kinds of reptiles to have become inhabitants of the human system, I at first ridiculed the idea; but finding that she was obstinately pertinacious of her opinion, I was under the necessity of promising to give some medicine which would dislodge the animal, should any such exist. For this I gave her a bitter infusion to be taken in the morning early, and at night a drastic purgative; which plan she was to continue every second day till she had taken three doses of each. I called to see her on the morning after she had taken the second dose: I was surprized to find her appearance uncommonly cheerful, and at her first salutation to me, "Doctor, I shall yet get well." On inquiring into the cause of this sudden change, her husband informed me that she had voided a considerable number of animals, of what kind he could not pretend to say, as he had never before seen any thing like them. The pot was shown me, in which I discovered a number of substances which I did not hesitate to pronounce animalcular. The nurse informed me that the medicine had operated very severely on my patient, and that she still continued to experience its effects. I requested her to convey another pot into the room, telling her that I should remain some time below stairs, and that if the medicine should again operate while I continued in the house, it was my wish to see what was evacuated. I had not waited long before my curiosity

was gratified; scarcely any fæces were to be seen; the excrements consisting almost entirely of these substances, some of which I had put into a bottle filled with spirits, in order to examine them more particulatly at my leisure. They were about three fourths of an inch long, and to the inferior part of the body of each were attached a considerable number of legs. On first view I thought they were separate parts of several large worms, and that what appeared like legs, were nothing more than the different laminæ of filaments of the skin, separated by maceration. But, on a closer examination, I rejected the opinion, because the back of these animals did not appear to be covered by skin, but by a firm cartilaginous substance; there was likewise an uniformity of appearance and structure, which is not observed in filaments of the skin thus separated, viz, they were vesicular, each resembling a distinct sack, distended with a fluid, colourless and transparent. For my own part I have very little doubt that they belong to the order of vermes molusca, and to that genus termed actinia. I consider those vesicles as tentacula or legs, by which they adhere to different substances while feeding on their prey.

That this particular species of worms should be found residents of the human body, is, so far as my reading extends, entirely novel. Considering it a duty to do all in my power to aid the laudable efforts of yourself and colleague for the diffusion of medical information, I submit the above case to your inspection, with liberty to make such use of it as you may think proper.

Yours, &c.

JAMES S. STRINGHAM.

P. S. Since writing the above I have met with a case, described in the sixth volume of the Transactions of the Royal Irish Academy, by Dr. Samuel Crumpe, which bears considerable analogy to that which I have just related to you; so much so, that I suspect the worms to be of the same genus, but can by no means agree with him in his speculations regarding their origin. These animals are found frequently floating in different kinds of waters, and, from experiments, many of them have been proved to resemble the polypus, in its powers of being multiplied by cuttings. May it not then easily be conceived, that some fragments of them should be swallowed with the water which these two patients drank, and that by adhering to the coats of the stomach and bowels, they should have become so numerous as to produce the effects already described. It may be proper to add, that since the voiding of these worms, the health of my patient has been perfectly restored, and that she has had no return of her complaints.



CASE OF PHTHISIS PULMONALIS, *successfully treated by Digitalis; communicated by Mr. DUNN, of Featherstone Street, Finsbury.*

ELIZABETH COULSTON, aged ten years and a half, of a delicate habit, about five or six weeks from the commencement of this history, had been attacked with fever, and which, as far as I could learn, was of an inflammatory nature. The medical gentleman who attended, bled her two or three times and administered nitrous medicines; the disease however continued to increase, and an affection of the lungs took place, plainly evincing a translation of morbid matter to those organs. Blisters were applied and nitre given, but to little purpose. The mother, who was but a poor woman, and could ill afford the attendance of an apothecary, where there was scarce any prospect of relief, and finding the child getting worse instead of better, declined his farther assistance. In this state she remained for better than a week, when I was desired to see her, and the following is an accurate statement of the condition in which I found her.

June 24, 1803. For several days past she had taken no medicine except a nitrous powder or two, the reliques of those which the gentleman who had attended had given her. The symptoms were, violent cough, attended with great pain and a spasmodic action of the diaphragm, drawing in the scrobiculus cordis during the fit, accompanied with pain; a considerable rattling noise in the throat, as if the bronchiæ were choaked up with matter; expectoration of a great quantity of thin matter; great emaciation; yellow countenance; facies hippocratica; the body reduced to a mere skeleton; hectic flushes; colliquative diarrhœa; dyspnœa; pulse quick and hard; violent pulsation of the carotids, which could be distinctly seen at a considerable distance beating with force; loss of appetite, pain, and inability of lying on the left side; with these symptoms were conjoined extreme weakness and faintings, insomuch that she could not stand or sit up without being supported.

Attentively considering all the symptoms, and the state of the pulse, I determined within my own mind that there was not a moment to be lost, and that energetic methods should be immediately adopted. The digitalis occurred to me, and I thought this a favourable opportunity for trying its effects, at the same time that I had more hopes from it, than from any thing else I could think upon.

N n 4

I began

I began by giving tinct. digitalis gt. ij. every four hours, in an oleaginous mixture, with a small quantity of nitre in it.

June 25. Cough somewhat relieved; pain, expectoration, diarrhœa, and other symptoms much the same, the pulse rather slower if any thing; but no considerable alteration could be expected in so desperate a case in such a short time. Tinct. digitalis gtt. iij. every four hours in the same kind of mixture.

26th. Cough, diarrhœa, and expectoration, somewhat less. Pulse less frequent; hectic flushes continued, particularly in the morning and evening.

27th. Cough considerably abated, diarrhœa almost gone, expectoration less and thicker; hectic flushes the same, feet and ancles considerably swelled, pain across the chest gone; dyspnœa and rattling in the throat greatly relieved. Tinct. digitalis gtt. iv. 4tis horis sumendæ.

28th. Towards the afternoon yesterday the cough became worse and more frequent, attended with pain and drawing in of the umbilicus, which abated in the evening, on the coming on of the hectic paroxysm. This morning more cheerful, less fever and cough; had expectorated since yesterday morning a great deal of tough, viscid phlegm, consisting of fibres or threads; complained of an itching in the nose and about the anus, with costiveness. Suspecting there might be some worms in the intestines, I gave the following. R. Pulv. rhæi gr. viij. calomel gr. ij. aloes socot. gr. ij. M. ft. pulv. vesperi sumendus. Cont. tinct. digitalis gtt. iv. 4tis horis in the same mixture.

29th. The powder operated five or six times, and brought off a quantity of dark coloured fæces, but no worms could be perceived; which however might, if they existed, have been indiscoverable in consequence of the blackness of the stools. Cough very violent, expectoration increased, violent cramps in the legs during the night, spasmodic contraction of the extensor tendons of the feet and toes, feet swelled, periodical hectic flushes, accompanied with cough, recurring every four or five hours. Gave her a spermaceti mixture with a few drops of tinct. opii; and gave tinct. digitalis gtt. vj. 4tis horis.

30th. Much better; all the symptoms relieved; more cheerful; had slept a little; pulse about 70; cough and expectoration moderated very much; bowels pretty regular. R. Digitalis gt. ix. 4tis horis.

July 1. Cough and expectoration diminished, and the paroxysms shortened; the drawing in of the umbilicus, which

which had been all along productive of great pain and distress in coughing was also lessened. Speech more clear and distinct, hollow rattling in the throat quite gone, appetite somewhat returned; she drank milk and ate light puddings, toasted bread, vegetables, &c. Tinct. digitalis, gtt. xij. 4tis horis.

2d. Continues to get better; all the symptoms considerably abated, speech very distinct, cough very little, expectoration small in quantity and thick, pulse more slow and not so hard. Tinct. digitalis as yesterday.

3d. Much as yesterday, but complains of great faintness and inconvenience from the excessive heat of the weather. Tinct. digitalis gtt. xiv. 4tis horis.

4th. Continues very weak and faint, cough and expectoration very little; extreme debility the most troublesome symptom now remaining, the others being almost entirely removed.

5th. Pains in the abdomen about the umbilicus, at times very severe; the digitalis had occasioned some nausea and giddiness, diminished therefore to twelve drops to be given occasionally with the spermaceti mixture, when the cough was troublesome. As the chief complaint consisted in great weakness, I gave the bark with a small quantity of steel. R. Pulv. cinchon. ʒij. aq. menth. pip. ʒiv. tinct. ferr. muriat. gtt. xx. capt. cochl. 1. ter in die.

6th. Better; pains gone off; continued the same plan as yesterday,

7th. Cough and expectoration almost entirely vanished; something stronger; continued the bark and digitalis occasionally from this time to the

13th. Nothing occurred worthy of recording; there was a little return of cough now and then, when the balsamic mixture with the digitalis was had recourse to; the heat of the weather oppressed her very much; debility still considerable; appetite increased.

20th. Continued in a convalescent state, though from the debility and still continued excessive heat of weather, she regained her strength but slowly.

The pain and inability of lying on the left side (the lung, I imagine, to be the most affected) was very nearly gone, as well as the cough.

She continued to take the bark and stomachic bitters, with the use of the digitalis, on the recurrence of the cough, for a short time; she got gradually better, and is now a fine hearty plump girl, full of health and spirits.

This is a true narrative, copied from the notes which I  
daily

daily took of the progress of the disease during the time I was attending the patient; and I think every one must admit the rapid recovery of this girl was entirely owing to the effect of the digitalis. Though given in small doses, I adjusted it as nearly as possible to the state of the system, which was in a high state of irritability; and the increase even of two drops sometimes occasioned, as I have instanced, nausea and giddiness.

Should the Case tend to confirm the effect of digitalis in cases of phthisis, and increase its partizans, my intention in recording it is answered; as I think it certainly, if not immediately cure the disease, will in most cases so considerably diminish the vascular action, as to allow Nature, by her operations, to restore the diseased lungs to their former state, and to more healthy actions.

The tinctura digitalis which I made use of, was made as follows, according to Dr. Latham: R. Digitalis sicca et contusa, ʒj. spt. vini tenuis, ℥bj. Digere per dies octo et cola.

October 12, 1803.

To Dr. BATTY.

SIR,

THE following communication is intended to shew the inefficacy of Digitalis Purpurea, of which so much has been said as to its specific effects in Phthisis.

After reading so many encomiums on the virtue of this well known plant, I was determined, the first convenient opportunity, to give it the fairest possible trial in two cases of phthisis pulmonalis; and this medicine was exhibited in the form of a tincture, made according to the formula recommended by Dr. Maclean, and which is inserted in the Medical and Physical Journal, vol. ii. p. 122.

The relation of the two following cases will point out the uncertain effects of this medicine, which is so generally well spoken of in diseases of this class. No doubt need arise as to the badness or impureness of the plant, as it was gathered in the beginning of July, when in its full vigour and blossom.

Before I draw up the cases, I think it necessary to remark upon what some authors have said, who have written in favour of the good effects of this plant in cases of phthisis pulmonalis. It is said, that in true cases of this disease,



disease, where the following symptoms run very high, viz. hectic fever, pulse beating from 120 to 130 strokes in the minute, hæmoptysis now and then, great expectoration of purulent matter, nocturnal sweats, and sometimes diarrhœa: I say, it is said that in such cases the digitalis is capable of effecting the cure of such a malady; and which is performed by these means: It diminishes the frequency of the pulse, of course the fever must be abated, as also the hæmoptysis if present; it gradually checks the expectoration, consequently the bowels are less liable to be out of order, "as I am firmly of opinion, that it is in the matter swallowed from time to time that in a general way brings on this spontaneous kind of diarrhœa, as I have many times found that the stools of such patients consist of similar matter to that which has been coughed up from the lungs. All these symptoms are gradually made better, the patient begins to recover his strength, of course the night sweats disappear, and in the end he is completely cured."

I sincerely wish the two following cases would strengthen the above declaration; but am extremely sorry to say, that they prove very much to the contrary. I attended the patients myself, and made very accurate minutes, morning and evening, for three weeks successively, both of the state of the pulse, the quantity and quality of the matter expectorated, and the quantity of tincture given morning (ten o'clock), and afternoon (four o'clock).\*

CASE I. Thomas Wilkinson, æt. 33, by trade a grinder, of a spare habit of body, of the middle stature, a delicate and florid complexion. He was admitted into the Sheffield General Infirmary on March 6, 1801, and was then labouring under the following symptoms, viz. A hectic fever; the pulse beating 120 strokes in the minute; a troublesome cough and great expectoration, to the amount of from four to five ounces of purulent matter in the course of twenty-four hours; night or rather morning sweats, so as to wet his linen; in very hot or cold weather, hæmoptysis would come on, and continue a few days; sometimes he had a diarrhœa; debility, and loss of appetite.

This

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\* Dr. Maclean says, that from ten to thirty drops of his tincture, *ter indies*, is a sufficient dose, but I extended it a little further, and only *bis indies*, as I found by experience that when it was given so frequent as three times in the day, that it was the cause of keeping the stomach in a state of continual nausea. Pyrmont water was the vehicle which I gave the tincture in.

