

## Medical and Physical Journal.

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*Case of a Polypus Uteri, communicated by Dr. DENMAN.\**

IN the beginning of July last, I was desired to visit a foreign lady, who was born, and had passed the greatest part of her life, in a hot climate. She was between thirty and forty years of age, had been early married, but never had a child. Her strength was much reduced, her aspect was wan, and her lips and gums pale, but her appetite and digestion were good. She informed me, that about three years ago, she had suffered much from a profuse uterine hæmorrhage, and from that to the time of my conversing with her, had never passed a single day without a return of the hæmorrhage in a greater or less degree, and sometimes it had been very considerable. She had never suffered any uterine pain, or other local inconvenience, except a frequent inclination to void her urine, and some difficulty in voiding it. When she was free from the hæmorrhage, she had a watery or ichorous discharge, of an unpleasant kind. She had been under the care of several medical gentlemen, who had not given a decided opinion on her case, but had generally made an alarming prognostic. She had received little or no benefit from a variety of medicines, which had been prescribed for her, and which she had taken with great perseverance.

She permitted me to take an examination, and I was very much surprised to find the whole *vagina* and *uterus*, as far as I could reach, (for the *os uteri* was completely dilated) filled with fleshy substance of a pretty firm texture, which could not be expected to be any thing but a *polypus*, though it was not possible to discover the stem, or pedicle of it.

The state of this patient was such as to excite great apprehension for her, from the continuance of the hæmorrhage.

hage, and as there was no likelihood of this being stopped, without the extirpation of the *polypus*, the necessity of removing it was evident. Yet, from its magnitude, there must clearly be much difficulty in passing a ligature over it; and if this difficulty were surmounted, it would be doubtful on what part it might be fixed, as it was not certain that the *uterus* was not inverted. But from the failure to pass the ligature, though I might be disappointed, no harm could arise; and if it were passed, and happened to fix upon a part unable to bear its operation, I could desist immediately on the appearance of a untoward symptom; it was therefore thought right to make the attempt. I was foiled in the first trials I made; but on July the ninth, I succeeded in passing the ligature, and conducted it by the help of a long wooden probe, with a perforation at the end, far beyond the reach of my fingers; so as to include the whole circumference of the tumour. On the first day I only drew the ends of the ligature sufficiently tight, to keep it fixed upon the part to which it was conducted; but I drew it tighter on every succeeding day till the seventeenth, when the ligature came away. From the time of my fixing the ligature, there had been a profuse sanious discharge, plainly shewing that the tumour was decaying; yet, though it was detached, no attempts were made to extract it; but it was suffered to remain, with the expectation of its bulk being lessened by putrefaction. On the nineteenth, after some disturbance of the bowels, she complained of severe pains in the region of the *uterus*, returning at short intervals like the pain of labour, raising the same kind of effort as is made to expel the child. During the continuance of a pain, I found the *polypus* firmly upon, and dilating the *os externum*, which was much contracted. In about four hours, with the assistance I was able to give, the *polypus* was excluded without hæmorrhage, either during the time of its expulsion or afterwards.

Dr. BAILLIE, who saw this patient with me, had seen the *polypus*, which, notwithstanding its diminution, (it was now decayed) weighed two pounds and three ounces; so that it does not seem unreasonable to suppose it must originally have weighed three pounds, being far the largest I ever removed.

The lady recovered without one unpleasant symptom, and menstruated naturally at the end of five weeks, and remained in perfect health.

Old Burlington Street,  
Nov. 27, 1799.



*A Case of Premature Delivery, by Dr. DENMAN.*

IN the year 1798, a lady of rank, who was six months gone with child, came from Ireland to London, for the purpose of procuring advice; Dr. Savage and myself were called into consultation.

She had been many years married, and in her first pregnancy, through some accident, was brought to bed of a living child about the seventh month. Since that time, though she had enjoyed a good state of health, she had been delivered, after very severe labours, of four children, all of which were still-born. From the account given us, there was every reason to believe that she had been conducted with great patience and judgment through her labours; but that the pelvis was so much reduced in its dimensions, as to render it impossible for a full-grown living child to pass through it. When we had collected all the information we could, and duly weighed and deliberated upon the circumstances, we agreed in proposing to bring on her labour in the eighth month. Our opinion being represented to her friends, they having heard all the reasons we had to urge in support of it, gave their consent to the measure, though not without some hesitation; but the patient agreed to it very readily.

We fixed upon the midway, between the seventh and eighth month, as the most eligible time for the operation; and then the membranes were broken and the waters discharged. On the following day she had a rigor succeeded by fever; not in itself serious, yet which gave us some apprehension for the safety of the child; but on the third day the pains of labour came on, and she was soon delivered of a small, but apparently healthy boy. A wet nurse was immediately procured, and in the course of a few months the child became healthy and strong, and still continues to flourish. The lady recovered without interruption, and has ever since remained in perfect health.

*Old Burlington Street,  
Nov. 27, 1799.*

THOMAS DENMAN.

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

GENTLEMEN,

IF the following cases merit a place in the Medical and Physical Journal, you will oblige me by inserting them in your next Number. I have the honour to be, GENTLEMEN,

Your most obedient humble servant,

Chester, Oct. 19, 1799.

G. ROWLANDS.

*An uncommon Occurrence after Amputation.*

ON September the 9th, 1794, Robert Jones, a collier, was drawn up with great velocity out of a pit, forty yards deep, by the fore arm, which was nearly separated from the elbow, by being drawn between the rope and the wheel. The accident happened early in the morning; and a surgeon in the neighbourhood applied a tourniquet about four inches below the shoulder. He was brought to the Infirmary at six in the evening, and his arm was immediately amputated above the ligature, which had been tight on all day. The man bore a journey of ten miles in a cart, with his arm in that shattered condition, and sustained the operation without either fainting or complaining; he took an opiate, and had a better night than could have been expected.

The next day a clyster was administered, and he took saline draughts, with fifteen drops of vin. ant. in each, to remove a slight degree of fever: he continued the opiate every night. On the 13th, I looked at the stump, and had the satisfaction to find it perfectly united in every part, but where the single ligature hung out, only one artery having appeared. On the 22d the ligature separated; and on the 25th, all dressings, except a little lint and the roller, were left off.

The man had walked about the ward for many days, his appetite being good, and his nights undisturbed.—On the 27th, about three in the morning I was desired to come to him immediately, the messenger at the same time informing me that he was bleeding to death.—I hastened to him, and found the poor man in a miserable condition. The tourniquet had been applied by Mr. Manning, the house apothecary; but as the hæmorrhage came on in the middle of the night, he had lost so much blood before a discovery was made, that the bed was wet through, and the blood flowed across the ward. After removing the bloody things from about the stump, I discovered the cause of this extraordinary accident, to be an extensive mortification of the artery and integuments covering it. The union of



of the stump continued complete; the skin having separated in a slough, about an inch from the edge of the cicatrix. I made a ligature on the artery, and dosils of lint were applied to the mouth of it. The wound was dressed with mild digestive; every means had been used, and were still continued, to recover him from the low, fainting state to which he was reduced; and a person was directed to watch him constantly, and to make a slight compression on the end of the vessel. 28th, No appearance of blood. 29th, In the night, a second sloughing of the artery took place, and the ligature came off. The tourniquet was tightened as expeditiously as possible; but so great was the loss of blood, that, in his reduced state, it had nearly destroyed him. As soon as he was a little recovered, I made an incision in the direction of the artery to the axilla, and put a ligature on the vessel, as high up as possible. The wound was dressed as before, and moderate pressure was continued by a careful assistant. Nothing further occurred worthy of observation; the wound healed slowly, but eventually, so as to leave a very good stump; and he was discharged from the Infirmary in good health on the 28th of November following.

*The Evolution of the Fetus effected by the Action of the Uterus where the Arm and Funis presented.*

On the 28th of July, 1794, I was called to E. T. aged 26, a well-proportioned woman, and rather under the middle size. She was in labour of her first child, and the waters had been discharged about half an hour. One hand of the foetus and the funis were protruded beyond the os externum, and the shoulder was firmly locked in the os internum: the pains, at this time, were strong and incessant; and I found it would be impossible, without great violence, to turn the child. I returned the funis several times into the uterus; but, with every pain, it was forced into the vagina; and I was obliged to suffer it to remain there. The pains continued unusually strong, and frequent, all night, and my attention was wholly taken up in guarding the funis from compression, but notwithstanding all my care, the circulation was frequently checked, though never entirely stopped. I determined to leave Nature undisturbed, to effect the evolution of the child; for the possibility of which there was undoubted authority.\* Between four and five

\* Vide Denman's Introduction to the Practice of Midwifery, p. 291, vol. ii.

five in the morning of the 29th, after twelve hours very hard labour, I was sensible, during the presence of a pain, that the arm was beginning to recede; and, by the power of the next pain, the child was turned, and expelled footling.

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

GENTLEMEN,

IF you think the inclosed case worthy a place in the Medical and Physical Journal, by its insertion you will oblige,

GENTLEMEN,

Your's, respectfully,

Piccadilly, Sept. 12, 1799.

H. DAVIES.

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*A favourable Termination of an Adhesion of the Placenta after Delivery.*

A lady, aged about forty years, of a leucophlegmatic habit, was taken in labour on Friday, June 9, 1799, of her fifth or sixth child. Upon inquiry into the nature of the presentation, it was found to be natural, though at this time the child was very high up in the pelvis. The pains continued (though languid) during that night, on Saturday, and the following day till the evening, when they altered from what might be termed *preparatory*, to the *expulsatory* ones, and the patient was delivered, about eight o'clock, of an uncommonly fine and healthy child. After dividing the funis, according to my usual custom, I waited about a quarter of an hour (the patient being considerably exhausted) before I proceeded to deliver the placenta. The funis, in this case, was unusually large, and distended with blood. Upon a moderate degree of pressure, with a view to the extraction of the placenta, I soon discovered that it was disposed to give way, while, at the same time, the placenta itself remained immovable; and on continuing my efforts, though in the most gentle manner, it separated at its insertion into the placenta. Having lost this aid to the extraction, and an hæmorrhage of too considerable a nature taking place to trust it to the natural efforts of the system, I endeavoured to lay hold of the substance of it, and bring it away. Herein I was also foiled; for I found the adhesion so considerable, the texture



texture of the placenta so infirm, and the exhaustion of my patient so great, as not to justify persisting any longer in my efforts to remove it. It occurred to my mind here, that probably, by giving the patient a little respite, supporting her with gentle cordials, &c. I might promise myself better success at a little distance of time. But finding the hæmorrhage rather alarming, and the patient sinking, I resolved, in less than an hour from the first attempt, to make another effort, as the only alternative left to preserve her life; being well aware that the hæmorrhage would not cease, while the substance of the placenta was distending the cavity of the uterus. Upon the introduction of the hand, I found the placenta in the upper part of the uterus, and bending my fingers, I thrust them into its substance, determining, if practicable, to bring it away entire; or, as much of it as I possibly could. Here again my most sanguine expectations were cruelly disappointed, for I found, notwithstanding I had so firm a hold of it, it gave way, and only a portion of it could be extracted; the remainder adhering to the uterus. From the now unusually exhausted state of my patient, I thought it unwarrantable to proceed in my attempts any farther. Repeated faintings, colliquative sweats, and a small pulse, not to be counted, were symptoms, in my opinion, of too alarming a nature to permit the continuance of an operation which was calculated to aggravate them; I therefore trusted the consequence to medical treatment only, which I hoped would assist the powers of the system to accomplish that naturally which could not be done artificially; and herein I am happy to say, my plan was crowned with success; for in a few days (three at farthest) the expulsion of the remaining portion, naturally took place by the efforts of the constitution, and the patient happily recovered. As it may not be unprofitable to mention the plan that was adopted upon this occasion, it consisted of the following mode of treatment: During the great exhaustion after the operation, I ordered a volatile draught to be given every two hours, and in the intervals to administer cordials, such as weak brandy and water, wine, &c. which, in the course of a few hours, had the happiest effects, insomuch that the sinking pulse was considerably raised, the pallid countenance materially altered, and the whole system partook of the general benefit. But, still I was aware that the constitution must be further invigorated, in order to accomplish the wished-for event, viz. expelling the remainder of the placenta; I therefore ordered the abdomen to be fomented frequently, a warm clyster to be administered occasionally, and a strong preparation of the cortex and bitters as often as the stomach would bear, and, in three days from the first attempt, I had the pleasure

sure to find that the expulsion took place. I now considered my patient in a state of convalescence; continued my tonic plan, with the addition of chalybeate preparations to the bitters; and in a fortnight from the delivery, I had the happiness of taking my leave of her, her health being so far restored as to supersede the necessity of any farther medical treatment.

I should not have troubled the medical world with the narration of the above case had I not read in a late publication of a similar one, where it appeared to me, that manual efforts in extracting the placenta had been too forcibly and prematurely persisted in; and the cordial, tonic plan, too long protracted. If the treatment above described should prove useful in a corresponding case, I hope it will form a sufficient apology for its insertion in the Medical and Physical Journal, and the writer will be amply gratified.

### Dr. STOKES to Dr. BRADLEY.

DEAR SIR,

Chesterfield, Sept. 22, 1799.

AS some of the readers of the Medical and Physical Journal, in consequence of the account of Achard's experiments given at p. 188 of vol. i. may be induced to attempt to obtain sugar from the roots of beet, it may be well to inform them that M. Achard procured it from that kind which is generally known in this country by the name of *Mangold Wurzel*, or *Root of Scarcity*. M. Scherer, in his letter to Citoyen Van Mons, in the *Annales de Chimie*, No. 90, p. 299, calls it the "*Runkelrübe*, a plant which," he says, "has been hitherto used only as a food for cattle," and his correspondent, Van Mons, though he calls it a variety of the *Beta Cicla* of Linnæus, because he does not find in the works of that author any variety with a white root arranged under *Beta vulgaris*, expressly tells us, that the plant in question, "is the *Betterave sur terre*, the *Betterave champêtre*, *Racine d'abondance*, *Racine de disette* of the French," and he describes "the leaves," as red, or "veined with red." "The English," he adds, but on what authority he does not mention, "call it *Turnip*, which he thinks led the news-writers, in speaking of Achard's discovery, to say "that he had obtained sugar from turnips!" The root of scarcity, which I cultivated some years ago from seeds sent me by Dr. Lettsom, I referred to *Beta vulgaris*, from the flowers growing mostly four together, and from its general habit and colours,



colours, "the specific characters of the *Beta Cicla*" as Citizen Van Mons observes, after Linnaeus, "being, that the flowers are in threes; and that of *Beta Vulgaris*, that they are disposed in a greater number together." A gentleman in this neighbourhood informs me, that he finds the roots the best winter food for milch cows, which it is natural to suppose they must be, if they afford so large a portion of sugar. Do not neglect to inform the cow-keepers in the neighbourhood of London of this fact, as an acknowledgement for the readiness with which they gave us all the information in their power on the subject of the Cow-pox.