This appeared a fair case for the trial of digitalis; and after clearing the stomach and bowels, he was, on the 12th of March, put upon this indication of cure, which he continued regularly for three weeks, without the least benefit, as may be seen from the annexed table of minutes, made at the times of visiting.

| Dates of visiting. | State of the pulse morn. | State of the pulse even. | Quantity of tincture given morning. | Quantity of tincture given evening. | Quantity of matter expectorated. | Quality of the matter. |
|--------------------|--------------------------|--------------------------|-------------------------------------|-------------------------------------|----------------------------------|------------------------|
| Mar. 12            | 120                      | 120                      | drops 5                             | drops 5                             | about 5 oz.                      | pus                    |
| 13                 | 120                      | 120                      | 6                                   | 6                                   | ditto                            | ditto                  |
| 14                 | 120                      | 120                      | 7                                   | 7                                   | ditto                            | ditto                  |
| 15                 | 120                      | 120                      | 10                                  | 10                                  | ditto                            | ditto                  |
| 16                 | 112                      | 112                      | 12                                  | 12                                  | ditto                            | ditto                  |
| 17                 | 120                      | 120                      | 15                                  | 15                                  | ditto                            | bloody                 |
| 18                 | 120                      | 108                      | 18                                  | 18                                  | less                             | ditto                  |
| 19                 | 120                      | 120                      | 21                                  | 21                                  | ditto                            | less so                |
| 20                 | 124                      | 124                      | 24                                  | 24                                  | more                             | pus                    |
| 21                 | 124                      | 124                      | 28                                  | 28                                  | ditto                            | ditto                  |
| 22                 | 124                      | 124                      | 30                                  | 30                                  | ditto                            | ditto                  |
| 23                 | 124                      | 124                      | 33                                  | 33                                  | ditto                            | ditto                  |
| 24                 | 124                      | 124                      | 36                                  | 36                                  | ditto                            | ditto                  |
| 25                 | 124                      | 124                      | 38                                  | 38                                  | ditto                            | ditto                  |
| 26                 | 124                      | 124                      | 40                                  | 40                                  | more                             | ditto                  |
| 27                 | 124                      | 124                      | 42                                  | 42                                  | ditto                            | ditto                  |
| 28                 | 124                      | 124                      | 44                                  | 44                                  | ditto                            | ditto                  |
| 29                 | 124                      | 124                      | 46                                  | 46                                  | ditto                            | ditto                  |
| 30                 | 124                      | 124                      | 48                                  | 48                                  | ditto                            | ditto                  |
| 31                 | 124                      | 124                      | 50                                  | 50                                  | ditto                            | ditto                  |
| * April 2          | 124                      | 124                      | 50                                  | 50                                  | ditto                            | ditto                  |
| 3                  | 124                      | 124                      | 50                                  | 50                                  | ditto                            | ditto                  |
| 4                  | 124                      | 124                      | 50                                  | 50                                  | ditto                            | ditto                  |

**CASE II.** William Stokes, æt. 16, rather tall of his age, was of a plethoric habit, and had been ailing some time with pulmonic affections, attended with a cough and glandular obstructions about the neck. He was born of healthy parents.

\* On account of some aperient medicine that was given on the 1st of April, he omitted taking the tincture, and after the 4th he left it off altogether, not being at all relieved by it, as may be seen above; he however has been relieved by various other remedies; and continued lingering in this way, better and worse, until the beginning of April last, when his symptoms returned with more violence, and in the course of that month he died.

parents on the mother's side, but his father died some years ago of phthisis; his mother still lives, and is a strong, healthy woman.

He was admitted into the Sheffield General Infirmary, July, 1801, on account of the disease in his neck; at the same time he had the symptoms of phthisis, such as hectic fever, a small, quick pulse, beating from 125 to 130 strokes in the minute; coughed and spit up daily a great quantity of pus, which was sometimes streaked with blood; had night sweats, wandering pains in the thorax and about the sides, great debility, and loss of appetite. With these symptoms he was presently reduced from a plethoric state to that of an emaciated one. Various remedies were employed for some time, in order to lessen or subdue the symptoms, but all to no lasting relief; in the end, he was put upon the digitalis.

He began and continued the use of it exactly in the same manner for three weeks, as Wilkinson did, without the least variation, either in the pulse or the other symptoms;† at the expiration of the time above mentioned, he left off the digitalis, and was put upon palliatives, &c. for the relief of the cough and other symptoms. He continued gradually declining, until the July following, 1802, when he died.

In many other cases of phthisis, I have frequently remarked the disuse of digitalis.

I am, &c.

November 12, 1803.

ROBERT EARNEST,  
House Surgeon to the Sheffield Infirmary.

*Observations on the Utility of amputating the Extremities of the Bones in Cases of Caries of the Joints; by M. MOREAU, M.D. Communicated by our Correspondent at Paris.*

THE Author details a number of Cases where this mode of treatment superseded the necessity of amputating the entire extremity, and even without any considerable defect

† Although the symptoms were not relieved, in either case, both the patients most assuredly were under the influence of the medicine, as they many times complained of nausea, vertigo, languor, and a loathing of their diet.

fect in the portions of the member. Although we find similar cases in the Memoirs of the Academy of Surgery, and in the works of Mr. White of Manchester, Mr. Parke, &c. yet we conceive it will be interesting to offer some extracts from the work of M. Moreau, whose practice, as well as that of his father's, tends to generalize very much the utility of this method. The first observation is that of a young man, nineteen years of age, with an enlarged elbow joint, which came on after a swelling of the axillary glands; abscesses had formed in the neighbourhood of the joint, communicating with its cavity, and opening externally. The operation is thus described: The patient was laid on his belly on a table, the posterior part of the arm turned upwards, and lying close to the edge of the table. With a scalpel he cut down, in the direction of the inner condyle, to the articulation; a similar incision was made on the opposite side, and the two were united by one across dividing the skin and tendon of the triceps, immediately above the olecranon. Having exposed the parts, he found the humerus bare and covered with asperities, the articulation full of pus and fungosities, &c. After having detached the flesh from the anterior part of the bone above the condyles, he placed the handle of the scalpel between the bone and the fleshy parts, and he sawed the bone directly over it, and in this way he detached the bone from the surrounding parts; on removing which, he discovered that the diseases of the bone extended farther, and which obliged him to cut some lines more of the bone. His attention was next turned to the fore arm; an incision was made from the external condyle along the edge of the radius; the head of this bone was separated from the surrounding parts, as well as its union with the ulna. A band of linen was interposed to protect the soft parts, and the bone was cut above the insertion of the biceps muscle, which it was of importance to preserve. A new incision, corresponding to that of the internal condyle of the humerus, laid the radius bare, and which, with the incisions already described, formed a quadrilateral flap, adhering at one side to the flesh, on the posterior part of the fore arm. This flap was equally detached from the diseased part of the bone, which he sawed at about an inch and a half from the olecranon. Notwithstanding the length of time the operation required, and the extent of the incisions, the wound was nearly healed the seventh day. Two years have elapsed since the operation, and the patient had so far recovered the use of this arm as to be able to thresh corn.



corn. The extremity is shorter by three inches, the size of the limb somewhat diminished, but the person is daily acquiring the natural use of the part. Two similar operations, attended with equal success, were performed by the author's father.

The fourth observation of the author relates to an operation in the knee-joint; the state of the articulation and adjoining bones was nearly similar to the one described. The operation was performed by making an incision above the condyles, on each side of the thigh, between the vasti and flexor muscles; these incisions were united by a transverse one down to the bone, passing above the patella. Having detached the flap from the bone, on bending the knee the state of the articulation was perceived, and the bone was sawed above the part that appeared diseased. In order to remove the superior part of the tibia, an incision was carried along the sharp edge of the tibia, and one of equal extent was made on the head of the fibula on its external side. The consequence was, one flap composed of the flesh situated in the interossial space externally, and a second triangular one, formed by the skin covering the internal surface of the tibia; the head of the fibula was first laid bare and sawed, after that the condyles of the tibia were separated about ten lines in length. Every thing succeeded after the operation, till the patient was seized with a dysentery, prevalent in the hospital, which carried him off in fifteen days.

The operations before described have been already performed by other surgeons, before M. Moreau, but the following, we believe, to have been attempted by him only. His fifth operation was on the ankle-joint; we omit the details of this operation, since the principle directing the former operations apply here. It is useful to remark, that in these kind of cases, great embarrassment arises from the difficulty of exposing the bone sufficiently for the saw, considering the necessity for preserving the tendons, vessels, &c. surrounding this articulation. The difficulties do not exist in the articulations of the bones of the tarsus, the spongy structure of those bones is a reason why caries is seldom confined to the joints, and in which case the total removal of the bone became an easier operation. This is not the case with the os calcis; here it is necessary to preserve the attachment of the muscles, and work out the diseased part of the bone, as the author did in one instance; who, in the case where it is necessary to destroy this attachment, recommends taking off the limb. With respect

respect to the bones of the metatarsus, notwithstanding that they may be carious, either entirely or partially, he recommends their extirpation when the disease extends through a great part of the bone; for in this case, the bones of the corresponding toes lose their support. If, on the other hand, the caries is confined to the base, the section of the diseased part only should be attempted. He observes, that he never experienced any troublesome bleeding from the arteria plantaris, and never found it necessary to tie it.

The author performed the operation once, and with success, on the wrist joint; he has not detailed the operation, but we presume the principles to be the same as those laid down in the operation at the ankle. In the case in which he performed it, the person recovered almost entirely the use of the joint.

The last operation which the author mentions, is one on the shoulder joint. An incision was made on the posterior part of the articulation, beginning at the apophysis acromion, extending downwards two inches; it was parallel to another incision, distant from the former about four inches, and which had been previously made, in order to give issue to a collection of matter that had been formed. A transverse incision was made superiorly, at six lines under the superior insertion of the deltoid; this flap was turned down, in order to expose the articulation. At each extremity of the transverse incision a new one was made, the anterior directed towards the humoral extremity of the clavicle, and the posterior towards the spine of the scapula; this formed a second flap, and by means of which he could discover the entire extent of the caries; the head of the bone, disengaged from its cavity, was sawed; the parts united in the usual manner, soon healed, and the shoulder had the appearance as if dislocated; the superior part of the humerus took a position on the ribs at the edge of the scapula anteriorly. The motions of the arm remained very perfect, except the power of elevation, which was very limited. In all the cases related, the lips of the wounds were united by sutures; in one case, where he could not employ them, he found that the parts did not unite so quickly.

SCARPA'S OBSERVATIONS ON SEVERAL DISEASES OF THE EYES, extracted from his "*Saggio di Osservazione et di Esperienze sulle malattie degli occhi, &c.*" Pavia, 1801.

*On the puriform Running of the Eye-lids and on the Fistula Lacrymalis.*

**M**R. Scarpa distinguishes the last from the former disease in the following manner: *Fistula lacrymalis*, he calls that state of the *saccus lacrymalis*, when it is much extended, exulcerated, spongy, corroded, and sometimes attended with caries of the *os unguis*. The puriform running of the eye-lids takes place, if on a pressure of the sound lacrymal sac, a puriform, granulous, and yellowish matter issues through the *puncta lacrymalia*. This matter is not generated in the sac, but originates from the internal surface of the eye-lids, particularly of the lower ones, and is likewise secreted by the *glandulae meibomianae*.

This affection may be divided into four periods: 1. The matter is collecting itself in the sac, but finds an easy passage through the nose. 2. The passage being obstructed more or less, it begins to extend the sac. 3. The *saccus lacrymalis* is inflamed, corroded, and an ulceration takes place (*fistula lacrymalis*). 4. Caries of the *os unguis* supervenes. The cure of this affection differs according to the just stated periods. In the first, it is advisable to apply stimulant remedies, viz. the unguent. jannin. a diluted solution of vitriol. alb. The excoriations of the eye-lids are best removed by the unguentum citrinum Edinb. or by the cautious application of lapis infernalis. At the same time, aqu. plantaginis, with a little spirit of wine, must be injected into the *puncta lacrymalia*, till it has come into the sac. In the second period, an incision is made beneath the white macula, where the tendo and the ligament of the musc. orbicularis is situated, along the *saccus lacrymalis*, and a probe introduced into the nose through the *canalis nasalis*. The probe being taken out, a bougie of *resina elastica* is to be introduced; the cavity of the sac must be filled with lint. On renewing the dressing an ointment of red precipitate and gum arabic is applied to the lint, or the whole cavity is filled with red precipitate or alum, and the eye treated as in the former period. As soon as the sac has recovered its natural size, the lint is moistened with lime water and mel rosarum; and in lieu of the bougie, a small leaden tube is introduced, which being, after some time, extracted, the opening is suffered

to close. When the disease is arrived at the third period, the sac generally opens itself at an unfavourable place, on which account it is necessary to make an incision at the above indicated place, and to treat the wound in the same manner as before mentioned. In the fourth period, the sac is either found entire, but the os unguis internally corroded, or the sac is open and the os unguis carious. In the first case the sac must be opened and cleaned, by which the bone will be exfoliated and the sac soon be closed. In the second case it is necessary to apply the actual cautery, and to dress the wound with unguentum digestivum. A bougie of wax introduced into the opening, and the application of caustics, will in some cases produce the cicatrization of both the opening as well as the sac.

*Trichiasis* arises either from the eye-lids being turned inwardly to the eyes, the cause of which is not yet found out, or from the tarsus being turned inwardly, which may be occasioned by ulcers, scars, or a relaxation of that part. The cure of the first case is uncertain and defective. The author however effected a perfect cure in one case by making a small incision into the tarsus and cutting out a portion of the skin. If the tarsus be inverted, an incision in the skin near the affected part, and the cicatrix, thus produced, may in some cases be of great advantage.

The evacuation of blood produced by leeches is frequently insufficient in the *Chemosis*, in which case it is advisable to scarify the conjunctiva by means of a small pair of scissars, or to separate a part of the conjunctiva by a circular incision.

The simple *Macula Cornea* is but a slight superficial obscuration, produced by a chronic ophthalmia, which is preceded by a varixlike state of the veins in the conjunctiva and albuginea, or a dilatation of the small radicle of these veins on the surface of the cornea, whence a secretion of a transparent albuminous serum is produced in the substance of the conjunctiva, which covers the cornea. It is necessary to endeavour the contraction of the dilated vessels, and to cut off their connection with the macula, which may be done by scarification; but the contraction of the vessels is best effected by the ointment of Janin.

*Albugo* and *Leucoma* are produced by an acute ophthalmia, in which a thick coagulable lymph passes into the substance of the cornea. A fresh albugo must be treated like the chemosis in the first and second period; but if the affection be old, such remedies are to be applied to the eye, which



which promote the resorption. For this purpose Mr. Scarpa recommends: R. Aqu. calcis recent. unc. viij. sal. ammon. scrupl. ij. aerugin. gr. iv.; or the following ointment, R. Butyr. recent. unc. ℥. tutiæ ppt. dr. ij. aloes, mercur. dulc. aa. gr. ij. The perforation of the leucoma and the production of an artificial ulcer in the leucoma are of little or no effect.

*Ulcers of the Cornea* are produced by the opening of a small abscess remaining after an acute ophthalmia, and such pustules should always be suffered to open by themselves. Ulcers of the cornea are of a livid colour, with thick irregular margins, painful, and secrete a corrosive matter. The best remedy is to touch them once or twice with lapis infernalis, till a cicatrization be produced. If a fungous excrescence arises in the ulcer it must be cut away with small scissars, together with the varices, after which the application of lapis infernalis is required.

*Pterygium*, is a preternatural membrane of a reddish livid colour and triangular figure, spreading from the internal cantus oculi towards the cornea; it consists of that part of the conjunctiva covering the cornea, which is degenerated, incrassated, and interwoven with varicous vessels. The triangular figure is owing to the conjunctiva adhering more strongly to the cornea towards the middle of it; the pterygium can be elevated in a fold. The cure of this complaint is to cut it away; sometimes a scar is produced, which obscures the cornea, but in a far less degree than the pterygium itself. Such pterygiums, which extend in the white of the eye, are separated only at the narrow part towards the end of the cornea, and cut away at their basis concentrically with the margin of the cornea. A tumour *caruncula lacrymalis benignus* is cured by the knife; but care must be taken not to cut away too much, lest an incurable running of tears should be occasioned. If the cicatrization does not take place, the part must be cautiously touched with lapis infernalis. The matter collected in the hypopyum is not real pus, but a coagulable lymph which exudes from the coats of the choroidea and uvea. The abatement of the ophthalmia will diminish the hypopyum.

Mr. Scarpa disapproves the incision of the cornea, as by the least wound of that part the inflammation may be increased, and the secretion of the matter augmented. In some cases, the collection of matter comes on so suddenly as to cause a great extension of the camera oculi; and it frequently happens that an exulceration, obscuration, and

rupture of the cornea take place, through which the iris falls; all which is often attended with much danger to the life of the patient. In this case it is advisable to make an incision in the middle of the cornea, of the length of half a line; and having seized that part of the cornea where it is cut in with the forceps, to cut it off with a pair of scissors, so as to make an opening of the form of a lens, thro' which the matter, the lens crystallina, and, by degrees, the corpus vitreum, passes. After the operation the eye is to be covered with a cataplasim of bread and milk.

In the cure of a fresh prolapsus iridis, we must endeavour to diminish the irritability of the part which is fallen out, and to destroy so much of it that it may no longer distend the labia of the wound. For this purpose he recommends touching the iris with lapis infernalis or butyrum antimonii. The pains thus caused are diminished by luke warm milk. If the prolapsus be old, or the iris adheres to the lips of the wound, we may cut it away, and afterwards touch it with lapis infernalis. The prolapsus of the membrana propria of the aqueous humor rarely occurs; it appears as a small vesicle filled with water, passing through a wound or ulcer of the cornea. Sometimes it is a prolapsus of the corpus vitreum. It may be cut away with a small pair of scissors; or, if it be too small, it may be opened with a lancet or a needle, when the fluid will run out and the membranes retire. A prolapsus of the choroidea was cured by the author by touching the part with lapis infernalis.

Mr. Scarpa prefers the depression of the cataract, or the couching, to the extraction: 1. because it is a much easier operation; 2. it is adapted to every species of cataract; 3. it is less attended with dangerous accidents; and, 4. should the operation not succeed, it may be several times repeated on the same eye. The lens is not only pressed downwards by the needle, but also immersed into the corpus vitreum. Hence the patient must turn the eye, in order to promote the immersion, before the couching needle is extracted. It is likewise advisable to tear the anterior superficies of the capsula lentis, in order to prevent the obscuration of the capsula, in case it remains. The posterior part of the capsula is generally lacerated in the same manner; and if this should not be the case, an obscuration of this part is never so great as to hinder the sight. The lens which is depressed, gradually disappears, and is by degrees absorbed. For the operation, our author uses a couching needle and the hook of Pelletier. The first should

should be very fine, in order to hurt the eye as little as possible; which will generally prevent the rising of the lens and the ulceration of the membranes. For the purpose of destroying at the same time the capsula and depressing the lens with easiness, Mr. S. makes use of a fine needle, moderately bent at the point, which is convex on the back and cutting at both sides, and has a groove on the concave side. During the operation the other eye must be covered. The operator is seated higher than the patient, and the needle is introduced with the convex part of the hook turned towards the body of the operator, at a distance of one line from the cornea, and somewhat under the transverse diameter of the pupil; the needle must at the same time be bent with the handle a little downwards, to make the point easier penetrate into the eye. Then the convex part of the needle is brought on the superior margin of the lens, which is pressed a little downwards, and the hook of the needle immediately conducted between the corpus ciliare and the lens crystallina. The point of the needle being directed behind, it is pushed into the anterior part of the lens, and by a circular motion the capsula is there to be destroyed and the lens to be immersed into the corpus vitreum. In this situation the needle is held, in order to remove any flakes that may appear in the pupil; after which the needle being turned, it is extracted in the opposite direction to which it was brought in. If the anterior part of the capsula remain, which often occasions a secondary cataract, the needle is retracted from the lens, but applied to the part in the same manner as before.

In the operation of the soft or caseous cataract, the rupture which is made in the capsule must exactly correspond with the opening of the pupil in its natural extension; the hardest pieces must be cut through with the point of the needle, and the rest must be brought into the anterior chamber, where it will go down and be gradually absorbed. If in the secondary cataract, pieces of the capsule should obstruct the pupil without adhering to it, they must all be brought into the anterior chamber, where they will be by degrees absorbed. If the capsule adheres to the iris, the adhesion may be separated with the needle and brought into the anterior chamber; but care must be taken, as much as possible, not to touch the iris. After the operation the eye is covered with soft and dry linen, and must not be exposed to light for three days.

In the *pupilla clausa*, which sometimes follows the extraction

traction and depression of the cataract, the author recommends to make an artificial pupil, a method which is founded on his opinion of the iris being a membrane different from the choroidea. The circumference of the iris is to be separated from the ligamentum ciliare without making an opening into the cornea, for which purpose a fine straight needle is to be introduced into the eye, at a distance of two lines from the cornea, and conducted on the superior margin of the iris which is turned towards the nose, where the ligamentum ciliare is perforated, and thus the iris is separated by pressing the needle downwards.

The artificial exulceration of the staphyloma is of no use at all, and should the staphyloma become prominent between the eyelids, it is much better to cut it away, by making a semicircular incision in the lower part, and afterwards seizing the section with a pair of pincers, and then finishing the cut. A part of the iris is generally cut away, when the lens and corpus vitreum fall out. On the fourth day an inflammation supervenes; the ensuing suppuration is to be promoted by emollient cataplasmas, and the patient is supplied with an artificial eye. The imperfect fresh amaurosis, particularly the periodical, arises frequently, per consensum, from the stomach and primæ viæ, against which the cure must be directed. The topical application of the vapours of ammonia is at the same time of service.

*Account of Diseases in an Eastern District of London,  
from October 20, to November 20, 1803.*

| ACUTE DISEASES.          |    | Enterodynia - - - - 10 |    |
|--------------------------|----|------------------------|----|
| Pneumonia - - - -        | 3  | Diarrhœa - - - -       | 14 |
| Typhus Mitior - - - -    | 5  | Dysuria - - - -        | 3  |
| Cholera - - - -          | 12 | Menorrhagia - - - -    | 2  |
| Dysentery - - - -        | 6  | Amenorrhœa - - - -     | 5  |
| Hæmorrhagia Intestinalis | 1  | Cephalalgia - - - -    | 7  |
| Rheumatismus Acutus -    | 5  | Vertigo - - - -        | 3  |
| CHRONIC DISEASES.        |    | Epilepsia - - - - 2    |    |
| Tussis - - - -           | 10 | Hemiplegia - - - -     | 1  |
| Tussis cum Dyspnœa -     | 12 | Herpes - - - -         | 1  |
| Phthisis Pulmonalis -    | 3  | Rheumatismus Chronicus | 18 |
| Hydrothorax - - - -      | 4  | PUERPERAL DISEASES.    |    |
| Ascites - - - -          | 2  | Ephemera - - - -       | 6  |
| Anasarca - - - -         | 4  | Menorrhagia Lochialis  | 4  |
| Gastrodynia - - - -      | 5  | Mastodynia - - - -     | 3  |
|                          |    | Rhagas                 |    |



|                     |   |                    |   |
|---------------------|---|--------------------|---|
| Rhagæ Papillæ - - - | 4 | Ophthalmia - - - - | 4 |
| INFANTILE DISEASES. |   | Dentitio - - - -   | 3 |
| Aphthæ - - - - -    | 7 | Convulsio - - - -  | 2 |

The state of diseases during the last few weeks, does not afford an opportunity for any particular observations; it is sufficient to say, that it has been very similar to that which was included in the last Report. Complaints of the stomach and bowels have been very frequent, and have, as in former cases, been much connected with other morbid affections of the system.

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## CRITICAL ANALYSIS

OF THE

## RECENT PUBLICATIONS

ON THE

DIFFERENT BRANCHES OF PHYSIC, SURGERY,  
AND MEDICAL PHILOSOPHY.

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*The Elements of Physiology; containing an Explanation of the Functions of the Human Body, in which the modern Improvements in Chemistry, Galvanism, and other Sciences, are applied to explain the Actions of the Animal Economy. Translated from the French of A. RICHERAND, by ROBERT KERRISON, Member of the Royal College of Surgeons, London. Octavo, pp. 464. London, 1803.*

A want of some Elementary Treatise on Physiology, taking up the subject where the illustrious Haller has left it, seems to be pretty generally felt; but however alluring to those inclined to take up the pen, such a compendium may appear, the profound research and exhaustive learning of a Haller are easier to be admired than imitated.

The author of the work before us has, however, undertaken the task of imitation, and the present publication is designed as the *Primæ Linæ* of Physiology, as it now appears.

To do the author justice, he speaks with becoming modesty of his task, when put in comparison with that of his great predecessor; and the Preface to the work before us, is adapted to bespeak the candour and good-will of his readers. Indeed, he appears to consider the nature of his task in somewhat of a different manner to that of the great author of the *Elementa Physiologiæ*, who declares, "*Quando vero ad hunc librum scribendum accessi,*

O o 4

dudum

dudum in physiologicis laboribus majorem vitæ meæ partem posueram. Neque ergo ignarus adveni magni quod mihi imponebam oneris; felix, si perinde gerendo suffecero." Let us hear what our author says.

"If it should be objected that the enterprize I have undertaken is greater than becomes a person of my age, I shall answer, at the risk of maintaining a paradox, that young men are, perhaps, the most proper for the compilation of elementary works, because their memory retains with more correctness the difficulties they had met with in prosecuting the study, the tracks they had followed to surmount them, and a recent experience makes them acquainted with the defects and advantages of different methods; so that he who in the shortest space of time has acquired the greatest stock of solid information, will be, in many respects, the most able to direct his successors in the thorny paths of instruction and knowledge."

If the composition of an elementary treatise be little more than an affair of memory, if it be only to abridge the lectures of some one favourite teacher, to arrange the contents of a few approved class books, or to attempt to methodize the crude ideas of juvenile disputants, then indeed a young student, a very tyro, possessed of a greater share than usual of sense and industry, may be pronounced competent to initiate his juniors into the intricate paths of science.

It is rather remarkable that, in the present instance, the author really does not do himself justice in this respect, for, though in the execution of his task it is easy to observe that the number of authorities which he has consulted is not very great, yet the work is upon the whole very well executed, full of the necessary information, and not abounding with frivolous or irrevelant matter; so that the author must both have had very good teachers, and must have profited largely from the advantages of education.

In the introductory chapter, which is but confusedly drawn up, the author attempts to explain the animal functions at large, and their general regulating laws. The vital power (which he defines happily enough by a common French expression, the *tout ensemble* of laws that influence the animal economy) he branches out into the two principles of *sensibility* and *contractility*, to which he annexes *caloricity*, or the power in the living body to maintain an equilibrium of temperature. Nothing worthy of remark occurs here, except that the author attempts to prove a *latent* or *imperceptible* sensibility in organs non-sentient in their natural state.

A page or two suffices to discuss the difficult question of the theory of inflammation.

This is his definition, "Inflammation, in my opinion, may be defined, *an augmentation of all the vital powers of that part which is the seat of it.* Sensibility there becomes more lively, mobility greater; and from this increase of sensibility and motion arise all the symptoms that denote the inflammatory state: thus pain, swelling, red-

ness,

ness, heat, and the change of secretions, indicate a more energetic and active life in the inflamed part."

To this the following very singular observation is added, "Is not the swelling of an inflamed part induced by the same mechanism as that belonging to parts susceptible of erection, as the *corpora cavernosa* of the penis and clitoris, the nipple, the iris, &c.? In erection of the penis, as in inflammation, there is irritation, afflux of humours to the part, increase of sensibility and motion: yet it is not a state of inflammation. Nature has so disposed the organization of these parts as to permit them, with impunity, to experience this sudden augmentation of vital energy, necessary for the execution of those functions for which the organs they belong to are destined; and like inflammation, these swellings subside when the irritating cause ceases to act."

We may call this a singular illustration and confusion of ideas, for by acknowledging that this local influx of humours is not inflammation, but a very different thing, the hinge on which the similitude hung is at once snapped asunder.

He proceeds to elucidate his arrangement. We need not explain it to our readers, it is sufficiently clear for all useful purposes; for indeed the leading divisions of physiology fall so naturally into classification, that for the mere purpose of methodizing instruction to the beginner, who must go through the whole sooner or later, nice arrangement is but of small importance.

A description of the system of the great sympathetic nerves is added, as forming a nervous system in some degree distinct from the cerebral nerves, and peculiarly intended to give motion and vitality to the internal, assimilating, and digestive functions. This is a very useful view of the subject, and happily introduced here.

To proceed to the body of the work before us, in which however we shall only pause on the parts which appear to require or to merit notice; for the Elements of Physiology are not proper subjects for our Analysis.