I very much approve of your resolution of not admitting anonymous strictures on the observations of correspondents who sign their names; and I could wish you even to go farther, and reject all anonymous communications, unless containing narratives of unsuccessful practice, or suggestions which a known individual might not dare to hazard, but which you might wish to make publicly known. In any discussions, too, between individuals, which might seem to border on the verge of controversy, I could wish you to suppress every thing which might wear the least appearance of personality. Another error you will have to guard against, is the spirit of dissertation writing; and with respect to cases, I hope you will refuse to publish any whose termination is unknown, unless the author will engage to communicate at some future period, the final result; and in cures of cancer, and some other chronic diseases, it is your duty to take care that the result be communicated to the public after the lapse of two or more years. The writers of cases seldom publish new editions of their pamphlets, or if they do, they as seldom inform us of the present health of their patients.

I am, Dear Sir,

Yours, &c.

JONATHAN STOKES.

*Dr. B. assures his friend, Dr. Stokes, that his Communications, Hints, or Corrections, will always receive particular attention.*

# For the MEDICAL and PHYSICAL JOURNAL.

*Account of a remarkable Case, in which a considerable Part of a Female Body was converted into Fatty Matter.* By Mr. MANSFIELD, Surgeon, Thrapston, Northamptonshire.

THE curiosity of the philosophical part of mankind has been of late much excited, by the accounts which we have received, of human as well as other muscular flesh, being converted into fat by slow putrefaction. I have now an opportunity of adding to the stock of information on this subject, a remarkable case, which I shall describe, and which you will probably think deserves to be recorded as an extraordinary one; and perhaps a similar instance may not soon occur again, in which the period of time consumed in the process can be so well ascertained. The examination of it afforded me great gratification, and I have that reason at least for conceiving, that the account of it may be acceptable to many others.

A young woman of the parish of Islip, near Thrapston, in Northamptonshire, seventeen years of age, of a middle stature, and thin in her make, was drowned in the river Nen, near that place, upon the 1st of December, 1798; and the body was not discovered until the 27th of November, 1799, at a place about four miles off, by land; and from the circuitous course of the stream, about as far again by water.

As soon as I heard that it was found, I lost no time in going to see it, glad of an opportunity to satisfy myself, in ascertaining the truth of what had been said upon this subject, viz. that muscular flesh immersed in a stream of water, will in time become a fatty substance; not subject to farther decay in the water, nor to the usual effects of putrefaction.

I found the fact fully proved: the parts subject to this change, had the appearance, as it first struck me, of a lump of fat. The bones of the head, neck, and ribs, were nearly cleared of all the soft parts, the chest was quite void of its contents: the ribs themselves as clear of flesh as possible; but from thence downwards, all was firm and perfect. The abdomen and its contents remained in a natural state; as did the thighs and legs; and all had the same external appearance with a thick covering of fat, crack'd all over like the peel of a walnut when ripe.

There was nothing that had any resemblance to skin, but an upper



upper stratum about half an inch deep, which was disposed to separate from the muscular parts; this I took at first to be adipose membrane very much thickened, as it was of a loose and friable texture; but it is probable that this was skin, which had undergone the same change. Under this was a firm and white stratum of fat, very considerably thicker than the former; this appeared to be the upper part of the muscles, as it was not separated from the under part, which latter was pale, firm, and attached to the bone, as in a fresh state; upon cutting into this last substance, however, I found it very offensive (though the upper part was not so) to the smell.

Not any of this substance was crystallized like spermaceti; all the remaining part of the body had the exact appearance externally of a boiled ham, when stripped of the skin, both as to colour and substance.

That the putrefaction in this case was slow, is easily accounted for, as the body was in the water all the preceding winter, which was a very cold one,—the summer too was uncommonly cold and rainy; and on this latter account, the stream unusually rapid. From some accidental cause, the body had been detained all the time under the surface of the water, perhaps by the clothes having been entangled by the roots of a tree.

That there could be no doubt of this being the same body that was lost at the above period; it may be proper to observe, that the shoes and buckles remained on her feet, which the parents immediately identified.

It may be difficult to determine, at what precise period of time the change began to take place, and how long it would have been, before the remainder of the muscular flesh would have undergone the same alteration; but it is clear, that the process of converting a considerable part into fatty matter of a combustible nature, may be completed in the period of twelve months; which may suggest a hint as to the propriety of making this change in the flesh of horses, &c. an article of manufacture.

I have been much gratified by this investigation, and in having it in my power to give an account of it to those, whose curiosity, like mine, may have been excited by this extraordinary discovery, respecting the change taking place in animal matter, from slow putrefaction.

*Thrapston, Northamptonshire,  
Dec. 7, 1799.*

S. M. MANSFIELD.

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

GENTLEMEN,

SHOULD the following remarks on an important branch of the modern Practice of Surgery, be found deserving a place in your useful Publication, by inserting them at your convenience, you will oblige,

Your humble servant,

*Chester, Dec. 12, 1799.*

G. NESSE HILL, Surgeon.

THE numerous and great improvements which the practice of surgery has derived from the diligent labours of modern professors, is highly honourable to all who have in any degree contributed to the increase of knowledge, so conducive to the safety and comfort of mankind: hence it will be readily granted, that however small the mite which is added to the general stock, if it prove truly an acquisition, its minuteness will not cause it to be undervalued. Surgical books and lectures have, of late years, strongly recommended the practice of healing wounds of a certain description, by what is appositely called the first intention; of a certain description, I repeat, because I believe no practitioner in the present day recommends this mode, but in wounds which happen to be inflicted by clean-cutting instruments upon healthy subjects, and in favourable situations, no comminution or considerable laceration having taken place; or, lastly, after some surgical operation of a kind favourable for the practice. However agreeable this method may generally be to the patient, and how much soever it may seem to evince the dexterity of the surgeon, yet it is a certain fact, the consequences are not always pleasant to the former, or creditable to the latter. Several cases have fallen under my observation, where I have no hesitation in saying, it has proved injurious. Amongst others, the following short history will point out a caution to practitioners, not unworthy the attention of the warmest advocates for this facile method of healing wounds.

A respectable druggist in London was pressing a cork into a bottle of Daffy's Elixir with his right hand, the neck of which breaking, he received a deep wound thereby in a longitudinal direction, just below the first joint of the thumb; having no reason to imagine any part of the glass remained in the wound, and moving the part just the same as before the accident, he desired one of the shop-men to apply some lint, dipped



ped in the Tinct. Benzoës c. over the lips of the wound, previously held tight together, and bind all up with adhesive plaister: the subsequent day, feeling some pain, he shewed it to his surgeon, who on seeing all so smooth, and the parts but little swelled, said the dressings had better remain as they were, and perhaps the wound would heal by the first intention; this advice was taken, and accordingly it did so heal: but he has never since been capable of bending his thumb, inwards or downwards, without the assistance of his other hand; the extensor muscles keep it constantly strait out, the tendon of the flexor pollicis muscle appearing to be firmly united to the bone, at the place where the wound was inflicted: thus the proper action of so important a part is in a great measure destroyed.

In the relation of a case in surgery, as in the description of morbid appearances of dissected bodies, improvement in our art being the primary object, every man will, and most certainly ought to judge for himself: on examining the above thumb, it appeared to me worthy of attention, as confirming me in my former opinion, that due care is not always taken to discriminate between situations of the body favourable to healing wounds by the first intention, and healing by suppuration, &c. In the former mode, divided parts are always more or less condensed together by adhesive plaister, compress, or bandage, and consigned to rest so long in one posture to favour their speedy re-union, that coalition follows where it never ought; and Nature, if I may use the expression, taking it for granted they are never to be used, yields to their becoming immovable; and thus, an important flexible part becomes, ever after, rigid and inflexible, or its proper function is at least greatly impeded. The effects of even the slight degree of inflammation necessary to heal a wound in an healthy subject, by the first intention, is not strictly confined to the spot we want to unite, but affects the neighbouring parts to a proportionate extent; sometimes in a greater, sometimes in a less degree, as every day's practice sufficiently evinces; and it is perhaps equally well known, that pressure considerably increases the action of the absorbent system.

Inasmuch therefore as the perfection of good surgery depends upon as complete a restoration of deranged parts, whether by art or accident, to their former functions and usefulness as possible; it is incumbent upon us to attend strictly to the situation of wounds, before we determine on the mode of attempting their cure; for want of this precaution in wounds of the tendons, the arteries, veins, &c. many serious consequences have followed; nor is the injunction to be less regarded after surgical operations, particularly amputations, or those

those formed in the vicinity of an articulation, or of the sphincters of the anus, or bladder. I remember two cases of persons cut for the stone, where the attempt succeeded, of healing the divided parts by the first intention; but both subjects were ever after grievously troubled with an incontinence of urine.

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*Hints on the Medicinal Effect of Living with Cows, in Pulmonary Consumption. Communicated by Mr. BLAIR, Surgeon of the Lock Hospital and Finsbury Dispensary, &c.*

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

GENTLEMEN,

WE are said to have the felicity of living in an age "distinguished from all the preceding, by great practical discoveries immediately resulting from speculation;" and in which the Public are "too intelligent to be duped by those artifices that have so often given Medical Men vogue in the great world." A gentleman who, by his *aerial* speculations and discoveries, is exalted far above his professional brethren, seems of opinion, that the proposal "*of living with cows*" has been treated too fastidiously by practitioners in general. "As nobody, to my knowledge," he tells us, "has been moved by my exhortations (in *Considerations on Airs*, in the *West Country Contributions*, and in my *Essay on Consumptions*) to try the effect of living with cows in phthisis pulmonalis, I have lately put this practice to the test of experiment." Perhaps one of the reasons why this treatment meets with but little regard, may be, that it has not so much of the fascinating merit of novelty to recommend it, as your correspondent supposes. I have made no inquiries among my medical friends on this subjects; but, so far as my own recollection serves me, I think the experiment has been often and long ago tried, with no great success.

I beg leave to transcribe a few lines from a work lying before me, in which the practice here alluded to is explicitly mentioned. By taking the trouble to look over different medical writings, for that express purpose, other notices of the same



same kind might probably be found. "*Paucis abhinc annis stabula vaccarum habitare phthifici jubeantur, at sinistro prorsus eventu. Murray femina vidit, fere suffocatam, etsi unica in bubili vacca stabularetur.*" (JOSEPHI QUARIN, Animadversiones practicæ in diversos morbos, cap. v. p. 102, 8vo. Vienne, 1786.) I will not conjecture what motive induced practitioners to relinquish so curious a project; but the scheme of associating with cows, I imagine, would accord less with the dignity and accomplished habits of English phthifical ladies, than another plan of cure suggested by the same intelligent gentleman, viz. that of procuring a comfortable retreat among the polished natives of Egypt.

I remain, GENTLEMEN, &c.

Great Russell Street, Bloomsbury,  
Dec. 16, 1799.

W. BLAIR.

## STATE OF DISEASES IN LONDON.

List of Diseases from the 20th of November to the 20th of December, 1799; being the result of the public and private Practice of a Physician at the West End of the Town.

No. of Cases		No. of Cases.	
ACUTE DISEASES.			
Measles . . . . .	21	Dropsy . . . . .	6
Scarlatina Anginosa . . . . .	8	Cephalæa and Vertigo . . . . .	10
Whooping Cough . . . . .	5	Paralysis . . . . .	2
Small-pox . . . . .	4	Epilepsy . . . . .	3
Contagious malignant Fever . . . . .	9	Hysteria . . . . .	1
Catarrh . . . . .	20	Lethargy . . . . .	1
Acute Rheumatism . . . . .	6	Dyspepsia . . . . .	15
Inflammatory Sore Throat . . . . .	2	Gastrodynia . . . . .	8
Pneumonia . . . . .	3	Enterodynia . . . . .	6
Peritoneal Inflammation . . . . .	2	Jaundice . . . . .	1
Phlegmone Testis . . . . .	1	Diarrhœa . . . . .	8
Shingles . . . . .	1	Colica Pictonum . . . . .	2
Hectic and Slow Fever . . . . .	8	Hæmorrhoids . . . . .	2
Childbed and Milk Fevers . . . . .	3	Worms . . . . .	3
Acute Diseases of Infants . . . . .	8	Amenorrhœa . . . . .	4
		Menorrhagia . . . . .	1
		Abortus . . . . .	2
		Fluor Albus . . . . .	1
CHRONIC DISEASES.		Hæmaturia . . . . .	2
Cough and Dispnoea . . . . .	37	Gravel and Dysfury . . . . .	3
Hæmoptoe and Phthisis . . . . .	10	Scrophula . . . . .	3
Chronic Rheumatism . . . . .	16	Cancer . . . . .	1
Lumbago and Sciatica . . . . .	5	Dentition and Tooth-Rash . . . . .	4
Asthenia . . . . .	16	Itch . . . . .	

Itch, and Prurigo . . . . .	6	Grocer's Itch . . . . .	5
Lepra . . . . .	4	Porrigio . . . . .	3
Icthyosis . . . . .	1	Acne . . . . .	2
Urticaria . . . . .	1	Elephantiasis . . . . .	1

No unfavourable case of measles has yet occurred. The scarlatina, however, has been attended with violent symptoms, and proved in two instances fatal. It is worthy of remark, that when the scarlatina, or contagious malignant fevers, are fully formed, and a frost takes place suddenly, both diseases are thereby much aggravated, and often terminate fatally; but, at the same time, that the farther diffusion of these and other epidemical contagious disorders is usually prevented by a very cold atmosphere.

Since the commencement of the present frost, few malignant fevers have appeared: but this advantage may not be perhaps a subject of congratulation, as the pulmonic diseases which arise during a severe winter, are usually much more extensive and more destructive than fevers.

Red Lion Square, Dec. 21, 1799.