The first chapter contains the function of digestion, which is treated in a very perspicuous manner, and the author shews his good sense in confining himself chiefly to matter of fact. The following will give a specimen of the execution of the work:

"It is in the stomach that the mechanism of digestion is principally effected: it has always been considered the most important organ. The aliment received into its cavity becomes more fluid, undergoes a great alteration, and is converted into a soft homogeneous paste, known by the name of chyme. What are the means that induce this change? or, in other words, what is digestion in the stomach?"

"It would be useless to recapitulate the hypotheses successively formed to explain digestion; they may be reduced to *coction*, *fermentation*, *trituration*, *putrefaction*, and *maceration* of the food received into the cavity of the stomach. Physiologists are generally agreed at present, in considering digestion in the stomach as a solution

tion of the aliment by the gastric juice. This liquid, copiously poured on the internal surface of the stomach when this viscus is irritated by the presence of food, is the production of arterial exhalation; it is neither acid nor alkali, and seems to be of a nature nearly analogous to saliva; the gastric juice, possessing great properties of solution, penetrates into the alimentary matter on all sides, separates and divides its particles, combines with it, changes its composition, and impresses qualities very different from those it possessed before this mixture. In fact, if a mouthful of wine or food be returned from the stomach some minutes after it has been received, the odour, taste, and all the qualities, both physical and chemical, of these substances, are so altered, that we can with difficulty distinguish them; and vinous liquors, more or less acid, are no longer susceptible of spirituous fermentation. The energy of the power of the gastric juice, perhaps exaggerated by some physiologists, is sufficient to reduce to a soft mass the hardest bones, on which certain animals subsist: it is very probable that its chemical composition is different and variable, and that it is acid, alkaline, or saponaceous, according to the nature of the aliment. Although gastric juice is the most powerful agent of digestion in the stomach, its dissolvent power has need of assistance from the action of several secondary causes, as heat, which seems to augment and concentrate itself in the epigastric region. So long as the exertion of the stomach continues, there is a sort of intestine fermentation, which should not be, in the full sense, compared to the motion by which fermentative and putrescent substances are decomposed; there is also a moderate and peristaltic motion of the muscular fibres of the stomach, which press the aliment on all sides, and perform a slight trituration, while the gastric moisture softens and macerates the food before it is dissolved; it may then be affirmed that the process of digestion is, at the same time, chemical, vital, and mechanical: the authors, therefore, of various theories to explain this function have erred by attributing to one cause only, as heat, fermentation, putrefaction, trituration, maceration, and the gastric juice, that which is the aggregate result of all those causes united."

At the conclusion of this chapter a due degree of attention is paid to the chemical analysis of urine, as it is an excretion which on many accounts peculiarly merits the notice of the chemist, and has actually engaged it to very great advantage. It is particularly in the animal chemistry that we may look for the most copious additions to Haller.

Absorption is the subject of the second chapter. The author properly throws some doubts on aqueous absorption from the skin in common circumstances, a question still to be determined by future observation. Somewhat more might have been said on the anatomical distribution of these vessels, and on the assistance which pathology gives in explaining their functions.

The circulation of the blood is treated of in the third chapter. Scarcely any thing occurs here not to be found in Haller, and some interesting



interesting points of view are omitted. The effect of pressure, the resource offered by the anastomosing branches on interruption of the principal trunks, and some other physiological facts of great interest, might have been introduced with great propriety; but, neither here, nor in the other parts of the work, can we discern the hand of a master, but only of one who performs well within prescribed limits, but does not venture beyond them.

[ To be continued. ]

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*The Rules of the extended Medical Institution for the Benefit of the Sick and Drooping Poor, with an Explanation of its peculiar Design, and various necessary Instructions.* By THOMAS BEDDOES, M. D. pp. 78. Bristol, 1803.

IF this little tract were drawn up by a common hand, and contained only the usual rules and regulations of a charitable institution, we should not have introduced it into our Retrospect; but there is something so truly original in every thing that comes from the pen of Dr. Beddoes as always to fix the attention, at least, of his readers, and not seldom to ensure their warm approbation. It is particularly in large and extended views of the objects of his profession that the author exhibits his talent for deep observation, and nice insight into the characters of different ranks of society;—as a guardian of public health his abilities appear eminently conspicuous.

The purpose of this Institution is singular, it is for the prevention of some of the most widely wasting diseases to which the inhabitants of this country, particularly the hard working, needy, and suffering part of the community are exposed, partly by the pressure of always urgent necessity, partly by prejudice and ignorance in subjects connected with the preservation of health, partly by their own folly, thoughtlessness, and vice, and very largely by the bitter inheritance of the seeds of disease, commonly the only inheritance derived from their progenitors. The purpose of the institution is thus explained by the author.

“ Now, then, in what does it consist?—If I am to answer generally, I should say it is—in proposing to check the canker of disease as soon as it fastens on the frame, and to root it out:—the moment any one seems, before his season, inclining towards the grave, to stretch out a helping hand, rear him upright, and set him firmly upon his footing again—Do I speak plainly enough, or shall I add, that it is our purpose to preserve those that suppose themselves only a trifle out of sorts, but are really falling into some deadly disorder,—to fill the feeble with strength to go through the business of their station—to give those, whose weakly childhood marks them out as likely to be cut off in youth, a fair chance for a long and healthy life—in fine, not only to stop short the course of some maladies, but to render the constitution less accessible to them, and to stir up in fathers and mothers an universal spirit of watchfulness over the condition of their tender offspring.”

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A most forcible appeal is made to the feelings, and, above all, to the common sense, of those to whom this is addressed, by strong portraits of these diseases. We shall present some of these to our readers, not to add to *their* information, but as specimens of this kind of graphical painting.

“Consumption, then, has the harrowing chills and scorching heats of fevers in general. It has the drenching and draining sweats of ague in particular. It has the insupportable languor of various slow disorders. It has the oppression of asthma; indeed, a worse oppression still, since it often grows stronger and stronger, up to actual drowning by inches, or suffocation from matter which there is not strength to bring up. Belonging to the advanced stage of the disease, there is a scene which I have sometimes witnessed, and which I doubt not but others have witnessed also. It is, when the consumptive expire under increasing shortness of breath. They have a sort of agony that will last for hours and even for days with some intermissions. The sufferer gasps; at times he snaps convulsively at the air; and calls, with dismal shrieks, upon the bystanders for Breath! Breath!

“Besides this, there is the violent cough, producing frequent retchings, and even the throwing up of almost every meal for days together. Should the patient at first feel no pains about his chest, he is seldom so lucky as to get into the grave without being visited by them severely,—and by pains elsewhere too. What is most miserable is, that these distresses commonly go on increasing with the inability to bear them. New evils spring up from time to time. Think to what a pitch wretchedness must have risen, when the galled state of the skin renders it almost impossible to find a posture for reposing the weary limbs. After a long siege has been laid to life, attempts are made to seize it by storm. Sudden conflicts arise, and severe conflicts they prove. The first are got over perhaps, though with difficulty. The pitying friends congratulate themselves. But how can one join in their joy, when the struggle is still to be gone over again; and yield at last? I say nothing of the outward change—how the features shrink—the nose sharpens—the eyes grow hollow—the cheek bones project, till we have a living death’s head just covered with skin; and one of the most lovely, perhaps, is changed into one of the most pitiable objects the eye of man can behold.

“For it is by no means here as in many other complaints, of which we say—He has youth on his side, and it is odds but he gets over it. In the present case youth is no sort of advantage. Who indeed is ignorant that this dire disorder is most apt to come like a blight over the spring of life? And who can contradict the melancholy observation of the poet?

“Sad Beauty’s form foul SCROPHULA surrounds  
With bones distorted and putrescent wounds;  
And, fell CONSUMPTION, thy unerring dart  
Wets its broad wing in Youth’s reluctant heart.

“You

"You are, I hope, beginning by this time to conceive what sort of a complaint it is, which I would fain show you in something like its true colours. Very different no doubt it must be from what you had imagined, if you have only passed some poor pale female, basking like a withered lilly in the sun, and have not been used to hold her head as she strains with coughing, or to watch all night by the side of her reeking bed."

Still the reader may not be aware of the precise object of this institution, nor of the method in which the physician is to set about fulfilling its duties. Of this the author gives some farther explanation.

"Upon examining a particular child, it has occurred to me, many scores of times, to ask the parent: Have you any more children? "Yes." I am sure, from what I see about this child, that the rest cannot be healthy. "They none of them complain." Be so good as bring them however such a day. I particularly wish to examine them, and satisfy myself.

"In consequence of this conversation the children are brought. I single out one among the number, and finding various distinct marks of indisposition about him, I enquire: Can you possibly consider this child as in a proper state of health? The parent says again, as he did at first: "I do not hear him complain; and he eats heartily enough; but his meat does not seem to do him any good. He has been getting thinner and weaker these some months." That is speaking to the purpose. Can you suppose a child is as he ought to be, when his food does him no good, and he gets thinner and weaker? I could add several other reasons, if they were such as you could properly understand. But I suppose you will be satisfied if I promise to give him something that shall cause his food to do him good, and make him fuller of flesh and stronger. You must do your part: give him the medicine regularly, and feed him in the best way you can."

Of the fortune or success of such an institution more than doubts will be entertained by many of those who have had the most experience in these subjects; but the efforts of enlightened physicians to improve the health, comforts, and with them the morals of the lower classes of the people survive the fate of individual establishments, and are seldom lost upon that part of society, whose good opinion is the most to be valued and cherished.

# MEDICAL AND PHYSICAL INTELLIGENCE.

*A Letter from Mess. Paul and Harfield to the Editors, dated Villiers Street, Strand, Nov. 10, 1803, contains the following Information.*

## ON ARTIFICIAL CHELTENHAM WATER.

Since the publication of the "Reports on the Preparation of Artificial Mineral Waters," which were circulated at the opening of our manufactory in the spring of 1802, we have had the satisfaction to see our new establishment patronized, in the first instance, by the most eminent men in the several departments of medical science, and soon afterwards greatly encouraged by an enlightened public. During this space of time, several hints have been given to us, and various improvements have been suggested in the preparation of mineral waters by medical men of science and respectability, which have enabled us in some instances to extend still farther this class of remedies.

As it is our intention, at some future period, to give the public a full account of these improvements, we shall not at present enter into any particulars respecting them. But as there is one, which has already undergone a sufficient trial to enable us to speak with some confidence of its utility, we beg leave to submit it immediately to the consideration of the faculty.

Some sort of artificial mineral water, uniting under a pleasant form the tonic qualities of a chalybeate with those of a laxative medicine (such as is met with in the Cheltenham water) has long been sought for as a valuable acquisition. Natural waters of this kind not admitting of being transported without losing some of their properties, owing chiefly to a loss of gas, and a precipitation of iron, various substitutes have been proposed; the most effectual of which consists in preparing, in the form of a powder, the solid ingredients of the spring, and dissolving them in water at the moment of their being used. But it is obvious that in this imitation, useful as it may be, the medicine is deprived of its gaseous acid, which serves to dissolve and suspend the iron, and contributes greatly to render this combination effectual as well as palatable.

These advantages we flatter ourselves to have fully obtained, by combining together those two kinds of water, which are mentioned in our reports under the names of *Seidlitz* and *Spa*, so as to impregnate by means of our particular processes each pint of water with the following ingredients:

Carbonic acid, 5 times its volume.

Carbonate of iron, 1 grain.

Magnesia vitriolata, 6 drachms.

This water, we are authorised to say, has been found upon trial to be remarkably pleasant, and has appeared beneficial in the hands of some eminent physicians in cases in which Cheltenham waters would have been deemed advisable. This mode of impregnation,



pregnation, we need hardly observe, has the additional advantage of enabling us to vary the proportion either of the iron or neutral salt, as circumstances may require, and of covering almost entirely the bitter taste of the latter, by increasing greatly the proportion of the gaseous acid. Yet in recommending to notice this new preparation, we are far from imagining that those patients who can resort to the natural spring may not derive material advantages from a number of favourable circumstances connected with such excursions: but we submit to the consideration of the faculty how far the water itself, from the circumstances just mentioned, may be so prepared as to be at least as effectual, and often even better adapted to the constitution, and particular state of patients, as that which is drank on the spot itself. As the Seidlitz water when mixed with Spa in the manner used at our establishment, may be transported to almost any distance without injury, we would, with great diffidence, suggest the probable advantage of sending it to such climates as give rise to those diseases which require the combined powers of saline purgatives with tonics for their cure."

The history of an appearance, called in French the Blue Disease, (*Maladie Blue*) or that blueish livid appearance arising from malconformation of the heart, or the great vessels carrying on the circulation, was read at the Medical Society of Nancy, of which the author, M. Thiebaut, is a member. The child, a boy, was two years of age, and was remarkable for the deep colour of the skin throughout the body; the child was frequently attacked with epilepsy, the returns of which increased and terminated his existence. The author had no opportunity of examining the body, we therefore presume that the cause would be found the same as that described by Morgagni, Hunter, &c. The author conceives, that the disease may arise in the first instance, from a plethoric state of the infant at birth, preventing the new changes that should take place in the circulation, and suggests the propriety of letting a certain quantity of blood from the umbilical cord immediately after birth.

Mr. RENAUD thinks that arsenic in a metallic state has no effect on the animal body; an opinion to which he was led by analogy and by some experiments. Metals in general seem only to act on the animal body, when in a state of oxydation; hence all metals which are not easily oxydable, have but little or no effect on the living body. Thus quicksilver, as a metal, has not the least action but only a mechanical one, depending on its natural heaviness; whereas, in an oxydated state, it proves strongly stimulating, and often corrosive. It is however attended with many difficulties to make experiments with metallic arsenic, this metal being already oxydable by the mere contact of the air, besides which the slightest trituration is capable of oxydating it, on which account it cannot be given in powder, and in pieces it will only act with its surface, because it dissolves with great difficulty in the stomach. For these reasons Mr. R. took the arsenial mundic, which may be reduced

reduced to a fine powder without losing its metallic gloss. Mr. R. gave of this substance from eighteen grains to two drachms to dogs, without perceiving any symptoms of a deleterious effect.