R. W.

*Diseases admitted under the care of the Physicians of the Westminster Hospital, from the 20th of November to the 18th of December, 1799.*

Fevers . . . . .	10	Hæmoptoe . . . . .	2
Pleurisy . . . . .	1	Hæmorrhoids . . . . .	3
Scarlatina . . . . .	1	Hypochondriasis . . . . .	1
Intermittent . . . . .	1	Hysteria . . . . .	2
Amenorrhœa . . . . .	3	Impetigo . . . . .	2
Anasarca . . . . .	4	Itch . . . . .	2
Asthma . . . . .	2	Jaundice . . . . .	1
Catarrh . . . . .	5	Lepra Græcorum . . . . .	1
Cephalæa . . . . .	2	Lumbago . . . . .	1
Cholera . . . . .	1	Phthisis . . . . .	4
Colic . . . . .	1	Paralysis . . . . .	3
Cough . . . . .	12	Quinsey . . . . .	2
Diarrhœa . . . . .	3	Rheumatism . . . . .	7
Dyspepsia . . . . .	4	Seruma . . . . .	1
Enterodynia . . . . .	3	Tinea . . . . .	1
Erythema . . . . .	1	Worms . . . . .	1
Gastrodynia . . . . .	1		

Though febrile affections have become more frequent during the last month, they have not assumed any appearance of malignance in this part of the metropolis.



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

GENTLEMEN,

WHEN I sent you the case of Hydrocephalus Internus, I hinted in a cursory manner, the importance, and indeed necessity, of anatomical investigation, in order to discover the causes of those diseases of which we are ignorant; and, at the same time, hinted at the difficulties frequently attendant upon such examinations.

If it does not too much interfere with the plan of your Journal, I propose to resume the subject, and will endeavour to point out the importance of opening bodies after death; anatomy being the foundation upon which all true medical knowledge is built, and upon which, only, we can expect to raise a fabric which will stand the test of time.

Every practitioner in medicine will allow, that he has occasionally met with cases which have completely baffled his most strenuous endeavours to overcome the disease; and likewise his most assiduous attempts to find out the cause, which, if known on the first attack of the disorder, might have saved him a great deal of unnecessary trouble and anxiety, and, in many instances, the life of his patient. How mortifying must it be to a practitioner, to find, upon examining the body of his patient after death, that he has been completely mistaken in his case; and that, probably, if he had known what his disorder really was in the first instance, a valuable life might have been saved!

We all know, that the symptoms of many disorders are often equivocal, and that the consequence of this must be, the medical attendant's occasionally mistaking one disorder for another; this is certainly a melancholy reflection; for, upon a proper, and indeed accurate diagnostic, the patient's life frequently depends.

The most sensible and experienced are liable to these errors of judgment, as well as the illiterate and inexperienced; but, doubtless, they happen by far less often to the former than the latter; how careful then, ought that man to be, who chooses the practice of physic or surgery for his employ, that he does not sport with the lives of his fellow-creatures.

The man who has the science of physic, rather than its forms and ceremonies, or craft, at heart, will be constantly upon the watch to prevent accidents from happening in his practice, and will be daily improving himself, as well as rendering an essential service to others. Such a man as this may be justly said to

be a valuable member of society; while that man, whose only study it is to enrich himself at the expence of his fellow-creatures, by studying the craft rather than the science, and imposing upon their credulity, may be considered as the pest of society.

By a more frequent examination of bodies after death, we may reasonably hope that we shall in time acquire a fund of useful information, and be better able to avoid errors, as well as to adopt a more rational mode of practice in the treatment of those diseases, which are placed at present among the opprobria medicorum. When any thing extraordinary occurs, or any new discovery is made, such occurrence or discovery ought most assuredly to be communicated to the public, with the particulars of the case (if possible); and, in some instances, a sketch of the morbid part might be added, to illustrate the subject, and make it more comprehensible, instead of hoarding up such discoveries, which I am afraid is done too frequently, and only satisfies the selfish curiosity of the individual, without advancing our art in the smallest degree.

If such a plan could be regularly practised, the physical and chyrurgical arts would daily make more rapid strides towards perfection than they do at present; although it must be confessed, that very considerable improvements have lately been made in these sciences, by a more general spirit of investigation having taken place.

There is a number of disorders to which the human body is liable, sufficiently characterised by their peculiar symptoms; but the causes of many of them are veiled in obscurity, having hitherto eluded the enquiries of medical men of the first abilities, nay, even of our best and most experienced anatomists: This, upon a superficial view of the subject, is almost sufficient to deter a person from prosecuting the matter further, and to make him rest satisfied with what has been done before him, by practitioners whose abilities he considers in a far superior degree to those of his own, and to make him conclude, that if they have not been successful, it is not at all probable that any inquiry he could make would be attended with better success. Upon slightly considering the subject, some degree of plausibility appears attached to it; yet, such reasoning as this is most assuredly very superficial, and will, upon a more attentive examination, lose its weight, and appear in the light it ought to do.

I would ask, whether the immortal Hervey, when he began the study of anatomy, expected to discover the circulation? or Dr. Hunter the absorbent system? Most assuredly they did not; and yet we find that their anatomical studies were crowned with  
a suc-



a success, far beyond their most sanguine expectations, by the discoveries each of them made. A steady perseverance, and a well-directed application to their pursuits, enabled them to do this: why may we not then expect, and with reasonable hopes of our expectations succeeding, by pursuing a similar plan, in a science which presents to our view such an ample field for investigation, that we may one day or other be equally successful, and be able to point out the causes of some of those diseases at present unknown? How frequently do we see the difficulties which arise in the common occurrences of life, and which appear so formidable as to be thought almost, if not quite, insurmountable, when presented to our view, yield by courage and a steady conduct; and at last the difficulties, which had gradually diminished, or lost their terrors upon our nearer approach to them, disappear altogether, fully recompensing us for our exertions.

In this manner we ought to proceed in the sciences of physic and surgery; difficulties will, no doubt, present themselves daily, but, by their yielding to our well-applied exertions, we shall gain courage to persevere, and, in time, what appears now so difficult to us, will no longer be seen in the same light.

We should make it a rule attentively to examine the bodies of those who die of disorders unknown; or, supposing the disease to be known, yet the cause may be veiled in obscurity; in either of these cases there is ample scope for observation, and it would be hard indeed, if we did not sometimes add a mite to our common stock of medical knowledge, by pursuing with vigour a plan of this kind.

By a steady perseverance in the plan proposed, whenever we have an opportunity, we shall gradually extend the boundaries of our art; if we should be successful in one case only, out of ten or more, yet it would amply repay us for all our trouble.

Men who wish well to the art will be daily taking pains to overcome the prejudices naturally inherent in the human mind against dissecting bodies, and which exist in a much greater degree in those people whose minds have not been cultivated by a liberal education, in order to obtain leave to examine the bodies of their patients after death.

The education of medical men being in general equal, and sometimes superior to that of others, they are often in consequence much superior in point of argument, and will therefore frequently be able to obtain their wishes, if they are strenuous in their cause, by pointing out the absurdity of the prejudices against opening bodies, and the great utility likely to be derived to posterity, if such examinations be permitted.

If consent is obtained, no unnecessary time ought to be lost;

but it is advisable to do it almost immediately, i. e. as soon as we can without giving offence to the friends or relations of the deceased, by our betraying too great anxiety to begin our operation, as if we were void of feeling: a certain degree of solemnity is always prudent in these matters. It is well known to anatomists, that the natural appearance of the different parts of the human body is soon changed after death; and that those parts which had been previously diseased, sooner suffer this change than those which had not, consequently they soon become very unfit for the investigation of the causes of diseases: for, after putrefaction has taken place in any considerable degree, the appearance of the parts will be so much altered, as to make it difficult for the most experienced anatomist to say, what parts had been diseased and what had not: this is of considerable importance, and ought constantly to be attended to in our anatomical pursuits.

It was the opinion of a very justly celebrated physician and anatomist, Dr. Wm. Hunter, that the most probable means of improving the science of physic, would be "a more general and a more accurate examination of diseases after death." The opinion of so great a man as Dr. Hunter, must certainly add great weight to what I have said; and if we are really desirous of promoting knowledge, it will have its proper effect.

Thus, Gentlemen; I have offered you my ideas on a subject of no small importance: wishing they may meet with your approbation and support. Having resolved, myself, to pursue the plan I have pointed out above, I shall take every opportunity of communicating the result of my investigations and inquiries to the public; thereby hoping to contribute my mite towards extending our art, as well as to improve myself.

I shall subjoin two curious cases, which I had lately an opportunity of examining, together with a drawing to illustrate one of them.

I remain, GENTLEMEN,

With respect,

Your very humble Servant,

*Aldersgate-Street,  
Oct. 1, 1799.*

T. H. SPRY, Surgeon.

### CASE I.

The subject of this case was a child, aged six months, who, previously to the illness of which he died, was healthy and strong.

Upon inspecting the body, the attention was arrested by the  
I
uncommon



*Sketch of a double Intus-Susceptor which happend in a Child aged 6. Months*

*See the Case Page 2*



*Fig. 2.*



*An Apparatus for applying Smoke to a painful Tooth.*

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VOL. 3. PL. 4.

uncommon distention of the epigastric and umbilical regions; the hypogastric being nearly in its natural state.

Upon opening the abdomen, no omentum was to be seen; the transverse arch of the colon was likewise missing; the small intestines were extremely distended with air, and contained little fœculent matter; they did not appear to have been in the smallest degree inflamed.

On the left side, near the loins, a very hard tumour, about four inches and a half in length, was soon discovered.

Having made a couple of ligatures, one above and the other below the deceased portion, I removed it, as represented in the plate: it appeared to be a double intus-susceptio.

A portion of the intestinum ilium, with the cæcum, its appendix, and the whole of the transverse arch of the colon, had passed downwards into the sigmoid flexure; the cæcum, appendix cæci, with a small portion of the ilium, occupied the lowest part of the colon near its termination, and formed a firm mass of alivid colour. A portion of the sigmoid flexure was reflected over the tumour for the space of an inch, and had, by the stricture it occasioned, strangulated it: no adhesions had taken place. Between the fold of the lower intus-susceptio, a quantity of a yellowish coloured fluid was found.

The intestine, when drawn out, measured, from one ligature to the other, more than 22 inches, so that about sixteen inches of intestine had passed from above downwards; and two inches from below upwards, at the lower intus-susceptio. The information I received respecting the symptoms of this case was, that the child was first seized with rigour, which was succeeded by vomiting, and which continued to the last. It had likewise one evacuation of pure blood, probably occasioned by the strangulation of the lower part of the tumor.

It is remarkable, that the child did not appear to suffer the least pain. No medicine, as may be imagined, had the smallest effect.

The child was seized with rigour on Sunday the first of September, and died on the Wednesday morning following;—and was opened the next morning.

From considering the nature of this disease, and particularly from its situation being near the rectum, which must have been known, from the impossibility of throwing more than a very small quantity into the rectum, which was actually the case, the clysters being constantly returned without passing; does it not suggest the idea to us of making use of mechanical means, by the use of a large bougie introduced into the rectum? Would such practice be attended with any probability of success? or, would it be prudent to attempt it? These are questions which

I shall



I shall leave to be decided by men of superior abilities to my own; we are certain that death must be the consequence, if this disease is left to itself, and that speedily; are we not, on that account, authorised to try every means in our power, provided there is the smallest chance of success?

## CASE II.

The subject of this case was a child aged twenty-two months. The whole body was emaciated to the greatest degree possible, with anasarcaous extremities.

Upon opening the thorax, the lungs on the right side adhered to the pleura, lining the cavity of the thorax; but no mark of disease was perceived in the lungs themselves. The pericardium was distended; and, upon opening it, a very large quantity of a reddish coloured fluid flowed out; the heart itself was found, but completely immersed in fluid.

In the abdomen the liver was larger than usual, somewhat discoloured, and the left lobe was much indurated: nothing particular was perceived in the gall bladder and biliary ducts? the stomach was very large, and contained some indigestible matter; the intestines appeared in their natural state: the mesentery shewed more evident marks of disease, being every where full of obstructed glands, many large, being of the size of a walnut, and in some places they formed clusters; the spleen, pancreas, and remainder of the abdominal viscera were to appearance sound.

This child, for six months after its birth, was to all appearance very healthy; about this time a purging came on, of a greenish, foetid matter, which continued with greater or less violence till its death.

The child gradually wasted away, without any other symptom of disease besides the diarrhoea; at first a vomiting attended the purging, but this, after a time, ceased.

She did not appear to suffer any particular pain, but was always languid; her appetite was frequently voracious.

She had sometimes a cough, and, towards the last, her breathing was very quick; she was restless, and would scream violently when she awoke from her sleep. Some little time before her death she became quite anasarcaous; her extremities were distended to such a degree as to threaten gangrene, the skin being tense, shining, and discoloured.

From the uniformity of the symptoms of this disease, for so great a length of time, no journal was kept of them, particularly as no medicines were exhibited, except at the beginning of the disease, when the purging came on.

## EXPLANATION OF PLATE I. VOL. III. FIG. I.

- A. A. A. The colon at the sigmoid flexure.  
 B. Intestinum ilium passing into the colon, and cut off above the ligature.  
 C. Colon cut off at its junction with the rectum.  
 D. D. Dotted lines, denoting the arch of the colon which had passed into the sigmoid flexure, altering the natural shape of the latter.  
 E. E. Lines denoting a hard strangulated mass in the lowest part of the sigmoid flexure of the colon, formed by a portion of the ilium cæcum with its appendix, and part of the colon.  
 F. Intus-susceptio formed by a portion of the sigmoid flexure passing upwards, and strangulating the tumour below it.  
 G. Extent of the lower intus-susceptio.

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*Three Cases of Fractured Skull:—Communicated by Dr.*  
*SKRIMSHIRE, of Wisbeach.*

GENTLEMEN,

November 21, 1799.

I SEND you the three following cases for insertion in your Medical and Physical Journal, as serving to illustrate, and in some degree support, the opinion of Mr. Abernethy, that the trepan is not so often necessary, as all the ancient, and many of the modern surgeons, have inculcated.

In drawing up the first case, I have deviated from the usual mode of giving daily reports, and have detailed the symptoms and their changes, the practice and its effects, in one continued history. This I have done, because as either I myself, or Dr. Fawcett, was with this patient both day and night, every new symptom was observed as soon as it arose, and the proper treatment immediately had recourse to, so that it would be impossible to divide it into regular reports. The same cause has made the description more minute than otherwise it would have been; but as the accuracy of it may be depended upon, and the case is in many respects a remarkable one, I trust it will not be thought tedious.