Dr. DEIMAN, of Amsterdam, employed the suroxygenated muriatic acid mixed with oil as one of the best external remedies in scabies and other cutaneous diseases, and he succeeded in curing a very obstinate species of scabies with a liniment, in which sixty drops of the acid were added to one ounce of oil. He used this remedy with equal success in tinea capitis, and herpetic complaints of the most obstinate kind. Dr. Binkman, of the same place, praises likewise this combination, but in tinea capitis he advises to add more acid. The oil is mixed with the acid by shaking it in a glass vessel, which is well closed. No more than one ounce ought to be prepared at once. The vessel, in which the liniment is preserved, must be put in a dark place, and be shaken, before it be applied.

Dr. ACKERMANN, of Mentz, has made several Galvanic experiments on the body of a beheaded person a quarter of an hour after decapitation. The battery which he used consisted of 100 strata of zinc and copper plates. A small sponge, moistened with a solution of ammonia, and connected with the hydrogen pole, being introduced into the intestinum rectum, another sponge was laid on the wound of the neck, and the head placed above it, into the right ear of which a small sponge had been put, tied to a wire, whose end was held in the hand. On touching the oxygen pole of the battery, all the muscles of the body were thrown into violent convulsions, the spine lifting itself and bending repeatedly; both arms, forcing themselves out of the hands of the assistant, were forcibly drawn towards the body; the muscles of the face were likewise convulsed, and the masticatories opened and closed the jaws with gnashing of the teeth. In the experiments which were made on the body alone, the muscles of the extremities were much convulsed; and in those made on the head only, the eye-balls were violently rolled within their cavities. All these contractions continued above an hour; and even when the body had received the temperature of the atmosphere, slight contractions could be perceived.

**EDINBURGH CLASSES.** Mr. Charles Bell is now delivering his Course of Lectures under the following divisions, Anatomy, Pathology, and Surgery. The Course will conclude early in April.

Dr. BATTY will begin his Second Course of Lectures on the Theory and Practice of Midwifery, &c. on Monday, Jan. 2, 1804.

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#### TO CORRESPONDENTS.

Communications are received from Dr. Reid, Mr. G.N. Hill, Mr. Barlow, Mr. Marson, Mr. Adye, and Mr. Roche.

# I N D E X.

|                                                                                               |     |                                                                           |        |
|-----------------------------------------------------------------------------------------------|-----|---------------------------------------------------------------------------|--------|
| <b>A</b> BDOMEN, case of a wound of the                                                       | 250 | Afcites, successful operation in                                          | 498    |
| Aberdeen, account of the influenza at                                                         | 232 | Asthma, on the lichen islandicus in                                       | 379    |
| Abergavenny, epidemic at                                                                      | 228 | Atkinson, Mr. on metallic casts of the ear                                | 359    |
| Abernethy's, Mr. lectures announced                                                           | 286 | Auban, Dr. on the cow-pock, as a preservative against the plague          | 474    |
| Aberystwyth, epidemic at                                                                      | 294 | Auditory organs, method of applying Galvanism in affections of the        | 61     |
| Abcess of the liver, case of                                                                  | 1   | Aurelianus on bronchotomy                                                 | 7      |
| ———, Dr. Robinson on                                                                          | 489 | Autumnal fever, history of the                                            | 365    |
| Absorption, on aqueous                                                                        | 570 | Axilla, on compressing the greater arteries at the                        | 156    |
| Acid, on preparing muriatic æther with simple                                                 | 94  |                                                                           |        |
| ———, on the existence of cobaltic                                                             | 94  | Babington's, Dr. lectures announced                                       | 285    |
| Ackermann's, Dr. Galvanic experiments                                                         | 576 | Baddeley, Mr. on the influenza                                            | 214    |
| Æther, method of obtaining muriatic                                                           | 94  | Badham's, Dr. lectures announced                                          | 384    |
| Africa, on the remittent fever of the coast of                                                | 85  | Baines, Mr. on the influenza                                              | 396    |
| Ague, on that of hot climates                                                                 | 85  | Barbadoes, account of the vaccine inoculation at                          | 424    |
| Agues, on the use of white vitriol in                                                         | 496 | Barbary, observations on the coast of                                     | 381    |
| Albugo, description and cure of                                                               | 562 | Bardsley, Dr. on the influenza                                            | 210    |
| Alderson, Dr. on the influenza                                                                | 125 | Bark, on the uses of, in fevers                                           | 12, 18 |
| Aldis's, Mr. case of fissure of the cranium                                                   | 244 | Barlow, Mr. on the influenza                                              | 209    |
| Alkalies, on the antiseptic qualities of                                                      | 475 | Barnside, Dr. on the influenza                                            | 528    |
| Allen's, Mr. lectures announced                                                               | 285 | Barthe, M. his case of a wound in the abdomen                             | 250    |
| Almonds, prussic acid in the infusion of bitter                                               | 95  | Bartley, Mr. on the influenza                                             | 308    |
| Amaurosis, on the application of Galvanism in cases of                                        | 330 | Basse, Mr. on muriatic æther                                              | 94     |
| Amblyopia cured by Galvanism                                                                  | 58  | Bath waters, review of a treatise on the                                  | 183    |
| America, quantity of spirits distilled in                                                     | 476 | Batty's, Dr. lectures announced                                           | 286    |
| Analogy between the motion of the blood in the arteries, and of water in troughs and conduits | 285 | Bayfillance's, Dr. case of tinea                                          | 542    |
| Angina pectoris, case of                                                                      | 63  | Beaumont, Dr. on the influenza                                            | 202    |
| Animal flesh, employment of pot-ash with                                                      | 475 | Beddoes's, Dr. communications on the influenza 73, 97, 193, 289, 385, 517 |        |
| Animalcula, observations on                                                                   | 139 | ———, Dr. on a medical institution for the poor                            | 571    |
| Animal matter, on the action of heat or caustic on ( <i>note</i> )                            | 26  | Bell, Mr. on the influenza                                                | 517    |
| Animals, cause of motion and sensation in                                                     | 253 | Bell's Principles of Surgery, remarks on                                  | 154    |
| ———, on contraction in the muscles of                                                         | 53  | ———, Mr. C. lectures announced                                            | 576    |
| Antyllus on Bronchotomy                                                                       | 7   | Biddeford, account of the influenza at                                    | 104    |
| Aqua laurocerasi, prussic acid in the                                                         | 95  | Black, Dr. on the influenza                                               | 295    |
| Aretæus on bronchotomy                                                                        | 7   | Blackburne, Dr. on scarlet fever, reviewed                                | 457    |
| Arnemann's, Prof. instruments for extracting the cataract ( <i>with an engraving</i> )        | 65  | Bladders, on the cure of diseased                                         | 82     |
| Arsenic, on its effects on the human body                                                     | 575 | Blair's, Mr. case of an extraneous substance lodged within the vagina     | 491    |
| Artery, on the incontracton of an                                                             | 2   | ———, lectures announced                                                   | 287    |
| Arteries, on the difficulty of compressing the great                                          | 156 | Blake, Dr. on the influenza                                               | 116    |
| ———, on the motion of the blood in the                                                        | 284 | Bleeding, its use in fever                                                | 14     |
| Artificial Cheltenham water, description of                                                   | 574 | Blifters, on their use in puerperal fever                                 | 17     |
|                                                                                               |     | Blood, on an issue of the arterial                                        | 4      |
|                                                                                               |     | ———, on the motion of the                                                 | 284    |
|                                                                                               |     | Blood vessels, on the compression of the large                            | 154    |
|                                                                                               |     | Blount, Dr. on the influenza                                              | 126    |
|                                                                                               |     | Blux disease, account of the                                              | 575    |

# INDEX.

- Boarding schools, advice to the heads of 458
- Bones, on a caries of the 4
- BOOKS, CRITICAL ANALYSIS OF MEDICAL**—The Natural History of the Human Teeth, by Joseph Fox, 77. Account of the Discovery of the Power of Mineral Acid Vapours to destroy Contagion, by John Johnstone, M. D. 78. On the Influenza as it prevailed at Bristol and its Vicinity, by John Nott, M. D. 80. Cases of the successful Practice of Vesicæ Lotura for the Cure of diseased Bladders, by Jesse Foot, Esq. 82. Medical Directions for the Use of Navigators and Settlers in Hot Climates, by Thomas M. Winterbottom, M. D. 83. Illustrations of some of the Injuries to which the Lower Limbs are exposed, by C. B. Trye, 88. An Enquiry into the Efficacy of Oxygen in the Cure of Syphilis, by C. Platt, 90. Useful Hints to those who are afflicted with Ruptures, and on the Empirical Practices of the present Day, 92. The Edinburgh Practice of Physic, Surgery, and Midwifery, a new edition, in 5 vol. 180, 277. A Second Treatise on the Bath Waters, by George Smith Gibbes, M. D. 183. The Report on the Cow-Pock Inoculation, from the Practice at the Vaccine-Pock Institution during the years 1800, 1801, and 1802, 187. Observations on Diarrhœa and Dysentery, as those Diseases appeared in the British Army during the Campaign in Egypt, in 1801, by Henry Dewar, 279. A concise History of the Autumnal Fever which prevailed in the Borough of Wilmington, in North America, in the Year 1802, by Dr. John Vaughan, 365. Practical Observations on Surgery, illustrated with Cases, by William Hey, 369, 466. Experiments and Observations on the Cortex Salicis Latifoliae, or Broad-Leaved Willow Bark, by G. Wilkinson, 374. Practical Observations on the Management of Ruptures, by W. H. Timbrel, Esq. to which are prefixed, two recommendatory Letters, by William Blair, A. M. 375. Facts and Observations concerning the Prevention and Cure of the Scarlet Fever, with some Remarks on the Origin of acute Contagions in general, by W. Blackburne, M. D. 457. The Charleston Medical Register, for the Year 1802, by David Ramsay, M. D. 468. A Treatise on the Cow-Pox, containing the History of Vaccine Inoculation, and an Account of the various Publications which have appeared on that Subject, by John Ring, 473. The Elements of Physiology, by M. Richerand, 567. Rules of a Medical Institution for the Poor at Bristol, by T. Beddoes, M. D. 571
- BOOKS, NEW MEDICAL ANNOUNCED.**—Mr. Henry's third Edition of his Epitome of Chemistry, 96. Dr. Percival's Medical Ethics, *ib.* Mr. Dewar's Observations on Diarrhœa and Dysentery, *ib.* Dr. Blackburne's Observations on the Prevention and Cure of Scarlet Fever, 384. Mr. Johnston's History of Animal Chemistry, 480. Mr. Skrimshire's Popular Chemical Essays, *ib.*
- Bradford, account of the epidemic at 387
- Bradley's, Dr. lectures announced 286
- Breast, case of abscess in the 414
- , case of cancer of the 448
- Bree, Dr. on the influenza 125
- Brewer, Mr. on the influenza 512
- Bridgewater, epidemic at 228
- Bristol, on the influenza in 80
- Bronchotomy, on the operation of 6
- Brousonet, Dr. on scarifying and cupping 415
- Brown, Mr. on the influenza 118
- Brunonianism, observations on 181
- Buchholz, M. on the analysis of opium 42
- on cobaltic acid 94
- Bursæ Mucosæ, disease of one of the 69
- Bush's, Mr. case of dropsy 498
- Callanan, Dr. on the influenza 523
- Cambridge, Mr. on the influenza 203
- Cambridgeshire, account of the epidemic in 205
- Cancer, case of 448
- Carendeffer, M. de, on stony concretions 328
- Carey, Mr. on the influenza 529
- Caries of the joints, on amputating the extremities of the bones in cases of 557
- Carlisle's, Mr. lectures announced 384
- Carmarthen, influenza at 303
- Carolina bank, extraordinary attempt to rob 472
- Carpue's, Mr. Galvanic experiments 383
- , Lectures announced 287
- Cataract, on the cure of 564
- , case of early 10
- , account of instruments for extracting 65
- , account of a couching needle for 371
- Catarrhal peripneumony, on cupping in 425
- Catheter, method of securing the elastic 174
- Cats, disorder among 217
- Cerussa acetata, its use in hæmorrhage 236
- Gevallos, M. on the goat pock 341
- Chamberlaine, Mr. on the medicine act, 165, 258, 347
- Chancre, on the cure of 499
- Charcoal, remarks on experiments on 273
- Charleston Medical Register, review of the 468
- Gheltenham waters, on artificial 574
- Chemistry, lute for the operations of 494