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On July 17th, 1799, Mrs. M. a lady aged 26, was thrown with violence from an open carriage upon a stone pavement. She was taken up senseless, conveyed to the nearest house, and put under the care of a surgeon, who was on the spot at the time of the accident. In a few minutes she began to recover; some strong brandy and water was given, and her senses were soon restored. Her nose bled considerably, her face was much bruised under both eyes and across the nose, and a small swelling

was



was perceived on the right side of the head. About a quarter of an hour after the accident, she became sick, and felt a peculiar tingling sensation in her extremities, to which succeeded vomiting; this same sensation recurred three different times, and was each time succeeded by vomiting. It being late in the evening, she now went to bed, and passed a pretty good night; in the morning she complained of being much bruised, but seemed otherwise well. At nine o'clock, after drinking some warm tea, she became sick, had convulsive twitchings of the small muscles about the nose and mouth, and had also the same sensation in her extremities as yesterday, but more constant, and, except at the commencement, not attended with vomiting. The muscles of the hands too were spasmodically contracted, so that her fingers were drawn together, but the hand not closed. The surgeon prescribed ether to be taken freely in brandy and water, and ordered her arms to be rubbed with spirits. The symptoms rather increased than abated during the whole morning; and to those above described, were soon added those of involuntary laughing and singing. She also spoke in a sharp, quick manner, but not incoherently. Her answers were pertinent, but her whole conversation rapid. These symptoms being considered hysterical, the ether was continued. It was in this state that I first saw her, about two o'clock in the afternoon, on the day after the accident.

Apprehending something more serious than hysterics, I immediately examined her head, but only found a small swelling, without any evident appearance of further injury than a bruise. She complained of some uneasiness in her bowels, and her left groin was very considerably bruised. Her pulse was quick, but regular and equal. She snorted once very loudly whilst I was present, and I was informed had done so twice before; her breathing was otherwise perfectly natural.

Having ordered them to give no more ether until I returned, I went immediately to meet the surgeon: as he thought venæsection might aggravate the hysterical symptoms, I proposed waiting for the lady's father, who was a medical man, and was expected every minute. When he arrived, venæsection was thought proper, and immediately had recourse to. The bad symptoms were relieved by it, and she lay much more composed. A draught with half an ounce of oil of ricinus was ordered to be taken directly. The oil made her sick, and was partly thrown up. About an hour after the bleeding, the symptoms returned; her eyes were protruded, and the pupils dilated. I again examined the swelling of the head, strongly suspecting this to be the seat of the mischief. The tumour appeared as before, and being circumscribed, gave the sensation to the touch, as if the bone

bone was depressed, but this proved afterwards to be fallacious. I was, however, convinced that this was the seat of the injury, when I perceived that her eyes were evidently more distorted whilst one of the medical gentlemen was pressing on the tumour. Thinking an operation indispensable, I called in my very worthy friend, Dr. Fawcett, who was then accidentally in the town. His opinion of the case exactly coincided with mine; and after consulting with the surgeons, it was agreed to make an incision across the tumour, to examine the state of the cranium, and thereby to be regulated, as to the necessity of any farther operation. A longitudinal incision was therefore made from near the middle of the parietal bone, in a straight direction to the coronal suture. A small quantity of uncoagulated blood escaped from the tumour, whether from under the pericranium or not, could not be ascertained, as this was divided by the same incision with the teguments; the pericranium, however, had a very healthy appearance. It was now fully evident, that the parietal bone was fractured, a fissure of two or three inches in extent being easily observable, nearly in the direction of the surgeon's incision. The bone was fortunately in no part of it depressed, and as our patient felt immediate relief, there was no indication for applying the trepan. The wound was dressed lightly; the convulsive twitchings, as well as the tingling sensations in the extremities, were no longer felt.

As our patient had had but one, and that a very costive stool, a common enema was given in the evening, after which she took a draught, with *T<sup>ra</sup> Opii et Vini Antimonialis aa gr<sup>o</sup> x.* The whole night was passed in a very calm, composed state, and she slept some hours. On the morning of the 19th, between seven and eight o'clock, she had two dark-coloured stools, attended with very considerable uneasiness in her bowels. At eight the convulsive distortions of the face returned, but in a slight degree, and not attended with any of the other symptoms. I removed the dressings, and washed the wound of the head with warm water, and had  $\text{℥ viij}$  of blood taken from the arm, after which the spasms did not return. A saline draught with a few drops of antimonial wine was given every four hours, to produce a gentle diaphoresis. The application of warm flannels relieved the uneasiness in the bowels. Her food was ordered to be broths and ripe fruit. The room was darkened, and every noise avoided; she was placed with her head elevated, and desired to exert herself as little as possible in speaking or otherwise. The remainder of this day and the whole of the night passed over favourably; a draught with *T<sup>ra</sup> Opii et Vini Antimonialis aa gr<sup>o</sup> v.* taken at 10 P. M. and repeated at 2 A. M. procured several hours of refreshing sleep.



On the 20th, no return of unfavourable symptoms. The clyster was repeated in the morning, and the two anodyne draughts at night, with the same good effects as before. Pulse and skin natural.

On the 21st, she was so well as to be removed to another room without any inconvenience. She exerted herself a good deal in conversation during the morning, but at noon her spirits flagged; she became very low and faint, and began to be disagreeably affected by noises. In a few hours she complained of very violent head-ach, and a sense of heat, chiefly in the forehead and temples, which felt as if tightly bound. Noises so slight as scarcely to be heard by those in the same room, produced a jarring sensation in her head, that almost distracted her; the admission of light too increased the pain. Slight but temporary relief was experienced from applying fresh dressings to the wound, as was the case from bathing the forehead and temples with a spirituous embrocation. The whole of the hair was now cut off, and her head kept uncovered;  $\frac{3}{4}$  xij of blood were drawn from the arm. The pain soon became less acute, and the burning heat and distress from noise was less. The sense of tightness with a dull head-ach remained, and she was so very faint and low, as often to approach nearly to syncope. A spoonful of sago with a very little wine was given every half hour. About 6 P. M. a blister was applied to the nape of the neck, and two leeches to each temple. At the time the leeches were preparing, a few drops of blood came from her nose on blowing it, which gave very great relief to her head for a minute or two. The bleeding from the leeches likewise was evidently beneficial. About 10 P. M. our patient, thinking she had experienced some relief from the blister, proposed having another; Dr. Fawcett therefore ordered another behind each ear, and two more leeches to the temples. The dull head-ach, together with the uneasiness from the blisters, prevented her getting any sleep, except now and then for a few minutes; but towards morning the head-ach abated. She had dysuria during the night, and for an hour or two was unable to retain her urine. This, however, being the effect of the blisters, was soon removed by drinking plentifully of gum dissolved in milk and water. During this time, about 2 A. M., she told me, that on passing a small quantity of urine, she had just experienced a very great and sudden relief to her head; it was, however, but temporary.

On the 22d and 23d, Mrs. M. continued remarkably faint and low, and had a dull, uneasy sensation in her head, though little pain, and less distress than before from noises. She took a little broth or sago frequently, and now and then a little  
sherry

cherry and water, and ate often of ripe fruit. The anodynes, as prescribed on the 19th, were given each night, and the body kept open by clysters.

On the 24th, 25th, and 26th, the head-ach gradually abated, so that Mrs. M. was now able to sit up an hour or two.

On the 27th, she ate some fowl for dinner, and had very little head-ach.

On 28th, in the evening, felt some head-ach, had more lowness than for some days past, and complained of heat about the wound, which was not more than half healed up. On 29th, less; and on 30th, scarcely any head-ach or heat about the wound. On 31st, she was apparently quite well; and on 1st of August was conveyed home, a distance of 14 miles, without any sense of fatigue. The next day about noon, however, she began to complain of lowness, and dull head-ach, accompanied with flatulence and distention of the abdomen. These symptoms were relieved by bitters and attention to diet; but on the 8th she was considerably alarmed by an involuntary action of the left levator labii superioris et alæ nasi, attended with a similar sensation to that experienced before the operation. It was slight, and not perceived after a few minutes. She felt a prickling in the wound at the same time, from the appearance of which, and its disposition to heal afterwards, I suspect some trifling exfoliation took place, though the dressings were examined without finding any portion of bone. Since this, Mrs. M. has remained in as perfect health as before the accident, excepting that about a fortnight ago she caught a cold, which was attended with a slight suppuration in the right ear, a complaint which she never had before.

The absence of coma in this case, and the relief experienced from a simple incision, make it doubtful whether there was any compression of the brain, or whether the symptoms may not be attributed to tension, produced by the effusion of blood under the integuments. Two inferences are, however, fairly deducible respecting the practice in such cases. First, that attention should be paid to the effects of incision before proceeding to the use of the trepan. Secondly, that caution is necessary in the use of stimulants; for, though there was in this case considerable concussion of the brain, which is said by most practitioners to require the highest range of stimulants, yet the most alarming symptoms of inflammation afterwards occurred, notwithstanding the early use of the lancet, and a strict adherence to the antiphlogistic plan of treatment.

JULY 19, 1799.—I visited W. D. a young gentleman aged four



four years, who had fallen the day before from a height of ten feet upon a brick pavement.

He vomited soon after he was taken up, and complained of a bruise on his head, but seemed otherwise quite well. The surgeon, who was immediately sent for, easily discovered a very evident depression of the right temporal bone, in the direction of its squamose suture, and likewise a fracture of the right parietal bone, extending from the middle of the squamose suture about one inch upwards. As no symptom of compression was present, he merely applied a spirituous embrocation, and gave a gentle laxative, warning the child's friends of the bad symptoms that might very probably afterwards arise. I examined the head, and found the depression and fracture as above described; but the former, as the surgeon informed me, was considerably less than it was yesterday. No one bad symptom had come on, the boy was in good spirits, his pulse and skin natural. As his physic had not operated, I ordered an enema;  $\frac{3}{4}$  vi of blood were taken from the arm, and he was ordered a strictly antiphlogistic regimen for two or three weeks.

This child has continued in full health and spirits. The depressed bone gradually rose to its natural situation, so that in a few days it was not perceptible, and after a few weeks it was impossible to detect the situation of the fracture.

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AUGUST 20th, 1799.

W. G. aged nine years, fell from the fore-horse of a cart, upon a stone pavement, and the wheel immediately went over his head. I saw him about an hour after the accident, and found the whole of the left side of the head very much flattened; the temporal, and great part of the parietal bone, being so much depressed, that it would have taken twelve or fourteen folds of linen to have filled up the hollow to its natural shape. There was, besides, a fracture of both bones, about one inch in extent, which crossed the squamose suture.

The boy was comatose, but roused for a moment when spoken to. His breathing was laborious, pupils dilated, pulse of natural velocity, but intermitting. He had vomited several times, had bled much from the nose, and likewise from the right ear. In a consultation with Mr. Clark, and Messrs. Skrimshire, senior and junior, it was thought adviseable to apply the trepan in two or more places, with a view to elevate the depressed bones. This was therefore proposed to the parents of the boy, as apparently the only chance for his recovery. They, however, obstinately refused, so that to put in practice the antiphlogistic plan, was all that was left us.

He

He was accordingly bled to  $\mathfrak{z}$ vij, an enema was administered, and he was ordered to be kept quite still.

21st. Morning. The depressed portion of the bones is very evidently elevated, so that the hollow is much less than it was last night. He breathes more freely, but is still comatose. When roused, he complains of head-ach, putting his hand to his forehead; his skin is hot, his pulse quick and intermitting; has had no stool from the clyster.

R. Natron tartaris.  $\mathfrak{z}$  i. Mann. comm. Fruct. tamarind. aa  $\mathfrak{z}$  ss. Inf. fennæ,  $\mathfrak{z}$  v. f. M. Cujus capiat cochlearia ampla tria,  $\mathfrak{z}$ <sup>na</sup>. q. q. hora donec alvus soluta fiat.

Evening. The bones seem still more elevated. He has less of coma, but has been very restless this afternoon. Skin hot, pulse quick; has had no stool yet.

Rep. Mist. aper. ad cochl. quatuor pro dos. Let him have plenty of ripe fruit.

22d. Morning. Has had a restless night, is still comatose, complains more of head-ach when roused. Skin hot and dry, pulse quick, but less frequently intermitting. The opening mixture has not operated. There is a small, puffy, and circumscribed tumor on the parietal bone, between the depression and crown of the head. There is no appearance of fracture or depression under the tumor, nor is it painful when pressed upon.

Inj. stat. enema purg.

Evening. The clyster procured a copious stool. He has less coma, but much head-ach. Pulse not so quick, and less frequently intermitting.

Appl. tempori sinistro Hirud. N<sup>o</sup>. iv.

23d. Very little coma; complains of a dull, constant head-ach; the tumor seems increasing; he has taken some broth with appetite; has had no stool since that from the clyster.

Rep. Enema.

24th. He has had a very good night, and is now free from both head-ach and coma. Pulse irregular, but not intermitting. Belly open.

26th. He has continued quite free from complaints, has walked a little about his chamber. All his functions natural.

November 11th. Our patient has continued in perfect health. After a fortnight he resumed his usual avocations.

The depression became gradually less for some time, but that side of the head is still very considerably misshapen. On or about the twelfth day after the accident, the tumor having been some time stationary, without any appearance of diminution, an incision was made across it. Its contents, being uncoagulated blood, were evacuated. The bone and pericranium were both sound, and the wound healed in a few days.



The two last cases teach us, that in young subjects we may often expect even considerable depressions to be removed without any surgical aid. In such cases, therefore, we need be less anxious to perform an operation than in similar depressions in adults. The last case shews to what a great extent the brain may be injured without a fatal consequence; and the present misshapen appearance of the head is a proof, that the position and shape of the brain may be even permanently altered without any bad consequence whatever, as the alteration in the form of the cranium is such, as must have induced an analogous one in that of its contents.

The happy termination of these three cases will, I trust, speak favourably of the strict antiphlogistic plan of treatment in injuries of the head.

*CASES of Injuries of the Head, with Observations, by*  
JOHN CHAPMAN, Surgeon, Ampt hill.

THE fondness for trepanning, so much inculcated by Mr. Pott, and so very anxiously supported by Mr. Benjamin Bell, has justly met with two very able antagonists in Mr. John Bell\* and Mr. Abernethy,† the latter having given six cases of fracture, with depression, that recovered without the use of the trephine: in these cases no subsequent inconvenience was occasioned by the depression. Mr. Latta has also given two cases of depression that recovered where the bone, as he supposes, recovered its form by its own elasticity; in these two cases there could not exist any fracture. For my own part, I have never seen any case of this kind of bending in the bones of the cranium, yet can readily believe that it may frequently be the case in young children. I have met with two cases (in such subjects) where the bones of the fore arm were bent very considerably; without any fracture, and that required considerable force to straighten them.

The following Cases still further confirm Mr. Abernethy's opinion, that there are many instances of fractures with depression, that will do perfectly well without the use of the trephine, the brain becoming accustomed to the pressure.

Case 1.—A child four or five years old, the daughter of one

\* Discourses on Wounds, part ii. p. 153.

† Surgical Essays, part iii.

of the nurses, was admitted into St. George's Hospital under Mr. Walker, having received a blow upon the left parietal bone, which was followed by extravasation; upon examination it gave the feel of fracture with depression, (of the existence of which there was not any doubt,) but as there were no symptoms of inconvenience attending this preternatural pressure, Mr. W. did not think it prudent to divide the scalp, but directed cloths, wet with a solution of muriated ammonia in vinegar and water, to be applied to the part, which was continued for a fortnight, till the extravasation had entirely subsided, the depression still remaining. The child was kept in the hospital ten days or a fortnight longer, and as she remained perfectly well, was discharged. I heard a considerable time after this, that she felt not the least inconvenience.

CASE 2.—A. S. of Silfoe, a woman about twenty years of age, says, that seven years ago, being at play with her brothers, she had the misfortune to fall backwards upon the floor; she immediately perceived a swelling a little above the occipital ridge, which subsided in a short time without any other symptoms; since this, she has been at different times affected with an acute pain in her head, which, she says, always originates in that part. About three years ago she had several very strong epileptic fits, which have very rarely returned since, but she is now much troubled with pain in her head and vertigo. On examining the part affected, I discovered a triangular depression of the cranium, which she never recollects to have given her the least pain upon pressure being applied to it.

Mr. Cruikshank, in his Lectures, relates the case of a woman that recovered from an apoplexy in two or three days, without any remaining paralytic affection, and was apparently well, remained so for two years, and then died of a fever. On opening the head, betwixt the *dura* and *pia mater*, was found a cyst, the parietes of which were formed of coagulable lymph, containing a quantity of fluid blood. This cyst is preserved in the Museum in Windmill-street.

Mr. John Bell, says, "I have very often seen the remains of most unequivocal depressions of the skull, (e. g.) from the kick of a horse in boys who have grown up, (the depression still continuing) till they became strong and healthy men."\*

There are also cases where the injury is entirely confined to the scalp, which, by the symptoms and feel of the part, give every appearance of depression; but by waiting a few days, the alarming symptoms, extravasation, and feel of depression have disappeared.



disappeared. These cases require a superior sagacity, or *tactus eruditus*, to discover whether fracture does or does not exist, previous to dividing the scalp, and I can readily conceive, that even our first surgeons might sometimes be disappointed.

CASE 3.—T. O. of Amphill, a boy about thirteen years old, on running down the street, his feet slipped, and he struck his head against a stone; a considerable swelling, with extravasation, immediately appeared upon the anterior part of the parietal bone, giving the exact feel of fracture with depression. The boy became very stupid and drowsy, was frequently sick. The sickness and drowsiness increased in the evening, his pulse became more full and quick, with thirst, &c. I wished now to bleed him, but it was not permitted, and nothing more was done than a lotion of muriated ammonia applied to the part. On the following morning he was much the same, a purge was exhibited, and as speedily rejected; the saline mixture with sal polychrest was then had recourse to, and continued during the day and night. On the third day, had slept quietly, the sickness gone off, had two stools, and was considerably better; the extravasation and feel of depression remained the same, continued some days, then gradually subsided, leaving a longitudinal ridge under the scalp, which is not now, after an elapse of three weeks, entirely removed. The following case also shews how much we may be deceived by these appearances.

CASE 4.—A servant man belonging to Mr. P——, of Maulden, received a kick from a horse over the orbital ridge, which divided the integuments down to the bone; the force of the blow knocked the man backwards, and he fell with the back of his head on a large pebble; he was taken up senseless, the wound was properly dressed and attended to; the bone had not received the least injury; he was let blood copiously, proper medicines were given, and he was put to bed: the next day the stupor and drowsiness much the same, complained occasionally of his head, his pulse 90 and full; aperients were given, and venæsection was repeated. On the third day he had a very restless night; his pulse quicker, more thirst, sometimes sick, and except occasional intervals of coma, was very restless; the aperients had operated very well. A blister was applied betwixt the shoulders, and diaphoretics were given. On examining the head this day, a little swelling was discovered on the posterior part of the parietal bone, occasioned by the fall, which gave the feel of fracture with depression; nor was I ever more disappointed in my life, than in freely laying open the scalp, to find that no fracture existed, and that this feel had been occasioned by extravasated blood; in dividing the scalp a small artery was divided, and allowed to bleed for a little while; the wound was  
I dressed,

pressed, presses were given, and the diaphoretics repeated; but he became more restless, and on the fourth day he died. I regret that I could not procure leave to open his head. The first day or two the symptoms were evidently those of concussion, that rapidly changed to inflammation. According to Mr. Benjamin Bell, I should have been warranted in the use of the trephine, (as there was a supposition of extravasation) in search of blood or matter oppressing the brain;\* but this, in my opinion, would have been extremely rash; the idea of it brings the following case to my recollection.

CASE 5.—A labouring man, about sixty years of age, in lopping a tree his foot slipped, and in his fall struck the bill or hatchet he held in his hand against his head, and divided the scalp upon the frontal bone. A surgeon was sent for; on examining the wound, he declared the skull to be fractured; the next morning (being in partnership) himself and partner arrived, with the intention of applying the trephine; the wound was dilated to a considerable extent, and an inconsiderable fissure† was discovered. One of the surgeons insisted upon it, that it was a complete fracture; the reply of the other was, if you will say it is, I will trepan him. The man during all this time was in his perfect senses, without a single symptom of a compressed brain. A gentleman present begged they would postpone the operation; they now attempted to scrape out the fissure with the raspatory, which was effectually done with little trouble. The man recovered very well.

Every man, previous to applying the trepan, ought to ask himself, for what he is going to trepan? "To think that a fractured skull is a chief cause, or even an absolute sign of danger, is a very erroneous notion; it is not the damage done to the skull, but the injury to the brain, that is the cause of danger; and the fracture of the skull is but a faint uncertain mark of the harm done to the brain."‡ Again, "there is still but one motive for applying the trephine, viz. to relieve the brain from compression."§

Now I am speaking of affections of the brain, I cannot forbear observing, that I have long been dissatisfied with the Edinburgh

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\* System of Surgery, Vol. III. p. 121.

† "A fissure is not of itself a motive for trepanning the skull; but if with a fissure the patient lies oppressed, then the oppression is the mark of danger, perhaps, from extravasated blood; and the fracture or fissure of the skull, marks the point on which we should apply our trepan." J. Bell's Discourses on Wounds, Part II. p. 145.

‡ J. Bell's Discourses on Wounds of the Head, p. 137.

§ Ibid, p. 144.



burgh treatment of concussions of the brain, viz. with cordials, wine, and stimulants; this appears to be uniformly the same with Mr. B. Bell,\* Mr. J. Bell,† and Mr. Latta,‡ and is directly opposite to the experience of Pott. My ideas on this subject are so exactly consonant to what has been said by Mr. Abernethy,§ that I shall therefore refer my readers to his Essays. In concussion of the brain, (in Hunterian terms) we ought to take great care to keep up a proper equilibrium between the powers of the part and their action, or we shall have more inflammation than may be consistent with life, it therefore requires the greatest caution in the use of stimulants; for whilst concussion may be subsiding on the one hand, inflammation may be making rapid strides on the other, which was clearly the case in Case the 4th. I shall beg leave to subjoin the following instances of concussion without any comment.

CASE 6.—Mr. T. grocer, of Leighton Buzzard, in reaching down some candles, his foot slipped, and the back of his head struck against some drawers; he was taken up senseless; in a short time was somewhat recovered, complained much of his head, was very giddy, and talked incoherently. I did not see him for two or three hours after the accident, his pulse was beating full and strong; I immediately took away twelve ounces of blood, and directed salines with antimonial wine and tinct. opii; the next morning he still complained of his head, was very giddy, talked very wandering, his pulse too quick and full; I gave a saline aperient, which operated very well; repeated the salines in the evening; the day following he was more sensible, but continued a little wandering, with occasional loss of memory for two or three days, and then recovered without any farther inconvenience.

*Mr. Christie's Observations on Gun-shot Wounds.*

[Continued from our last Number, p. 447.]

A Private, of the name of Doogen, belonging to the 27th regiment, was shot by a musket-ball entering half way between the right breast and axilla, where the ribs sit pretty close on each

\* System of Surgery, Vol. III. p. 141.

† On Wounds of the Head, p. 139.

‡ System of Surgery, Vol. II. p. 177, 178.

§ Surgical Essays, Part III. p. 59, 60, &c.

each other, and where the bellies of the pectoral muscles are thickest. The wound became consequently deep, and in the entrance of the ball a portion (fortunately the superior one) of a rib was fractured. The man had great anxiety and difficulty of breathing, with a quick and hurried pulse. There was no great hæmorrhage from the wound. I was certain the ball entered the chest; but I thought it likely that the lung had escaped; for, during the few minutes he was with me, he spat up no blood. The wound was dressed as expeditiously, and as securely, as I could. He was sent the same evening to the general hospital, with little hopes of his surviving the accident; but, twelve days afterwards, I heard from a soldier who came from the hospital, that he was still living, and, as he said, doing well and likely to recover, although the ball still remained in the chest. The particulars of this case, so far as inquiries can go, I shall make my business to report at some future period. Is it possible for a ball to remain harmless, or even compatible with life, on so exquisitely sensible a membrane as the pleura?

If the recoveries from wounds penetrating the thorax and abdomen be few, on account of the extensive inflammation which so constantly follows them, fewer still will the recoveries be where the skull is entered. It is remarkable, however, how great an injury the brain will occasionally receive, and long afterwards accommodate itself to the purposes of life, or even be followed by complete recovery. In the general action which occurred on the 2d inst. and in which, from the nature of the ground, (an immense space of high sands in the vicinity of Camperdown) and from the dispersed situation of the troops, it happened that the wounded would be lying singly; and from the impossibility of getting any kind of carriage on the ground, it might be some time until the wounded could be seen or collected, a private in the 27th regiment had been found on the day of action, by a surgeon of another corps, with a wound in the head, lying alone, and, as he said, dying; for, as the brain had been penetrated, he thought it in vain to do any thing more than, for form sake, to apply a bit of lint and wrap a handkerchief round the head, which, of course, would be done in a hurry. Next day, when traversing over extensive sands, to see if any men were still to be found to whom I could afford any assistance, I found this poor man laying by the side of a bents-bush, in a deplorable situation. Not knowing any thing of him, I asked him his regiment and hurt; he answered by putting forth his hand, as if to implore my assistance; he issued a groan which penetrated my heart; he made signs for drink, but this could not be instantly got; a scanty bog here



and there was all the water the place afforded for several thousand men, overcome with fatigue, and many lying helplessly wounded. At last a canteen-full was got for my patient; distractedly, and with convulsed eagerness, he tried to hold it to his head until it was half empty! I had him conveyed in a blanket by four of his comrades, and this was his state on examination: He was not wholly senseless, for he constantly made signs for water, and would hardly suffer the canteen to be taken away from him; he was not in a coma, or syncope, but apparently in a state between those two; he frequently attempted to articulate, but could not. An officer, who had formerly been his master, came and spoke to him, and to afford him assistance—it filled his eyes with water. On attempting to raise him, he increased his moaning, and pushed his feet downwards, as if to place himself in an easy posture. On washing his face well with cold water, he seemed to relish it; but on attempting to touch his head, there he shewed signs of morbid sensibility; his countenance was pale and ghastly, for *that* side of the face on which the injury was done was paralytic, the corner of the mouth falling downwards; he had, however, the use of all his limbs; his pulse was feeble, depressed, and intermitting. The dry sands, had blown the whole night upon his head and cloaths, all bloody; they formed a hard cake around him. On making his body as comfortable as could well be, I removed the handkerchief from his head, and found a musquet-shot had carried away a part of one of the parietal bones, nearly about its centre. From the wound, portions of brain were pushed outwards, some in detached pieces, like teaspoonfuls. As the edges of the wound did not appear very rugged, or at all depressed, and especially as the brain still continued working out, and the poor man making signs in agony to have his head put up, I just applied simple dressing, as gently and securely as I could, putting him up in blankets, with no hope of his recovery, to be conveyed to the general hospital, whither he was taken late in the evening of the 3d instant.

Four days afterwards, i. e. five from the accident, a soldier came from the hospital, who informed me, he then left Shreeves in the same state, or, as he expressed it, raving, and his brains coming out. The confusion which succeeded this, by our retreat from Alkmaar and its neighbourhood, and the consequent movement or capture, of the general hospital, which was but a temporary one, have entirely prevented me, for the present, from ascertaining the issue of this case. It is more than probable, however, that the inflammation, and consequent suppuration, would shortly put an end to this patient's sufferings; for

for such a fatal termination does not appear to be always brought about by mere loss of brain. •

In penetrating wounds of joints, the recovery, if it ever succeeds without amputation, is always at least very uncertain and hazardous; when the capsular ligament is divided, and the bone at the same time fractured, it is probable immediate amputation, if the patient be not of too robust and plethoric a habit, be always adviseable. But the point here is nice;—to those therefore, whose experience is extensive, whose dread of the succeeding tension, inflammation, and suppuration, is less than that of present mischief, I will yield with silent submission: at all events, amputation in such wounds can only be adviseable in those joints below the hip and shoulders. • When along with fractured bone there also happens extensive laceration of external parts, as happens generally from cannon-shot, shells, and splinters, I suppose I need hardly mention, no excuse should warrant the delay of amputation, as this, or a frightful sloughing, will alone preserve life.

Belguere, who was chief surgeon in the armies, I believe, of the great king of Prussia, in fulfilling the dictates of his master, recommends amputation never to be had recourse to; and, if I am not mistaken, sums up his experience by a sort of proof that, under his direction, the cases of recovery of gun-shot wounds were more numerous wherein no operation was had recourse to, than before, when generally practised: but German knives are not the first in the world. After all, it is plain the cases of recovery after amputation, in military practice, must be comparatively fewer than what follow in civil life, whether in private or public; for the healthy, full, and plethoric habit, soldiers and sailors generally enjoy at the time of receiving their hurts, is found to be inimical to the formation of a kindly stump. The sparer the habit, unless carried to excess or old age, the easier the recovery after amputation. Farther, the injury which the whole frame receives from the shock of a cannon-ball, appears to be in some cases sufficient to frustrate our intentions in amputating. The thigh shall be carried off half way up, probably not more than a quart of blood will be lost, but the patient will lose his spirits and strength amazingly. His pulse, and whole frame, shall be tremulous and distracted; the bone may be shattered high up, a vast part of the body of it must be taken away, and the patient sinks under accumulated irritation.