# INDEX.

|                                                                      |     |                                                                                       |           |
|----------------------------------------------------------------------|-----|---------------------------------------------------------------------------------------|-----------|
| Chemosis, on the cure of                                             | 562 | Deafness, on the benefit of Galvanism in                                              | 61, 332   |
| Chevalier's, Mr. lectures announced                                  | 287 | De Carro, Dr. on vaccination                                                          | 242       |
| Church-yard infection, remarks on                                    | 177 | ——, letter to Dr. Jenner from                                                         | 274       |
| Cinder, remarks on finery                                            | 278 | Deiman, Dr. on suroxygenated muriatic acid                                            | 576       |
| Clark, Dr. on the influenza                                          | 202 | Deiaferronnays. Baron, on the Iceland Lichen                                          | 379       |
| Clarke's, Dr. lectures announced                                     | 286 | Delunel, M. on inodorous plants                                                       | 95        |
| Climates, on the fevers of hot                                       | 36  | Dennet, Mr. on inoculation                                                            | 321       |
| Cline's, Mr. lectures announced                                      | 285 | Dennison's, Dr. lectures announced                                                    | 286       |
| Close-stools, observations on                                        | 176 | Dewar, Mr. on the influenza                                                           | 119       |
| Cobalt, method of obtaining metallic                                 | 95  | ——, his observations on diarrhoea and dysentery, reviewed                             | 279       |
| Cobaltic acid, on the existence of                                   | 94  | Diaphoretics, on their use in puerperal fever                                         | 16        |
| Cock, Mr. on the influenza                                           | 395 | Diarrhoea, observations on                                                            | 276       |
| Cold water, its use in convulsions                                   | 410 | ——, the radix lopez recommended in                                                    | 477       |
| ——, its use in opisthotonos                                          | 492 | Digestion, observations on                                                            | 318       |
| Compound fracture, case of                                           | 316 | Digitalis, on its success in phthisis                                                 | 551       |
| Concretions, on stony                                                | 327 | —— its inefficacy in ditto                                                            | 554       |
| Contagion, on the suppression of                                     | 460 | Diseases, cases of general ones cured by the extraction of decayed and diseased teeth | 431       |
| ——, on the discovery of the power of mineral acid vapours to destroy | 78  | Disease of one of the surfæ mucosæ                                                    | 69        |
| Contagious diseases, the re-appearance of                            | 177 | Diseases, on contagious                                                               | 177       |
| Convulsions, on the use of cold water in                             | 410 | Diseases in an eastern district of London, from May 20 to June 20, 1803               | 76        |
| Cook, Mr. on the influenza                                           | 197 | ——, from June 20 to July 20                                                           | 180       |
| Cooke's, Mr. case of incontinence of urine                           | 423 | ——, from July 20 to August 20                                                         | 276       |
| Cooper, Mr. A. lectures announced                                    | 285 | ——, from August 20 to Sept. 20                                                        | 378       |
| Cornea, on the cure of ulcers of the                                 | 563 | ——, from Sept. 20 to Oct. 20                                                          | 456       |
| Correspondents, addresses to, 96, 192, 288, 384, 480, 576            |     | ——, from Oct. 20 to Nov. 20                                                           | 566       |
| Cortex salicis latifoliae, experiments on the                        | 374 | Dislocations, remarks on                                                              | 89        |
| Cow-pock, on the origin of the                                       | 93  | ——, case of                                                                           | 467       |
| ——, inoculation, report on the                                       | 187 | Dixon, Dr. on the influenza                                                           | 110       |
| ——, a security against the plague                                    | 474 | Dogs, experiments on                                                                  | 22        |
| ——, sheep inoculated with the                                        | 192 | ——, affected by the influenza                                                         | 217       |
| ——, account of in Barbadoes                                          | 424 | Dolor faciei, case of                                                                 | 420       |
| ——, Mr. Weston on the                                                | 544 | Doyle, Dr. on the influenza                                                           | 193       |
| Cow-pox, review of Mr. Ring's Treatise on the                        | 473 | Drogheda, epidemic at                                                                 | 527       |
| Cranium, case of fissure of the                                      | 244 | Dropsy, case of                                                                       | 498       |
| ——, on fractures of the                                              | 370 | Drunkennes, remarks on                                                                | 382       |
| Creafer, Mr. on the influenza                                        | 114 | Dugard, Mr. on the influenza                                                          | 215       |
| Crediton, epidemic at                                                | 311 | Dumas, Mr. on the cause of hunger and thirst                                          | 20        |
| Creve, M. on the metallic stimulus                                   | 54  | ——, his case of intermittent fever                                                    | 427, 541  |
| Crumpe, Dr. on intestinal vermes                                     | 550 | Duncan, Dr. on the influenza                                                          | 405       |
| Cruikshank's, Mr. experiments; Dr. Priestley's remarks on            | 273 | Dunn's, Mr. case of phthisis pulmonalis                                               | 551       |
| Cuming, Mr. on the influenza                                         | 312 | Dunning, Mr. on the influenza                                                         | 129       |
| ——, on the use of white vitriol in agues                             | 496 | Dysentery, observations on                                                            | 280       |
| Cupping, on the use of                                               | 425 | Ear, on metallic casts of the                                                         | 171, 357. |
| Currie, Dr. on the influenza                                         | 213 | ——, on applying Galvanism to the                                                      | 62        |
| Curry's, Dr. lectures announced                                      | 285 | Earneft, Mr. on the influenza                                                         | 387       |
| Custance, Mr. on the influenza                                       | 200 | ——, case of phthisis pulmonalis                                                       | 554       |
| Cutaneous diseases, efficacy of muriatic acid in                     | 576 | East Bourn, account of the epidemic at                                                | 127       |
| Davies, Mr. on the influenza                                         | 105 | Edgeworth, Mr. on the influenza                                                       | 301       |
| ——, Dr. on ditto                                                     | 303 | Edinburgh, account of the epidemic in                                                 | 405       |
| Davis's, Dr. observations on the Barbary Coast                       | 381 |                                                                                       |           |
| Deacon, Dr. letters from Dr. Mead to                                 | 43  |                                                                                       |           |

# INDEX.

|                                                                                       |          |                                                           |                   |
|---------------------------------------------------------------------------------------|----------|-----------------------------------------------------------|-------------------|
| Edinburgh classes                                                                     | 576      | Fevers, history of the autumnal                           | 363               |
| Edinburgh practice of physic, surgery, and midwifery, reviewed                        | 186, 277 | —, case of variety of intermittent                        | 427, 541          |
| Edlin, Mr. on the petechiæ sine febre                                                 | 444      | —, observations on the nettle-rash                        | 481               |
| Egypt, on the diseases of                                                             | 279      | —, on the prevention of scarlet                           | 457               |
| —, remarks on the climate of                                                          | 465      | Field, Mr. on the influenza                               | 223               |
| Electricity, parallel between Galvanism and                                           | 331      | Fieldhouse, Mr. on the influenza                          | 399               |
| Elements of physiology, review of the                                                 | 567      | Finsbury dispensary, report of surgical cases in the      | 74, 178, 275, 376 |
| Emetics, their use in fevers                                                          | 15, 38   | Flannel, on the use of                                    | 84, 281           |
| Emhoff, Mr. on Galvanism                                                              | 59       | Foot, Mr. on diseases of the bladder, reviewed            | 82                |
| Enemas, their use in fevers                                                           | 39       | Fossil fish, discovery of a beautiful                     | 480               |
| Epidemics, on the production of—see INFLUENZA                                         | 140      | Fothergill, Mr. on the influenza                          | 393               |
| Epilepsy, history of a case of                                                        | 51       | Fox's, Mr. natural history of the teeth reviewed          | 77                |
| —, cured by Galvanism                                                                 | 332      | —, remarks on, by Mr. Moor                                | 360               |
| Evaporation, account of an instrument for facilitating                                | 479      | —, lectures announced                                     | 480               |
| Excitability, on the causes of                                                        | 25, 52   | Fowler, Dr. on the influenza                              | 389               |
| Experiments on the cause of hunger and thirst                                         | 22       | Fracture, case of compound                                | 316               |
| —, relative to the analysis of opium                                                  | 42       | Frampton's, Mr. lectures announced                        | 286               |
| —, on the irritated muscular and nervous fibre                                        | 55       | Frazer, Dr. on the influenza                              | 204               |
| —, on cobaltic acid                                                                   | 94       | Friend's history of physic, a quotation from              | 6                 |
| —, on the application of Galvanism for medical purposes                               | 330      | Frogs, Galvanic experiments on                            | 57                |
| —, with oxydated disks of the Galvanic pile                                           | 63       | Fungus hæmatodes, observations on the                     | 466               |
| —, remarks on Mr. Cruikshank's                                                        | 273      | Furniture of a sick room, remarks on                      | 175               |
| — and observations on the cortex salicis latifoliae                                   | 374      | Gaillard, Mr. on preserving vaccine virus                 | 41                |
| —, Dr. Ackermann's                                                                    | 576      | Galvanic discovery, historical statement of               | 53, 330           |
| —, Mr. Carpué's Galvanic                                                              | 383      | — pile, experiments with oxydated disks of                | 63                |
| Extraction of decayed teeth, on the                                                   | 431      | — experiments                                             | 383               |
| Extraneous substance lodged in the vagina, case of                                    | 491      | Galvanism, M. de la Melhere on                            | 26                |
| — bodies, account of an instrument for extracting them from the œsophagus             | 479      | —, parallel between electricity and                       | 331               |
| Eyes, observations on several diseases of the                                         | 561      | —, on the medical benefits of                             | 330               |
| Fabroni, Mr. on Galvanism                                                             | 54       | Gangrenes, cases of                                       | 275               |
| Faciei, case of dolor                                                                 | 420      | Gelatine, on its use in intermitting fevers               | 323               |
| Facts and Observations on the prevention and cure of scarlet fever                    | 457      | Gibbs, Dr. on the Bath waters                             | 183               |
| Fahrenheit, mode of converting the degrees on Reaumur's thermometer to those on, note | 381      | Gibney, Dr. on the influenza                              | 527               |
| Febris hydrophobica, case of                                                          | 427      | Gidely, Mr. on the influenza                              | 204               |
| Femur, case of the luxation of the                                                    | 494      | Gilbert, Mr. on gelatine in intermittent fevers           | 323               |
| —, on the dislocation of the                                                          | 88       | Giraud's, Mr. case of Monstrosity (with an engraving)     | 171               |
| Ferguson, D. on the cure of chancre                                                   | 499      | Glastonbury, account of the influenza at                  | 226               |
| Fever, on the nature and cure of the puerperal                                        | 11       | Goat-pock inoculation, papers on                          | 339               |
| Fevers, on the use of gelatine in intermittent                                        | 323      | Gonorrhœa, bad effects of oxygenated muriat of mercury in | 283               |
| —, of hot climates, observations on the                                               | 36       | Goodwin, Mr. on the influenza                             | 195               |
| —, on the cure of                                                                     | 85       | Gottingen, question proposed by the academy of            | 383               |
| —, on the yellow                                                                      | 87       | Gout, success of cold affusion in                         | 254               |
| —, history of the yellow                                                              | 266      | —, on reduced temperature in                              | 357               |
|                                                                                       |          | —, on the frigorific process in                           | 377               |
|                                                                                       |          | Grant, Dr. on the influenza                               | 305               |
|                                                                                       |          | Gregory, Dr. account of the death of                      | 530               |
|                                                                                       |          | Griffith, Mr. on the influenza                            | 101               |
|                                                                                       |          | Griffiths, Mr. on ditto                                   | 197               |

# INDEX.

|                                                      |          |                                                                                                               |                            |
|------------------------------------------------------|----------|---------------------------------------------------------------------------------------------------------------|----------------------------|
| Grimm, Professor, on Galvanism                       | 58       | Hydrophobic fever, case of an intermitten                                                                     | 427                        |
| Groin, on compressing the arteries at the            | 156      |                                                                                                               |                            |
| Guttfeldt, Dr. on the Yellow Fever                   | 383      | Illustrations of the injuries to which the lower limbs are exposed                                            | 88                         |
| Hadley, Mr. on the influenza                         | 212      | Incarcerated hernia during pregnancy, case of                                                                 | 4                          |
| Haighton's, Dr. lectures announced                   | 285      | Income tax, observations on the                                                                               | 73                         |
| Haines, Mr. on preserving vaccine virus              | 40       | Incontinence of urine, case of                                                                                | 423                        |
| Hall, Mr. on the influenza                           | 220      | Incontraction of an artery, on the                                                                            | 2                          |
| Halliday, Dr. on the influenza                       | 301      | Indian army, luxury of an                                                                                     | 404                        |
| Hansford, Mr. on the influenza                       | 97       | Indians, their use of pot-ash instead of salt                                                                 | 475                        |
| Harnes, Mr. on the influenza                         | 291      | Inflammation, strangulation produced by                                                                       | 248                        |
| Harries, Dr. on the influenza                        | 112      | Influenza, Dr. Beddoes's collection of persons on                                                             | 73, 97, 193, 289, 385, 517 |
| Harrison's, Mr. case of dolor faciei                 | 420      | ————, Dr. Nott on the                                                                                         | 80                         |
| Head-ach, effects of Galvanism in the                | 332      | ————, Mr. Rodman on the                                                                                       | 46                         |
| Headington's Mr. lectures announced                  | 286      | ————, Mr. Lufcombe on                                                                                         | 127                        |
| Heat, on the action of                               | 25       | ————, Mr. Dunning on                                                                                          | 129                        |
| Heberden, Dr. on the Bath Waters                     | 183      | ————, Mr. Peaal on                                                                                            | 232                        |
| Heinze, Dr. inoculates sheep with the cow-pock       | 192      | ————, Mr. Hunter on                                                                                           | 233                        |
| Hellwag, Dr. on the medical application of Galvanism | 333      | ————, Mr. Cuming on                                                                                           | 312                        |
| Henry's, Mr. Epitome of Chemistry noticed            | 96       | ————, Mr. Stables on                                                                                          | 355                        |
| Hereford, epidemic at                                | 107      | ————, Mr. Weber on                                                                                            | 516                        |
| Hernia, on an incarcerated                           | 4        | Inoculation hospitals, report of the committee of                                                             | 191                        |
| ————, observations on a case of                      | 248      | ————, report on the cow-pock                                                                                  | 187                        |
| ————, on the treatment of strangulated               | 373      | ————, of sheep with cow-pock                                                                                  | 192                        |
| ———— congenita, case of                              | 33       | ————, Mr. Dennet on                                                                                           | 321                        |
| Hey, Mr. on the influenza                            | 194      | ————, on the goat-pock                                                                                        | 339                        |
| ————, his observations on surgery reviewed           | 309, 466 | ————, on vacciolous                                                                                           | 474                        |
| Heydeck, Mr. on the goat pock                        | 339      | Intermittent fever, case of a variety of                                                                      | 427                        |
| Hickins's, Mr. case of mania                         | 50       | ————, on the use of gelatine in                                                                               | 323                        |
| Hill, Mr. on the influenza                           | 195      | Intestinal vermes, a remarkable species of                                                                    | 547                        |
| ————, G. on opium                                    | 532      | Instrument, description of a new tooth                                                                        | 241                        |
| Hindoos, their eagerness to receive the cow-pock     | 93       | ———— for facilitating evaporation, account of an                                                              | 479                        |
| Hird, Dr. on the influenza                           | 518      | Instruments for removing the cataract, description of (with a plate)                                          | 65                         |
| Historical statement of the Galvanic discovery       | 53, 330  | Iron, on the volatile state of                                                                                | 185                        |
| History of the yellow fever                          | 266      | Irritability and excitability, on the causes of                                                               | 25                         |
| ———— of the autumnal fever                           | 365      | Jamaica, progress of vaccine inoculation in                                                                   | 544                        |
| Hobbes, Dr. on the influenza                         | 289      | Jardine's, Mr. description of a new tooth instrument                                                          | 241                        |
| Hodge, Mr. on the influenza                          | 197      | Jenner, Dr. communications to                                                                                 | 93                         |
| Holder, Dr. on vaccination                           | 424      | Johnson's, Mr. History of Animal Chemistry, announced                                                         | 480                        |
| Hooft, a disorder among cats                         | 217      | Johnstone's, Dr. Account of the Discovery of the Power of Mineral Acid Vapours to destroy Contagion, reviewed | 78                         |
| Hot climates, on the fevers of                       | 36       | Joints, on caries of the                                                                                      | 57                         |
| Hughes, Dr. on the influenza                         | 107      | Jones, Mr. on the influenza                                                                                   | 107, 113                   |
| Hugo, Mr. on the influenza                           | 311      | Jullion, Mr. on hydrocephalus interaureus                                                                     | 150                        |
| Humboldt, M. on Galvanism                            | 55       | Kilkenny, epidemic at                                                                                         | 297                        |
| Humerus, on the reduction of the                     | 90       | King's, Mr. case of spina bifida, (with a plate)                                                              | 237                        |
| Hunger, on the causes of                             | 20       | Kinglake, Dr. on the influenza                                                                                | 306                        |
| Hunter, Mr. on the influenza                         | 233      | ————, on reduced temperature                                                                                  | 457                        |
| ————, J. on preparing casts of the ear (note)        | 359      |                                                                                                               |                            |
| Huxham, Dr. on an epidemic                           | 135      |                                                                                                               |                            |
| Hydatids, abscess of the liver, with a formation of  | 439      |                                                                                                               |                            |
| Hydrocephalus, cases of                              | 74       |                                                                                                               |                            |
| ———— internus, case of                               | 150      |                                                                                                               |                            |