In this place I cannot help remarking, that some of the Russian army surgeons, either actuated by a mistaken humanity, or immersed in a savage darkness, appear blindly to follow Belguere's plan of treatment; for, in consequence of a deficiency of  
hospital



hospital mates, when I was lately sent to act for a little while at the general hospital at the Helder, when the wounded of the army were brought, I had an opportunity of witnessing the Russian management of the sick and wounded. Here shattered stumps, compound fractures, deadly wounds, were all promiscuously left to unassisted nature; or rather, Nature's intentions appeared to be grossly perverted by the effect of the surgeon's art. The charge of a Russian battalion, of more than a thousand men, is intrusted to a surgeon-major and about a dozen of mates or assistants, who are called Feldshers. Of the former I know nothing, but suppose they may enjoy advantages both of education and experience; the latter, like the German feldshers, are a set of vulgar lads, mean, and, God knows, humble, who pretend not to the knowledge of disease; who are only initiated in the art by the dressing of sores, and the administration of clysters; and belong to that class of human beings formerly known by the name of barber-surgeons.

In the Russian hospital at Helder, were crowded together in one small apartment about an hundred men, ill of fever and fluxes. In their persons, the Russians are abominably dirty, which, along with their thick blankets and confined air, (for the windows were closely shut) presented a scene truly characteristic of human misery and human prejudices. In the apartment of the wounded, from which also the external air was as scrupulously denied as if it had been a poison, were about two hundred; they were unusually crowded; but this arose from temporary pressing circumstances, and which, by the attention of some of the British hospital staff, was, in a few days, remedied, as far as their humanity could go. The Russian surgeons were ordered to be shewn, and to practise, the English method of dressing the wounded, which task was far from being desirable to the teacher; for the surgeon, though dignified with the title of major, appeared to hold among the ranks of man but an inferior station. His appearance was truly characteristic, and must be described:—A lean, tall figure, dressed in a green great coat down to the ground, a leather military cap arched with a row of green feathers, having a long white-top'd cane in its hand, was introduced to us as the superior of the Esculapian brotherhood. A few broken accents in German, in a weakly, shrill voice, told us, he was happy to see us, and would be glad of any of our assistance. On observing how necessary it would be to preserve cleanliness, and admit fresh air into the hospital, he called to some orderlies, as if he wished to shew he maintained authority; but one of his own officers being present, a rough, unfeeling son of Mars, in reply to the poor surgeon's necessary suggestion, soon convinced me how little sway or respect

spect any effort of his could have in the œconomy of *his* hospital. He appeared afraid of touching a wounded limb, and yet would remove a fractured one from a bed, and put a bandage round it on a seat; but if ingenuity had been put on the stretch, a dressing more unkindly could not be thought of, than that used by the Russian surgeons. The lint they use is the threads drawn out of coarse Russian cloth, without any preparation; it is hard, and resembles a skein of thread; with this the wounds were plugged up, above which, his digestive, in which there appeared to be a great proportion of resin, was applied; others dressed their wounds with vinegar and sugar. To a person of this description it was by no means pleasant to order a new plan to be adopted, and his own to be laid aside. The poor man, as well as his assistants, appeared sensible of their imperfections. The contracted allowances granted them by their government, for themselves and sick, seemed also to have contracted their own souls.

In the Russian Hospital at Helder, were a great number of bad gun-shot cases, from which much information might be drawn; but, from the short time I remained there, cannot now make any remarks upon them.

The general want of immediate hæmorrhagy in gun-shot wounds is a circumstance observed by all practitioners. It is probable, immediate hæmorrhagy never happens, unless when the force of the ball is nearly spent, or when a vessel is partially divided transversely; and this last, I should suppose, can only happen when the ball comes out of the piece truncated, or with edges, as from rifled pieces, when the wound will, in some measure, partake of the nature of an incised wound. Whether this want of hæmorrhagy is always owing to a sudden and total destruction of all life in the injured parts, by which the exposed arteries refuse any longer to propel their contents; or, whether it be from the sudden extraordinary preceding stretching, that an extraordinary temporary contraction, with life, follows, appear to me questions not to be readily decided.

A limb shall be carried off by a cannon-ball; the arteries shall be seen hanging out, as if they had either been elongated from above, or torn up for inches below, and still with little or no hæmorrhagy. Whether that which follows from such vessels afterwards be of the active or passive kind, I have not yet had sufficient opportunities of examining.

Is the bleeding which succeeds the application of a leech to be attributed to a vacuum formed by its mouth for a considerable time over the divided extreme vessels, destroying their tone, so that they lose the power of contracting? or, is this evident loss of tone rather to be referred to something deleterious in the proboscis



proboscis of the animal, by which it not only renders passive the extremities of the divided vessels, but also prevents coagula from forming? There is one circumstance attending gun-shot wounds, which I apprehend may be worthy of notice: The great velocity with which cannon and musquet balls pass through the air, must occasion in their rear a momentary vacuum; may not, therefore, much mischief be done by a portion of our body being exposed to a situation where external pressure is suddenly removed? In those cases which terminate fatally by the wind, as it is called, of a cannon-ball, that is, where the ball passes without touching, it is not likely death is brought about by a sudden concussion of air on a part, (as the expression implies) but by a sudden removal of a portion of air from a part essential to life, by which all external support is removed, rupture of vessels, or other mischiefs follow, terminating in death; and this event à priori will be most likely to happen when the ball passes across the head, chest, or epigastric region. There is another fact tending to the support of this idea, which is, that a touch with a cannon, or even a musquet-shot, though hardly sufficient to discolour the skin, will yet sometimes knock the person down. It has also been alleged, and, possibly, not without reason, that slight touches from cannon or musquet-shot, are attended with more tedious or dangerous consequences than apparently similar touches from another mode of infliction; if this be really the case, it may probably arise from a vacuum suddenly formed over vessels, thereby injuring or destroying their tone. Lastly, a blue line, or mark, is sometimes observed on men after actions, although they were not sensible of a ball having touched them; the extravasation here, then, was probably owing to the external support of the air being taken off for an instant, occasioning rupture of vessels, and the effusion mentioned. But it has been alleged, and sometimes, perhaps, also, with reason, that people engaged in action, where the grim messengers fly thick, may be occasionally so overpowered with horror that a very slight blow will be sufficient to make them tumble; or, as others will have it, and which I suppose to be most likely, as well as most frequent, the imagination on such occasions may be so much heated by momentary impulse and ardour possessing the whole soul, as to deprive men of their acute feelings, and thus a ball may graze them without their knowledge.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

IF the following account of the deleterious effects of a very common species of agaric, not hitherto generally suspected to be poisonous, appears to you likely to prove useful or interesting to the public, you will oblige me by its insertion; should its length be any obstacle to this, I beg you will omit whatever you may think superfluous. I remain,

GENTLEMEN,

No. 10, Arlington-street,  
Nov. 16th, 1799.

Your's, most obediently,  
EVERARD BRANDE.

J. S. gathered early in the morning of the third of October, in the Green Park, what he supposed to be small mushrooms; these he stewed with the common additions in a tinned iron saucepan.\* The whole did not exceed a tea saucerful, which he and four of his children ate the first thing, about eight o'clock in the morning, as they frequently had done without any bad consequence; they afterwards took their usual breakfast of tea, &c. which was finished about nine, when Edward, one of the children, (eight years old,) who had eaten a large proportion of the mushrooms, as they thought them, was attacked with fits of immoderate laughter, nor could the threats of his father or mother restrain him. To this succeeded vertigo, and a great degree of stupor, from which he was roused by being called or shaken, but immediately relapsed. The pupils of his eyes were, at times, dilated to nearly the circumference of the cornea, and scarcely contracted at the approach of a strong light; his breathing was quick, his pulse very variable, at times imperceptible, at others too frequent and small to be counted; latterly, very languid; his feet were cold, livid, and contracted; he sometimes pressed his hands on different parts of his abdomen, as if in pain, but when roused and interrogated as to it, he answered indifferently, yes, or no, as he did to every other question, evidently without any relation to what was asked. About the same time the father, aged forty, was attacked with vertigo, and complained that every thing appeared black, then wholly disap-

\* This accuracy may seem trivial, but I have met with people who supposed the following symptoms might have arisen from the use of a copper vessel.



disappeared; to this succeeded loss of voluntary motion and stupor; his pupils were dilated, his pulse slow, full, and soft; breathing not affected; in about ten minutes he gradually recovered, but complained of universal numbness and coldness, with great dejection, and a firm persuasion that he was dying; in a few minutes he relapsed, but recovered as before, and had several similar fits during three or four hours, each succeeding one less violent and with longer intermissions than the former.

Harriet, twelve years old, who had eaten but a very small quantity, was attacked also at the same time with slight vertigo.

At nine o'clock I first saw them, and ordered a solution of ten grains of tartar emetic, in four ounces of water, to be immediately given to each in proportioned doses. It soon had the desired effect on the father and on Harriet, both of whom felt themselves much relieved by its operation. As soon as the stomach of the former could bear it, I ordered him an ounce of castor oil, and half an hour afterwards, vinegar and water, of each two ounces. He took three such doses, at intervals of half an hour, when he had a stool, and voided large quantities of urine, and although not perfectly recovered, did not appear to require any thing more.

To Harriet, who had two or three attacks of slight vertigo, with some languor, I gave, (after the operation of the emetic,) on the suggestion of my friend, Dr. Burges, who happened to be present, thirty drops of sal volatile, in a table spoonful of water. This relieved her exceedingly, and by repeating the dose twice in the course of an hour, she was perfectly cured.

From the difficulty with which Edward was made to swallow any thing, and from the large quantity required, it was eleven o'clock before he had taken enough of the emetic solution to excite vomiting; by this time the poison had produced so powerful an effect upon his system, that he did not appear in the least relieved by it. I now ordered him a stimulating injection, applied a blister to his neck, and by degrees made him swallow some small quantities of sal volatile, diluted with no more water than was absolutely necessary; his feet were frequently rubbed with and wrapped up in warm flannels; in half an hour the injection was repeated; this soon procured two stools, when he was sensibly relieved, knew the voice of his father and mother, and complained of coldness and insensibility about his stomach. His whole abdomen was well rubbed before a fire with some camphorated strong volatile liniment, which, at his own request, was repeated two or three times; he continued also to take the sal volatile, and some castor oil. By four o'clock every

every violent symptom had left him, drowsiness and occasional giddiness only remaining, both of which, with some head-ach, continued during the following day.

Charlotte, a delicate little girl, ten years old, naturally of a most mild and tractable disposition, who also had eaten a large proportion, was suddenly attacked in the presence of Dr. Burges and myself, about half after ten, with vertigo and loss of voluntary motion; her pupils were very much dilated, and sight greatly impaired; these symptoms soon gave place to a degree of delirium, in which she refused to take any thing, forcibly striking whatever was offered to her. A blister was applied to her neck; and having given her a strong dose of the emetic solution, immediately on the first attack, which, though late, operated violently, she became composed as the sickness went off; and after taking a few doses of the sal volatile, was perfectly well, and wholly unconscious of any thing that had passed since the commencement of the symptoms; her pulse, which hitherto had not been much affected, was now irregular, and continued so, though in a less degree, during the whole of the day.

Martha, aged eighteen, who had eaten a small proportion, was attacked about eleven o'clock, with symptoms exactly the same as those of Harriet. She was treated in the same manner with similar success.

From the evident utility of determining the species to which these agarici belonged, I desired the man who had gathered and partaken of them, to bring me some of the same; and on inquiry found he had for several years been in the habit of gathering, in the same place, what he was confident were the same sort. Part of those which he brought me, I sent to Dr. Williams, Botany Professor of Oxford, to whom I had related the cases. In a note which he had the kindness to send me, he says, "Having since passed a short time, in company with Mr. Sowerby,\* he has compared them with the Fungi and plates in his Museum. Mr. S. has no doubt respecting the species; it appears to be a variety of the *Agaricus glutinosus* of Curtis, (*Flora Londinensis*,) the same with Dr. Withering's *Agaricus semiglobatus*, yet no notice is taken either by Curtis or Withering of its deleterious quality. This may seem singular, as its effects were so strongly marked, unless any mistake has been made by the person who collected the specimens."

I have also examined some of the same parcel with Mr.

G 2

Wheeler,



Wheeler, Demonstrator of Botany of the Apothecary's Company, whose testimony concurring with the above, leaves no room to doubt their authority.

As some of your readers may not readily have an opportunity of referring to either of the authors already mentioned, I shall add Curtis's description of the species *Agaricus glutinosus*.

“ Stalks generally single, sometimes clustered, from two to four inches in height, the thickness of a goose quill, thread shaped, whitish, almost solid, the tube being very small, glutinous; ring, a little below the cap, scarce perceptible.

“ Cap, from one to two inches in breadth, of a brown colour; in the full grown ones hemispherical, always convex, and more or less glutinous; wet with rain, it becomes browner and transparent, so that it sometimes appears striated.

“ Gills numerous, single, of a brownish purple colour, clouded; whole ones about twenty, horizontal, three shorter ones placed betwixt them; they throw out a powder of a brownish purple colour.”

With respect to the use of it, he only says, “ There is nothing acrimonious or disagreeable in its taste, yet its appearance will not recommend it to the lovers of mushrooms.”

The variety, however, in question, (which is almost constantly to be met with on pasture land during autumn,) differs from this description chiefly in being of a conical form, as will be perfectly well seen in No. 19, of Mr. Sowerby's English Fungi, to be published on the first of January next; for the useful purpose of shewing which Mr. S. has expressly added figures 1, 2, and 3, of Table 248.

*A Case of difficult Parturition, by Mr. PURTON, Surgeon, at Alcester, Warwickshire; with Observations by JOHN CLARKE, M. D.*

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

GENTLEMEN,

I HAVE lately received the following case from Mr. Purton, a very sensible and judicious surgeon, of Alcester, in Warwickshire; you will, probably, think it deserving of a place in your Journal.

To

To Dr. CLARKE.

DEAR SIR,

*Alcester, Dec. 3. 1799.*

I beg leave to communicate to you a remarkable case of difficult parturition, which has fallen under my care lately, and I trust that you will agree with me, that the conduct which I pursued was adapted to the circumstances of the case.

Mrs. P. a hard-working woman, about six and thirty, has been the mother of four children. Her two first labours were very severe and lingering, the last more so than the first; as, in the former, the child was born by the natural pains; and, in the latter, with much difficulty, by the forceps. The third labour, she had lingering pains for three or four days, and I was with her for most of the time; at length, the os uteri was fully dilated, and the membranes burst. The head, with the anterior fontanelle towards the left inguen was distinctly felt at the brim of the pelvis. The pains now very soon increased in strength, and, after a little time, the head advanced somewhat further, but at last, although I waited patiently many hours, it did not move in the least degree. Considering the presentation and the head not being low enough for the application of the forceps, I desired a consultation, and therefore sent over for Mr. Bloxam's assistance. As soon as he arrived, he thought it proper to turn the child, which was done, and with the greatest difficulty the child was delivered, although I assisted him with all my strength; the head was nearly separated from the body in the attempt, and a considerable indentation was observable on the side of the head, after the child was born. On examination, there was very considerable projection of the sacrum, so as to lessen that diameter of the pelvis full an inch and a half. The fourth labour happened about six weeks ago. The head, in this case, did not advance so far in the pelvis, although the pains were much stronger, and continued so for some time: at length the woman became so exhausted, that I thought it prudent to deliver her; but, fortunately, during this deliberation in my mind, the funis was forced down, and it very soon ceased pulsating. When this took place, I did not hesitate a moment how to proceed; I immediately relieved the mother by evacuating the head, which operation, of course, I performed with much less violence to my own feelings when I was convinced the child was dead. It was with much difficulty I brought the child into the world, after I had diminished the head; and, on examination, the protuberance of the sacrum was much increased since the last labour, which shews that the bones must have been gradually becoming worse for many years; and also explains why the two first labours terminated so favourably.

The



The woman recovered (of which you have had, no doubt; many instances in similar cases,) more rapidly than many do in the best of times. I am,

DEAR SIR,

Your friend and servant,

T. PURTON.

The foregoing case appears to me to be worthy of being recorded, because it serves to shew the gradual steps of the disease, which is called *mollities ossium*, and the manner in which the pelvis, though it may have been once perfect, becomes more and more distorted, till it is absolutely incapable of admitting the passage of a child's head through it, without being diminished in size by evacuating the brain.

The first labour was completed, as it appears, by the natural efforts. In the second, the head was brought through (not, however, without difficulty) by the application of the forceps. In the third, the head did not advance far enough to admit of the application of that instrument, partly from the face being placed towards the groin, but principally, as is most likely, from the increasing deformity of the patient's pelvis. The child, in this labour, was turned, and it was delivered by the feet. The head, however, was brought through, not without great force. Between the third and fourth labour, the disease continuing to make progress, the deformity became still greater, so that it was necessary to deliver by the crotchet.

I do not know that there is any instance recorded in which *mollities ossium*, once begun, has been by any means arrested in its progress; the consequence of which is, that the pelvis, first, for obvious reasons, and afterwards the whole skeleton, must give way to the superincumbent weight, and if parturition has been rendered difficult from this cause, the difficulty may be expected to be aggravated in each succeeding labour.

Not so in the deformity arising from rickets. If the unfortunate subjects of this disease attain the age of puberty, the skeleton does not often yield afterwards to pressure. Hence the difficulty of parturition does not in them become increased at each succeeding labour, but the deformity remains where the disease left it, through life.

The operation, therefore, of bringing on premature labour; or of turning the child (if the full term of pregnancy has been completed) is applicable chiefly to cases of deformity, which are the result of rickets, where we may in any succeeding labour expect to find the same dimensions of the pelvis as existed in those labours which have gone before. In many cases of de-

formed

formed pelvis arising from the latter cause, if the dimensions of the pelvis are accurately noted by the practitioner, the life of a child may be preserved by bringing on premature labour, which must inevitably be lost, if the full term of utero-gestation should be allowed to be completed.

I need not observe, that it is only to the slighter cases of deformity, where success can be expected from this practice. The subject of premature labour has been so ably treated by Dr. Denman, in his excellent System of Midwifery, that I beg to refer your readers to his work. To the practical directions there laid down, I only think it necessary to add, that a small male catheter, curved so as to take the sweep of the vagina and cervix uteri, is a very well adapted instrument for puncturing the membranes, because the liquor will be readily drawn off through it; and the chance of labour coming on soon will be greater, when the waters are more perfectly evacuated; and much of the success must necessarily depend on the process taking place early; if it should not, the child will either die, or, continuing to grow, the intention of perforating the membranes will be defeated.

I am, GENTLEMEN,

Yours, &c.

JOHN CLARKE.

*New Burlington Street, Dec. 13, 1799.*

*Mr Franks, on the Brunonian System.*

[Concluded from our last Number, pp. 449—452.]

DR. FOTHERGILL observes, "It does not seem absurd to compare the animal machine to a clock; let the wheels whereof be in ever so good order, the mechanism complete in every part, and wound up to the full pitch, yet without some impulse communicated to the pendulum, the whole continues motionless."

With respect to the animal machine, the oxygen of the air may be considered as the impulse, and the left auricle the living pendulum to which this impulse is communicated.

From what has been observed on the state of apparent death from a temporary suspension of respiration, I am inclined to infer, that the existence of excitability directly depends on the constant restoration of that degree of stimulant force derived from the air by the blood in the lungs, to which the left auricle and ventricle have been accustomed, and without which there



there is a suspension of excitement, and not on the powers of assimilation in the stomach, &c. The powers of assimilation, as well as the excitability, are entirely dependant on the stimulus of arterial blood.

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OF PREDISPOSITION TO DISEASES OF THE SYSTEM.

Dr. WILSON objects to the idea of Predisposition to Diseases of the System,—page 519.—The system in general is either in a state of health or disease. Predisposition to general disease is a state that cannot be defined. There is, perhaps, no part of the writings of Dr. BROWN more exceptionable than his Observations on Predisposition to Disease. These, however, as they do not properly form any part of his system, it did not appear necessary to consider here.”

I am of opinion that predisposition to general disease forms a part of the Brunonian doctrine, which deserves consideration ; for it appears to me to be contrary both to reasoning and matter of fact to conclude, that the system is always either in a state of health or disease. If from observation it is evident, that the system in a state of health this day cannot be precipitated into dropsy on the next, or on the third, fourth, or fifth day, by a subtraction from the degree of stimulus which had previously supported the body in a state of health, but that by persevering in the application of the debilitating powers for several months together, and we then find this disease make its appearance,—may we not conclude, that the system has gradually receded from the standard of health during the interval, and that predisposition to some general disease of debility immediately commenced, (no matter in what form the deviation from health might be) when the daily allowance of animal food, wine, and porter were prohibited, and a vegetable diet with water for beverage substituted. If from observation we find, that there is an intermediate state between health and disease, may not the word, Predisposition, be employed to express such a state of the system ? and ought we to object to it merely because it cannot be defined ?

It is not a state essentially different from health or disease, only different so far as the excitement is concerned. It has an equal affinity with both, and may by management be readily converted into either.

But there appears something like a contradiction in another part of this work with respect to Predisposition, although it is possible that I do not rightly conceive the author's meaning ; for, on referring to page 468, Dr. Wilson observes, “ Between the healthy state in which the excitability and stimuli applied  
are

are in due proportion, and death, in which the excitability is extinguished either by an excess, or too great an abstraction of stimuli, the Brunonian system supposes all possible gradations. These are evidently to be divided into two classes; those in which the excitability is to a certain degree exhausted by too great an application of stimuli, and those in which a morbid accumulation is supposed to take place in consequence of too great an abstraction of stimuli. In the latter of these, the body is said to be in a state of direct, and in the former, of indirect debility. There are supposed its morbid states. *It is evident however, that there is a state of body different from either of these, and different also from the healthy state.* When stimuli are too much abstracted, debility is supposed immediately to ensue; but debility is not the immediate consequence of too great an application of stimuli; the immediate consequence of this is increased excitement."

The body, in a state of increased excitement, I apprehend to be the state which Dr. Wilson alludes to, as being different from a state of debility, whether directly or indirectly induced, and different also from the healthy state. But is not increased excitement, where sthenic diathesis always prevails, a state of predisposition to disease? If the excitement, and consequently the diathesis continue to be increased, a disease of the sthenic class in one form or another will inevitably supervene; but if diminished before the arrival of disease, a return of health may be the consequence.

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#### OF DIRECT AND INDIRECT DEBILITY.

Page 477—Dr. WILSON asks, "Are not the supposed states of direct and indirect debility opposite conditions of body? Can we suppose them to produce precisely the same train of symptoms? Yet Dr. Brown is constantly forced into this inconsistency."

I do not think that there exists any inconsistency in this instance. Direct and indirect debility seem to me to be a condition of body nearly one and the same, although a condition effected by opposite means. For, as health, predisposition, and general disease, is the same condition of body, different only with respect to the excitement; so is direct and indirect debility the same state or condition, different only with respect to the excitability; which in the former species is too much accumulated, and in the latter too much exhausted.

Dr. BROWN having found from observation, that debility of the system might be effected by opposite means, judged it proper to make a division, and to employ the terms Direct and Indi-



rect, to give an idea of the manner in which debility had been induced in each particular case; that when the diseases, of which it is the parent, became an object of our attention, the medical practice might be conducted on philosophical principles. But it does not occur to me that Dr. BROWN ever intended to convey the idea, that direct and indirect debility are opposite conditions of the body, otherwise than with respect to the excitability.

But were we to admit, that which I am not inclined to admit, that direct and indirect debility are opposite conditions of body, from a knowledge of the equivocal nature of symptoms, surprize would not be excited, if we should observe some of the symptoms to be the same in each of the conditions; for many of the symptoms of disease might be enumerated which occur equally in the sthenic and asthenic classes, as, delirium, pain, cough, thirst, &c.

Dr. WILSON has noticed what he conceives to be another inconsistency in the Brunonian doctrine, with respect to debility; this is, the supposition that both species of debility may exist in the same body at the same time.

There is no difficulty in conceiving, that to a degree of existing debility directly induced, an additional degree may be super-added indirectly, and vice versa.

A person in whom the sthenic is prevalent, after an excess in wine, experiences sometimes on the following day, symptoms of debility, as, a pain in the head, nausea, &c. It may be that he is his own physician on the occasion, and the means which he employs to remove these symptoms, induce an additional degree of debility, essentially the same as that which had been previously induced by the abuse of certain diffusible stimuli; for it is a very common occurrence, that persons so indisposed prescribe for themselves emetics, cathartics, bleeding, and water-gruel. By an error of this sort, a debility, which would have been only temporary, but for the application of directly debilitating powers, is often succeeded by a serious indisposition.

I think that I have seen two instances, where the parties, who were both men of strong constitutions, began to stimulate in excess very early in life, and continued in the practice for several years with impunity, with the exception of experiencing now and then some complaints from excessive excitement, but which were easily removed. At length, however, debility was very apparently induced; they were still very strong men when compared with others, but inferior in vigour to what they themselves had been for several years before.

The already existing debility was at this time daily increased by

by the abstraction of necessary stimuli, which in a very few months induced such a degree of debility as constitutes death.

If, when the system is in a state of debility indirectly induced, and in which the excitability is more or less exhausted, the sum of stimuli, which, by a continuance of application, induced, first, excessive excitement, and ultimately, the permanent debility, produces now a less degree of excitement than formerly, what sort of excitement will a considerable reduction from this sum produce?

We may infer, and observation sanctions the inference, that in a very short time no excitement will arise, and death will take place, not from any thing positive, nor from the complete exhaustion of excitability, and often not through the intervention of any particular disease, but from the permanent suspension of excitement, in consequence of a negation of the powers which support life.

If it should be required, what is the state of the excitability when one species of debility is superadded to the other which is already established,—Dr. BROWN having asserted, that in one species the excitability is too much accumulated, and in the other too much exhausted,—I would answer, that the excitability is not otherwise permanently affected, than by receiving an addition to the morbid state of it, whether of accumulation or of exhaustion.

J. FRANKS.

*Smith Street, Westminster.*

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*On the Affusion of Cold Water in Fever, by Mr. MARTINEAU, Surgeon, of Norwich.*

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

GENTLEMEN,

I SHOULD be extremely happy if I could draw attention to the practice of the *affusion of cold water* in the cure of fevers, which has been so strongly recommended in a work of great merit, by Dr. Currie, of Liverpool; but which has not, so far as I can learn, been followed in this part of the kingdom.

That ablution with cold water in fever should not have been more employed, is perhaps owing to the innovation it appears to make in the common mode of treatment; and that practitioners should remain fearful of cold in fevers, may arise in part



from the relief obtained from sweating, produced often by the opposite application of heat, forgetting that perspiration itself is the cooling process which nature sets up for carrying off preternatural heat.

In external inflammation, surgeons have not been timid in the application of cold, and experience there has confirmed the propriety of subduing inflammation, by taking off heat by cold applications. The analogy between external and internal diseases, attended with preternatural increase of heat, is great, and might lead to many pathological conclusions; but at present I shall content myself with giving a case or two, in which the *Affusion of Cold Water in Typhus* was attended with manifest advantage.

In November 1798, a young man, a farmer, about twenty years old, living four miles from Norwich, came to me, complaining of great lassitude, head-ach, loss of appetite, and costiveness; he had a quick, tremulous pulse; great dejection was marked in his countenance, and, in short, every appearance of Typhus. This was on a Thursday, and he had been complaining from the preceding Saturday. He was much fatigued with his ride, and it was with difficulty he returned home. I ordered him an emetic to be taken that evening, and a gentle dose of opening medicine for the following morning. I heard no more of him until the Saturday, when I was requested to go over to him. I found him at six that evening with every symptom growing worse, and his debility much increased. I prescribed a drachm of bark, to be given every two hours, and an opiate at bed time.

Sunday evening his pulse was 110, his tongue clear, skin hot, and dry, his weakness greater. He had taken the bark very regularly, which I desired might be continued, as well as his opiate at bed time.

Monday, at six in the evening, pulse as yesterday, heat pungent, head-ach with wandering, but not absolutely delirious, his strength less. The bark had purged him, notwithstanding laudanum had been given twice, beside the night draught.