# INDEX.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |                                                                              |                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------------------------------------------------------------------------------|--------------------------------|
| Kinglake, Dr. his correction of a mis-<br>statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 530      | Lungs, on stony concretions coughed up<br>from the                           | 327                            |
| Kirby-Moor-Side, epidemic at                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 390      | Lutcombe, Mr. on the influenza                                               | 127                            |
| La Grave's experiments with the oxydated<br>disks of the Galvanic pile                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 63       | Lute for chemical purposes, account of a                                     | 192                            |
| Lawrence, Mr. on the influenza                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 199      | Luxation of the femur, case of the                                           | 494                            |
| Laxatives, their use in puerperal fever                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 14       | Lynn, epidemic at                                                            | 405                            |
| Lectures on the vaccine pock inoculation,<br>plan of                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 190      | Lynn's, Mr. lectures announced                                               | 384                            |
| — announced. Mr. Cline and Mr.<br>Cooper's on anatomy and the operations<br>of surgery, 285. Drs. Babington and<br>Curry on the practice of medicine, <i>ib.</i><br>Dr. Babington and Mr. Allen on che-<br>mistry, <i>ib.</i> Dr. Curry on the theory<br>of medicine and materia medica, <i>ib.</i><br>Dr. Haighton on midwifery and physi-<br>ology, <i>ib.</i> Mr. A. Cooper on the prin-<br>ciples and practice of surgery, <i>ib.</i> Drs.<br>Roberts and Powell on the theory and<br>practice of medicine, 286. Dr. Ro-<br>berts's clinical, <i>ib.</i> Mr. Abernethy on<br>anatomy and physiology, <i>ib.</i> Mr. Ma-<br>cartney on ditto, <i>ib.</i> Dr. Powell on<br>chemistry and the materia medica, <i>ib.</i><br>Dr. Thynne on midwifery, &c. <i>ib.</i> —<br>Mr. Headington and Mr. Frampton on<br>anatomy and physiology, <i>ib.</i> Dr. Pear-<br>son on therapeutics, practice of physic,<br>and chemistry, <i>ib.</i> Dr. Bradley on the<br>theory and practice of medicine, <i>ib.</i> —<br>Dr. Batty on midwifery, <i>ib.</i> Drs. Den-<br>nison & Squire on ditto, <i>ib.</i> Dr. Clarke<br>on ditto, <i>ib.</i> Mr. Blair on physiology,<br>287. Mr. Wilson and Mr. Thomas on<br>anatomy, &c. <i>ib.</i> Mr. Taunton on dit-<br>to, <i>ib.</i> Mr. Chevalier on surgery, <i>ib.</i><br>Mr. Carpue on anatomy and surgery, <i>ib.</i><br>Mr. Lynn and Mr. Carlisle on surgery,<br>384. Dr. Badham on chemistry, <i>ib.</i><br>Mr. Pearson on surgery, <i>ib.</i> Mr. Tho-<br>mas on ditto, <i>ib.</i> Mr. Macartney on<br>comparative anatomy, <i>ib.</i> Mr. Moore<br>on the structure and diseases of the teeth,<br><i>ib.</i> Mr. Fox on ditto, 430. | 190      | Macartney's, Mr. lectures announced                                          | 286                            |
| Lee, Mr. on the influenza                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 99       | Madras, progress of vaccine inoculation<br>at                                | 384                            |
| Leeds, epidemic at,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 194, 518 | Magennis, Dr. on the influenza                                               | 93                             |
| Leeson's, Mr. case of semiofseous tu-<br>mour                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 162      | Man, epidemic in the Isle of                                                 | 122                            |
| Leg, case of ulcerated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 8        | Manchester, epidemic at                                                      | 529                            |
| Library, on the medical                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 334      | Mania, case of                                                               | 211                            |
| Lichen islandicus, benefits of in affh-<br>ma                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 379      | Marcet, Dr. letter from Dr. De Carro to                                      | 50                             |
| Limbs, on the injuries of the lower                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 88       | March, state of the weather in                                               | 242                            |
| Littlehales, Dr. on the influenza                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 386      | Marcus's, Dr. Galvanic experiments                                           | 146                            |
| Liver, cases of abscess of the                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 1, 489   | Marshall, Dr. on the influenza                                               | 333                            |
| Lochia, on a stoppage of the                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 13       | Marson, Mr. on securing the elastic cathe-<br>ter                            | 405                            |
| Lomas, Mr. on the influenza                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 198      | —, on the furniture of a sick<br>room                                        | 174                            |
| London, account of diseases in an eastern<br>district of 76, 180, 276, 378, 456, 566                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          | —, on church-yard infection                                                  | 175                            |
| Lozenges, on tolu, ( <i>note</i> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 352      | —, on the delivery of the pla-<br>centa                                      | 177                            |
| Low, Mr. on metallic casts of the ear, 357                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          | Marten's, Dr. on the medical application<br>of Galvanism                     | 433                            |
| Ludlow, epidemic at                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 219      | May, Dr. on the influenza                                                    | 330                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          | Mead, Dr. original letters of                                                | 291                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          | Measles, on the                                                              | 48                             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          | Medical directions for the use of navigators<br>and settlers in hot climates | 487                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          | — ethics, account of Dr. Percival's                                          | 83                             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          | — library, remarks on the                                                    | 96                             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          | — lectures, see LECTURES                                                     | 334                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          | — and Physical Intelligence                                                  | 93, 190,<br>283, 379, 474, 574 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          | Medicine act, observations on the amended                                    | 165, 258, 347                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          | Melhere, M. De La, on irritability and<br>excitability                       | 25, 252                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          | Melhuish, Mr. on the influenza                                               | 304                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          | Mercury, effects of oxygenated muriat of                                     | 283                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          | Metal, account of a new                                                      | 96                             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          | Metallic casts of the ear, observations on                                   | 171, 357, 359                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          | — stimulus, observations on                                                  | 54                             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          | — cobalt, method of obtaining                                                | 95                             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          | Metford, Dr. on the influenza                                                | 108                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          | Millet, Mr. on cold water in the gout                                        | 254                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          | Mineral acid vapours, on their power to<br>destroy contagion                 | 78                             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          | Monstrosity, case of                                                         | 172                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          | Moodie's, Dr. case of abscess in the breast                                  | 414                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          | Moor, Mr. on the vascularity of the teeth                                    | 360                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          | —'s lectures announced                                                       | 384                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          | Moreau, Dr. on caries of the joints                                          | 557                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          | Morrison, Dr. on the influenza                                               | 222                            |



# I N D E X.

|                                                                                                                    |          |                                                                                    |               |
|--------------------------------------------------------------------------------------------------------------------|----------|------------------------------------------------------------------------------------|---------------|
| Moffman, Dr. on the nature and cure of the puerperal fever                                                         | 11       | Peach-tree, Prussic acid in the distilled waters of the flowers of                 | 95            |
| ———, on the influenza                                                                                              | 387      | Pearse, Mr. on the influenza                                                       | 203           |
| Motion, on the cause of animal                                                                                     | 253      | Pearson's, Dr. plan of lectures on the vaccine inoculation                         | 180           |
| ——— of the blood in the arteries, and of water in troughs and conduits, analogy between                            | 284      | ——— medical lectures announced                                                     | 286           |
| Muriatic æther, on preparing                                                                                       | 94       | ——— Mr. surgical lectures announced                                                | 384           |
| Muscles of animals, on the influence which produces contractions in the                                            | 53       | Pembroke, epidemic at                                                              | 113           |
| Muscles, on the effects of eating                                                                                  | 482      | Percival's, Dr. medical ethics, account of                                         | 96            |
| Natural History of the Human Teeth, reviewed                                                                       | 77       | Petechnie sine febre, cases of                                                     | 444           |
| Navigators, medical directions for                                                                                 | 83       | Pew, Mr. on the influenza                                                          | 523           |
| Nettle-rash fever, observations on the                                                                             | 481      | Phthisis pulmonalis, successfully treated by digitalis                             | 551           |
| Newry, epidemic at                                                                                                 | 295      | Physiology, review of Richerand's Elements of                                      | 567           |
| Norfolk, improved state of the county of                                                                           | 405      | Pile, on the Galvanic                                                              | 63            |
| ———, (North America) history of the yellow fever at                                                                | 266      | Placenta, on the delivery of the                                                   | 433           |
| Nott, Dr. on the Influenza, reviewed                                                                               | 80       | Plan of lectures on vaccine inoculation                                            | 150           |
| O'Berne on the fevers of hot climates                                                                              | 36       | Plants, on distilled waters of inodorous                                           | 95            |
| Observations on Diarrhœa and Dysentery, as they appeared in the British Army during the Campaign in 1781, reviewed | 279      | Platt's, Mr. Inquiry into the Efficacy of Oxygen in the Cure of Syphilis, reviewed | 90            |
| Œsophagus, apparatus for removing extraneous bodies from the                                                       | 470      | Plymouth, on the epidemic at                                                       | 122, 133, 291 |
| Omentum, case of a wound in the                                                                                    | 356      | Pneumonic inflammation, case of a                                                  | 29            |
| ———, case of suppuration in the                                                                                    | 29       | Pontier's, Mr. case of epilepsy                                                    | 51            |
| Opisthotonos, case of                                                                                              | 492      | Portsmouth (North America) bill of mortality at                                    | 478           |
| Opium, on its use in puerperal fever                                                                               | 16       | Pot-ash used with animal food                                                      | 475           |
| ———, experiments relative to the analysis of                                                                       | 42       | Powell's, Dr. lectures announced                                                   | 286           |
| ———, on its effects on the human body                                                                              | 435, 501 | Practical Observations on Surgery, reviewed                                        | 369, 466      |
| ———, remarks on the modus operandi of                                                                              | 532      | ——— the Management of Ruptures, reviewed                                           | 375           |
| Osseous cavities of the ear, on metallic casts of                                                                  | 171      | Pregnancy, on an incarcerated hernia during                                        | 4             |
| Ottery St. Mary, influenza at                                                                                      | 293      | Priestley, Dr. on finery cinder and charcoal                                       | 273           |
| Oxyds, on those of the metallic disks of the Galvanic pile                                                         | 63       | Prussic acid, discovery of the                                                     | 95            |
| Oxygenated muriat of mercury, effects of                                                                           | 283      | ——— method of obtaining                                                            | 479           |
| Oxygen, on its efficacy in syphilis                                                                                | 90       | Pterygium, description and cure of                                                 | 563           |
| Palladium, a new metal, described                                                                                  | 96       | Puerperal fever, on the nature and cure of                                         | 11            |
| Paralysis, the rhus radicans recommended in                                                                        | 280      | Pupilla clausa, mode of treating                                                   | 565           |
| Paralytic diseases, efficacy of Galvanism in                                                                       | 60       | Quassia, its use in fevers                                                         | 39            |
| Patterson's, Dr. case of angina pectoris                                                                           | 64       | Question, Prize, of the Academy of Göttingen                                       | 383           |
| Paul, Mr. on artificial Cheltenham water                                                                           | 574      | Radix Iopez recommended in colliquative diarrhœas                                  | 477           |
| Paulus on surgical operations                                                                                      | 6        | Ramsay's, Dr. Charleston Medical Register reviewed                                 | 468           |
| Payse's, Mr. lute for chemical operations                                                                          | 192      | Reddleiden, Mr. on the influenza                                                   | 213           |
| Pezal, Mr. on the influenza                                                                                        | 233      | Redtearn, Dr. on the influenza                                                     | 211           |
| ———, on the cure of chancre                                                                                        | 499      | Rheece, Mr. on the influenza                                                       | 229           |
|                                                                                                                    |          | Reid's, Dr. case of trismus traumatica                                             | 345           |
|                                                                                                                    |          | Remmett, Dr. on an epidemic                                                        | 133           |
|                                                                                                                    |          | Renaud, M. on the effects of arsenic                                               | 575           |
|                                                                                                                    |          | Renoult's, M. case of hernia                                                       | 243           |
|                                                                                                                    |          | Report on the cow-pock inoculation                                                 | 187           |
|                                                                                                                    |          | ——— of the small-pox and inoculation hospitals                                     | 191           |

# INDEX.

|                                                                                   |          |                                                                 |                   |
|-----------------------------------------------------------------------------------|----------|-----------------------------------------------------------------|-------------------|
| Rewell, Mr. on the influenza                                                      | 409      | Simmons's, Mr. observations on select subjects in surgery       | 1                 |
| Rheumatism, on cold water in                                                      | 256      | —, on a case of abscess of the liver                            | ib.               |
| Rhus radicans, benefit of the                                                     | 480      | —, on an incontinence of an artery                              | 2                 |
| Ricards's, Mr. report of surgical cases at the Finsbury Dispensary, 74, 178, 275, | 376      | —, on an incarcerated hernia during pregnancy                   | 4                 |
| Rice, Mr. on the influenza                                                        | 112      | —, on a wound of the trachea                                    | 5                 |
| Richerand's Elements of Physiology, reviewed                                      | 567      | —, on a case of ulcerated leg                                   | 8                 |
| Richter's Method of obtaining tungsten                                            | 479      | —, on a case of early cataract                                  | 10                |
| Ring, Mr. on vaccinators                                                          | 159      | Simpson, Mr. on the influenza                                   | 101               |
| —, on inoculation                                                                 | 421      | Simpson's, Mr. case of compound fracture                        | 316               |
| —, treatise on the cow-pox, part ii. reviewed                                     | 473      | Skrimshire's Chemical Essays announced                          | 480               |
| —, on the cow-pox                                                                 | 544      | Small-pox hospitals, report of                                  | 191               |
| Ring-worms, cured by the rhus radicans                                            | 480      | Smart, Mr. on the influenza                                     | 393               |
| Roberts's, Dr. lectures announced                                                 | 286      | Smith, Mr. on the influenza                                     | 103               |
| Robertson's, Mr. case of suppuration in the omentum                               | 29       | —, description of an improved trephine                          | 239               |
| —, case of hernia congenita                                                       | 33       | Smyth's, Dr. formula of using muriatic acid vapour              | 79                |
| Robinson, Dr. on the influenza                                                    | 109      | Southall, Mr. on the influenza                                  | 102               |
| —'s case of abscess of the liver                                                  | 489      | Spalding's, Mr. bill of mortality at Portsmouth (North America) | 478               |
| Rodman, Mr. on the influenza                                                      | 46       | Spaniard, account of an extraordinary                           | 380               |
| Rolfe, Mr. on the influenza                                                       | 98       | Speer, Dr. on the influenza                                     | 408               |
| Ruptures, useful hints to those afflicted with                                    | 92       | Spina bifida, case of (with a plate)                            | 239               |
| —, practical observations on the management of                                    | 375      | Spirits, distilled, quantity of used in America                 | 476               |
| Rush, Dr. on the cure of diseases by the extraction of decayed teeth              | 431      | Squire's, Dr. lectures announced                                | 286               |
| Ryan, Dr. on the influenza                                                        | 296, 305 | Stables, Mr. on the influenza                                   | 355               |
| Sacco, Dr. on vaccination                                                         | 93       | —'s, Mr. case of a wound in the omentum                         | 356               |
| Sainsbury, Dr. on the influenza                                                   | 115      | Stanley, Mr. on the influenza                                   | 527               |
| Salus, on an epidemic                                                             | 142      | Steel, Mr. on the influenza                                     | 228               |
| Sandford, Mr. on the influenza                                                    | 223      | Stony concretions coughed up from the lungs                     | 327               |
| Scabies, muriatic acid used in the cure of                                        | 576      | Stringham, Dr. on the effects of oxygenated muriatic of mercury | 283               |
| Scarifying, on the uses of                                                        | 425      | —, on intestinal vermes                                         | 547               |
| Scarlatina anginosa, prevalence of                                                | 76, 276  | Sunderland, epidemic at                                         | 399               |
| Scarlet fever, on the prevention of                                               | 457      | —, report of diseases in the work-house at                      | 454               |
| Scarpa, Mr. on diseases of the eyes                                               | 561      | Suppuration in the omentum, case of a                           | 29                |
| Schaub's, Dr. method of obtaining prussic acid                                    | 479      | Surgery, observations on select cases of                        | 1                 |
| Schrader's, Mr. discovery of the prussic acid                                     | 95       | —, remarks on Bell's                                            | 154               |
| Scott, Dr. on the influenza                                                       | 529      | —, practical observations on, reviewed                          | 369, 466          |
| Selby, epidemic at                                                                | 393      | Surgical cases in Finsbury Dispensary, monthly report of        | 74, 178, 275, 376 |
| Selden's, Dr. history of the yellow fever                                         | 266      | Sulphurated muriatic acid, used in scabies                      | 576               |
| Semiofseous tumour, case of a                                                     | 163      | Swansea, epidemic at                                            | 201               |
| Sensation in animals, of the cause of                                             | 253      | Symes, Mr. on the influenza                                     | 228               |
| Shann, Mr. on the influenza                                                       | 392      | Symonds, Dr. on the influenza                                   | 224               |
| Sheep inoculated with the cow-pox                                                 | 192      | Syphilis, on the efficacy of oxygen in                          | 90                |
| Sheffield, epidemic at                                                            | 387      | Tadcaster, epidemic at                                          | 392               |
| Sheldrake's, Mr. hints to those afflicted with ruptures, reviewed                 | 92       | Tangiers, description of                                        | 381               |
| Short, Mr. on the influenza                                                       | 101      | Taunton's, Mr. lectures announced                               | 287               |
| Shrewsbury, epidemic at                                                           | 217      | Taylor, Mr. on the influenza                                    | 225               |
| Sierra Leone, on the climate and diseases of                                      | 85       |                                                                 |                   |

# I N D E X.

|                                                                                                                      |          |                                                                                                                 |          |
|----------------------------------------------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------------------------------------|----------|
| <b>Teeth, Natural History of the Human, re-</b><br><b>viewed</b>                                                     | 77       | <b>Vaccine inoculation in Barbadoes, account</b><br><b>of</b>                                                   | 424      |
| —, description of an instrument for the<br>extraction of                                                             | 240      | —, preventive against the<br>plague                                                                             | 474      |
| —, on the vascularity of the                                                                                         | 360      | <b>Vagina, case of an extraneous substance</b><br><b>lodged in the</b>                                          | 491      |
| —, on the cure of diseases by the extrac-<br>tion of decayed                                                         | 431      | <b>Valli's, Dr. experiments on the plague</b>                                                                   | 475      |
| <b>Temperature, on the benefits of reduced</b><br><b>254, 357</b>                                                    |          | <b>Van Den Bosch, Dr. on the radix lo-</b><br><b>pez</b>                                                        | 477      |
| <b>Thackeray, Dr. on the use of cold water in</b><br><b>convulsions</b>                                              | 420      | <b>Vascularity of the teeth, observations on</b><br><b>the</b>                                                  | 360      |
| <b>Thiebaut, Mr. on the blue disease</b>                                                                             | 575      | <b>Vaughan, Dr. on the autumnal fever in</b><br><b>America in 1802</b>                                          | 365      |
| <b>Thirsk, epidemic at</b>                                                                                           | 395      | <b>Vazie's, Mr. instrument for facilitating</b><br><b>evaporation, account of</b>                               | 479      |
| <b>Thirst, on the cause of</b>                                                                                       | 20       | <b>Vermes, on intestinal</b>                                                                                    | 550      |
| <b>Thomas's, Mr. lectures announced</b>                                                                              | 287, 384 | <b>Vesicæ loturæ, on the practice of, in the</b><br><b>cure of diseased bladders</b>                            | 82       |
| <b>Thorax, case of a wound penetrating the</b><br><b>abdomen and the</b>                                             | 250      | <b>Vitriol, on the use of white, in agues</b>                                                                   | 476      |
| <b>Thoresby, Mr. on the influenza</b>                                                                                | 409      | <b>Ward, Mr. on cancer</b>                                                                                      | 448      |
| <b>Thorp, Dr. on the Influenza</b>                                                                                   | 219      | — on the influenza                                                                                              | 521      |
| <b>Thynne's, Dr. lectures announced</b>                                                                              | 286      | <b>Warts, on the removal of</b>                                                                                 | 179      |
| <b>Tickell, Mr. on the influenza</b>                                                                                 | 105      | <b>Wasse, Mr. on the influenza</b>                                                                              | 395      |
| <b>Timbrell's, Mr. Observations on the Ma-</b><br><b>agement of Ruptures, reviewed</b>                               | 375      | <b>Water, analogy between the motion of the</b><br><b>blood and that of</b>                                     | 284      |
| <b>Tinea, case of</b>                                                                                                | 542      | — on cold in convulsions                                                                                        | 410      |
| —, benefit of muriatic acid in                                                                                       | 576      | <b>Weather, state of the</b>                                                                                    | 146      |
| <b>Tolu lozenges, observations on (note)</b>                                                                         | 352      | <b>Weber, Mr. on the effects of opium on the</b><br><b>human body</b>                                           | 435, 501 |
| <b>Trachea, on a wound of the</b>                                                                                    | 5        | — on the influenza                                                                                              | 516      |
| <b>Trephine, description of an improved (with</b><br><b>a plate)</b>                                                 | 239      | <b>Weston, Mr. on the Cow-pock</b>                                                                              | 544      |
| <b>Trichiasis, description and cure of</b>                                                                           | 562      | <b>Whately, Mr. on the influenza</b>                                                                            | 520      |
| <b>Trismus traumatica, case of</b>                                                                                   | 345      | <b>Whitehaven, epidemic at</b>                                                                                  | 111      |
| <b>Tromsdorff's method of obtaining pure</b><br><b>metallic cobalt</b>                                               | 35       | <b>Whitehead, Dr. on the yellow fever</b>                                                                       | 266      |
| <b>Trotter, Dr. on drunkenness and its effects</b><br><b>on the human body</b>                                       | 382      | <b>Whitely, Mr. on the influenza</b>                                                                            | 393      |
| <b>Trye's, Mr. illustration of some of the in-</b><br><b>juries to which the lower limbs are ex-</b><br><b>posed</b> | 88       | <b>Whitlock, Mr. on the influenza</b>                                                                           | 293      |
| <b>Tubingen, medical establishments at</b>                                                                           | 480      | <b>Wichmann, Dr. on the nettle-rash fever</b>                                                                   | 481      |
| <b>Tudor, Mr. on the influenza</b>                                                                                   | 226      | <b>Wilkinson's, Mr. experiments on the broad</b><br><b>leaved willow bark</b>                                   | 374      |
| <b>Tumour, case of semi-osseous</b>                                                                                  | 162      | — on the influenza                                                                                              | 399      |
| <b>Tungsten, method of obtaining</b>                                                                                 | 479      | — report of diseases in the work-<br>house at Sunderland                                                        | 454      |
| <b>Turton, Dr. on the influenza</b>                                                                                  | 201      | <b>Williams, Mr. on the influenza, 230, 289,</b><br><b>294</b>                                                  |          |
| <b>Ulcerated leg, case of</b>                                                                                        | 8        | <b>Wilmington, (N. Amer.) history of the</b><br><b>yellow fever at</b>                                          | 266      |
| <b>Ulcers of the cornea, description and cure</b><br><b>of</b>                                                       | 563      | <b>Wilson, Dr. on digestion</b>                                                                                 | 318      |
| <b>Urethra, on securing the catheter in the</b>                                                                      | 174      | — Mr. on the medical library                                                                                    | 334      |
| <b>Urine, case of incontinence of</b>                                                                                | 423      | —'s lectures announced                                                                                          | 287      |
| <b>Urticaria, on the</b>                                                                                             | 482      | <b>Winterbottom's, Dr. medical directions</b><br><b>for navigators and settlers in hot cli-</b><br><b>mates</b> | 83       |
| <b>Vaccination, Mr. Ring on</b>                                                                                      | 159      | <b>Wissbich, epidemic at</b>                                                                                    | 204      |
| —, Dr. De Carro on                                                                                                   | 242      | <b>Withers Wm. extraordinary narrative of</b>                                                                   | 472      |
| <b>Vaccinator, on the</b>                                                                                            | 41       | <b>Wurtemberg, Duke of, establishes an hos-</b><br><b>pital at Tubingen</b>                                     | 480      |
| <b>Vaccine virus, on preserving</b>                                                                                  | 40       | <b>Yellow fever, description of the</b>                                                                         | 87       |
| — inoculation, progress of in India                                                                                  | 93       |                                                                                                                 |          |
| —, Dr. Sacco on                                                                                                      | 93       |                                                                                                                 |          |
| —, plan of lectures on                                                                                               | 190      |                                                                                                                 |          |
| —, reports on 187, 191,                                                                                              | 288      |                                                                                                                 |          |

## I N D E X.

|                                                                               |     |                                                                                       |     |
|-------------------------------------------------------------------------------|-----|---------------------------------------------------------------------------------------|-----|
| Yellow Fever, short history of that which prevailed in Norfolk, North America | 266 | Younglove's, Mr. analogy between the motion of the blood and that of water in troughs | 284 |
| Yeo, Mr. on the influenza                                                     | 224 |                                                                                       |     |
| Yonge, Mr. on the influenza                                                   | 221 | Zadig, Dr. on Galvanism                                                               | 59  |
| York, epidemic at                                                             | 389 |                                                                                       |     |

## REFERENCES TO THE PLATES.

|                                               |       |            |
|-----------------------------------------------|-------|------------|
| Prof. Arnemann's Instruments for the Cataract | — — — | 65         |
| On the Disease of one of the Bursæ Mucosæ     | — — — | <i>ib.</i> |
| Mr. Giraud's Case of Monstrosity              | — — — | 172        |
| Mr. King's Case of Spina Bifida               | — — — | 237        |
| Mr. Smith's Improved Trephine                 | — — — | 239        |
| Mr. Jardine's new Tooth Instrument            | — — — | 242        |

## OBSERVATIONS