In this state, with the bark purging, and the disease making an alarming progress, I determined, although I was unable to measure his heat, and too far from home to wait for a thermometer, to make trial of the *Affusion of Cold Water*. My patient was taken out of bed, and while he was supported, standing naked in a tub, I poured the largest hand basin of pump water all over him. The shock was considerable to him, and the father and mother, who were present, thought, I believe, I should be the death of their son. He was wiped dry, and immediately returned to bed—his pulse then beat only 70—he

was

was cool, and said he had not felt himself so comfortable, and particularly in his head, for many days. Much pleased with this effect, but uncertain whether it would last, I went down stairs, and waited an hour; on my return to him, his pulse had not quickened, nor had the heat returned. I left orders to repeat the cold water, if he became hot during the night, but there was no occasion for it; he slept well, and had a gentle perspiration; and although I daily intended repeating the affusion, had the heat returned, I never found it necessary. His symptoms seemed at once arrested, but continued in a slight degree until the 14th day, when his appetite and natural sleep returned, and he soon after recovered his strength and health.

I should mention, that from the evening in which the affusion was used, I only ordered two or three smaller doses of bark in a day, conjoined with a few drops of laudanum to check the purging, and 24 drops at night, until the 14th day, when all medicine was laid aside. The bark, in such a small quantity, can scarcely be supposed to have contributed to the recovery of this patient; and I will add, that in the largest quantity, I never saw it of service, either in stopping of Typhus, or moderating the symptoms, unless given in the first two or three days, when I know it will often put a stop to the disease; but it must be given with the same assiduity as is required to check the return of a true intermittent. It is the time of giving as well as quantity of bark, which must render it successful in Typhus.

Dr. Currie in his admirable work mentions, that he finds the greatest benefit from affusion, when used in the first days of fever; and this I believe, for the very reason which makes the bark, and some other remedies, chiefly useful in the commencement, viz. that if the disease has had time to obtain its true character, or, in the language of Dr. Darwin, "the morbid febrile catenation is strongly formed," it will go on its own duration, in spite of our efforts to stop its natural termination. In my patient, however, the affusion was not tried till the ninth day, still the sudden impression made by it was so powerful as to produce such a mitigation of every symptom as to leave no farther apprehension for his safety, although no positive crisis came on before the fourteenth day, when the appetite and sleep marked the conclusion.

In January, 1799, the Lincolnshire militia were quartered in this city; their barracks were terribly crowded, ill ventilated, below the surface of the ground, and damp; the weather was extremely cold, and the men, after parade, frequently complained of having caught cold. After a short time the disease put on a mixed character of Typhus and Peripneumonia, the



Peripneumonia putrida of Sauvages, and many died. I was requested at this time by the Colonel, Lord Buckinghamshire, and Mr. Cooper, the surgeon of the regiment, who had been indefatigable in his attention to the men, to visit the hospital, which was a small house, in which were thirty, in all the stages, from an alarming commencement to a fatal conclusion. Two were brought in the evening, while I was there, who had been ill a few days only; and as there was considerable heat on the skin, I recommended the affusion, which was immediately complied with. The pulmonic symptoms might have been considered an objection to the trial, but the fatality of the disease led me to adopt a practice, which at first I should not have had courage to have employed. In these cases no very immediate relief was given, but both the men recovered with less severe symptoms than most of their comrades; blisters, however, were applied to them, and had not been used in the other cases. I have mentioned these two cases, to shew that even with pneumonic affection there arose no inconvenience from the application of cold water. An immediate stop was put to the contagion by the men being, the day after my visit, sent out of the barrack to separate houses.

In March last, Mr. Reeve, a pupil of mine, and whose attention and accuracy may be depended on, visited a poor boy, ten years old, who was in the fifth day of a Typhus, four of which he had been confined to his bed. He at first gave him an emetic, and some bark; but not finding him better the following evening, he applied the affusion of cold water, during the hot stage of the evening exacerbation. The pulse immediately fell from 120 to 98, the head-ach and heat were greatly diminished, and some sleep and a gentle perspiration followed. The affusion was used the next day at noon, and again at night, with the same advantage, and once more the following evening. On the 9th day, the fever terminated, and the boy rapidly recovered, having taken no medicine after the application of the water.

A fortnight afterwards, a brother of the above, aged eight years, was seized with the same fever; the affusion was applied on the second day with the greatest advantage, as he had no return of fever for four days, when some cold winds blowing upon him in bed, produced a relapse; the symptoms were more violent, and delirium and coma were added. On the evening of the second day, of the second attack, when the heat was very considerable, cold water was thrown all over him, and with an astonishing good effect, for he had no return from that time, and soon recovered, without having taken any medicine during the whole period of the disease.

On the 8th of May, the sister of the two boys, a girl of six years, was attacked with Typhus, but with symptoms less violent. The affusion was applied twice at the commencement of the fever, and she soon recovered without any medicine.

The above cases may, I hope, be an additional inducement to the practice they are intended to establish; many circumstances ought to be taken into consideration before its general application; and I cannot do better than refer such of your readers who have not already perused Dr. Currie's work, to the book itself, and conclude in his words—"Affusion may be safely used at any time of the day, *when there is no sense of chilliness present, when the heat of the surface is steadily above what is natural, and when there is no general or profuse perspiration.*"

I am, GENTLEMEN,

Your obedient humble servant,

Norwich, Dec. 23, 1799:

P. M. MARTINEAU.

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

GENTLEMEN,

IF you think the two following cases, objects worthy notice, I shall be gratified in seeing them placed in your very instructive Medical and Physical Journal.

I am, GENTLEMEN,

Your much obliged humble servant,

Princes Street, Hanover Square,

WILLIAM FOWLER.

October 12, 1799.

THE first of these cases is an instance of six teeth destroyed by the left canine tooth projecting across the front of the palate, occupying the place of those destroyed; and which long continued the undiscovered cause of their destruction.

CASE 2.—A gentleman whom I attended, was afflicted with the tooth-ach in the first dens molaris. Being much alarmed at the idea of extraction, he applied unknown to me) to a Mrs. ———, who at that time was esteemed famous for the cure of the tooth-ach without drawing. She had applied her nostrum to the tooth, twice within the space of three days; and on the fourth he came to me, complaining of a sore mouth, telling



telling me, where he had been to get relief; and that the liquid which had been used was very caustic. From the appearance of the violent inflammation, which had taken place from the diseased tooth to the epiglottis, I advised him to consult some medical gentleman of eminence *immediately*; with which advice, I am sorry to say, he did not comply. Not hearing from him on the third day, I called (*en passant*), but he was too ill to be seen; a derangement of intellects had taken place. I called again four days afterwards, and was informed, that he had died raving on the preceding day. I had every reason to believe, that the fluid which had been inserted into the tooth, with a view of destroying the nerve, had produced this tragical end.

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

GENTLEMEN,

Plymouth, 21st October.

I Resume the subject of my former letter, with a few remarks upon Mr. FIELD's method of curing croup, as far as that is connected with it.\*

Of this disease, there certainly are, as that gentleman justly observes, two distinct species; but that the nice discrimination of them, with a view to their treatment, is absolutely necessary, is a circumstance to which I cannot so readily agree, as both seem to have a proximate cause, different only as to the part which it affects. The spasmodic croup is occasioned by a spasm of the muscles of the glottis; the inflammatory kind consists in a spasm of the extreme arteries of the mucous membrane of the larynx and trachea.†

Mr. FIELD, like most other writers on this disease, in his Plan of Cure, places his chief dependence upon venæsection. I need not say, that I do not think this a very eligible practice, for I have my doubts whether it be safe; even children do not bear the loss of blood with impunity: indeed, it is to be feared, that to this very circumstance may be owing, in a great measure, the frequent recurrence of the complaint, in those who have once been afflicted with it. I cannot help suspecting farther,

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\* Medical and Physical Journal, Vol. II. page 146.

† Cullen's First Lines, &c. CCXL. CCCXVIII.

ther, that, by too copious a venæsection in children, we may be in danger of hastening what we are anxious to prevent—a fatal termination of the disease.

In a manuscript copy of the late Dr. Gregory's Lectures, I found a caution respecting bleeding in children, even with leeches, as apt to bring on fits. Now, if the learned professor's admonition was the result of experience, and a case which I myself once saw, leaves me little room to doubt it, what have we not to dread from taking away blood in a large stream from infants?

The symptoms of croup being so very alarming, often threatening immediate death, demand the most speedy as well as judicious exertions of the physician to combat them.

Former experience having taught him, that blood-letting has, in most instances, alleviated all the violent symptoms of the disease; and thinking it unsafe to trust to any other remedy, however equally efficacious that may be, in producing the same good effect, from the fear of its not being as quick in its operation, his own professional character, perhaps, being at stake, in case of failure, from trying a mode opposite to that which has received the sanction of the greatest names in the profession, he is therefore compelled by a sort of necessity, to have recourse to bleeding, as the speediest means of averting the present danger, regardless of any future bad consequences that may follow this measure. Experience authorises me to say, that opium in the form of tincture, will, if in a dose proportionate to the violence of the disease, give relief as speedily as venæsection or any other remedy.

It cannot be sufficiently regretted, that the attention of physicians has so seldom been directed to the effects of venæsection beyond the present moment. It surely is not enough, that we can with certainty prognosticate the ultimate event of a disease to be favourable; it is undoubtedly as much our duty, in the choice of our measures for that purpose, to weigh well not only their immediate, but all possible remote consequences which may follow the use of them, as the future health or comfort of our patients, that neither may be endangered.

From the little that has fallen within my own observation, I cannot too forcibly deprecate the use of the lancet in croup. If we could always trace the history of such as have, in infancy, been afflicted much with this complaint, from that period beyond which we are told that "there are no instances of children being affected with it;" I fear that about this time, it will have been too often found, they began to be less active than boys usually are at that age; that they seemed to have acquired a peculiar susceptibility of prevailing diseases, whether local or epidemic;



and not unfrequently that the early stages of manhood were embittered by repeated attacks of Asthma.

I do not mean to contend that such a train of evils is the unavoidable consequence of croup in infancy, or of the method of curing it; I barely hint my suspicions of this being too often the case, from knowing such to have been the fate of individuals of my own acquaintance, none of whom are yet beyond their thirtieth year; and may, perhaps, justify the caution which we have ventured to give, as to the use of venæsection in croup, in which disease my practice, however, has been but small.

With regard to blood-letting in general, as a means of cure in inflammation, synocha, &c. let me ask, whence the necessity of diminishing the quantity of blood in such diseases? or what proof have we, that the quantity of blood being increased, allowing, however, that it actually is so, is this increase of it the cause of the evil? By taking blood away we undoubtedly lessen the quantity of it, but do we really diminish the bulk of the circulating fluids, and contract the size of the blood-vessels? This is but doubtful, for it is more than probable, that from the loss of blood the secretions are diminished, and absorption of moisture\* from the atmosphere increased. From the way in which authors so repeatedly inculcate the emptying of the blood vessels as a necessary measure in the cure of diseases, one would imagine they were speaking of them as mere elastic tubes that dilate or contract in proportion to the quantity of fluid impelled into them, as if they were stimulated into action solely from the quantity of fluid which they contain, independent of the peculiar principle which the blood is known to possess, or their own irritability. The effects which we see blood-letting so instantaneously produce, cannot be explained from the quantity, but the manner in which it is taken away. It may admit of a doubt whether in synocha, the contractile power of an artery, in propelling the blood, is greater than in health: What are our proofs of its being so?

The acuteness of the pains in phlegmasiæ, seem to arise rather from the spasm on the extremities of the arteries, than from

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\* The excessive sweatings that often attend incipient recovery from fever, especially if the patient has been much exhausted by it, as they do not seem to have a debilitating effect, are probably owing to increased cuticular absorption and a retrograde motion of the absorbents.

That the diarrhœa, which also often accompanies great debility, is occasioned by cuticular absorption, and a retrograde motion of the intestinal absorbents, we judge from this, that we have generally been able to check it, even when excessive, by anointing the whole body at bed-time with mutton suet, or hog's lard, which, when omitted before the patient had acquired a sufficient degree of strength, the diarrhœa often returned.

from the dilation of them, or an increased quantity of blood. Exclusively of this, viz. the spasm of the extreme arteries, "as supporting an increased action of the heart and arteries," the blood itself seems to have acquired a new, or a higher degree of its stimulant quality, (perhaps hyperoxygenation) whence the increased irritability, and heat of the whole body. All which, from the known sedative\* powers of opium, naturally point it out as a remedy adapted to the nature of such diseases as are accompanied with synocha, &c. If it is hurtful, how are its ill effects to be explained?

I am well aware with what caution, notwithstanding every fact that can be instanced, to prove the beneficial employment of opium in phlegmasiæ, it will be admitted as a safe practice. If, however, upon a full and candid trial of its use, as recommended, and which can be made, and its degree of credit fairly ascertained in hospitals, this method of curing inflammatory fevers shall receive the sanction of men justly respected for their great professional talents; this will have more influence in determining the public opinion in its favour, and of course bringing it into repute, than either its own intrinsic value, or all the arguments and facts that can be adduced in its favour by an obscure individual†.

The evils which we have already alleged to arise from the injudicious, or too free use of the lancet, though of sufficient importance to merit an inquiry how they may be prevented, are, however, less serious than those which we shall next notice.

From the prevalence of bleeding in inflammatory diseases, some have, either from prejudice in its favour, or from a want of proper discrimination, used it copiously in genuine Typhus, accompanied (as it sometimes is) with thoracic pains, &c. The result of such practice will be obvious. Of this, I saw a mournful instance, not many months ago; and I have heard of other well attested cases of the same kind, all of which proved equally fatal.

\* That I may not afford to the Brunonians an opportunity of cavilling with me about the word sedative, as applied to opium, as this used formerly to be a favourite topic of controversy among them. I shall observe, that Dr. Trotter's explanation of its qualities is, in my opinion, fully satisfactory—"We no longer contend for a sedative power in this medicine (opium) than as a stimulant exhausting the sensorial power."—*Medicina Nautica*, vol. i.

† It is doubtful, if the cow-pox would have been so favourably received by the public, or its progress have been so rapid, if the subject had not been so industriously investigated, and its advantages pointed out by Drs. Jenner, Pearson, Woodville, &c. or some others of equal respectability.



Besides the case of fatal blood-letting, instanced by Dr. Vaughan, in which the death of the patient is so satisfactorily accounted for by Mr. Pulley, Dr. Monro, if I recollect rightly, annually shows to his pupils the arms of three or four patients who lost their lives in a familiar manner.\*

As venæsection has, till lately, been a very fashionable remedy in injuries done to the head, of every kind, I do strongly suspect, that by the indiscriminate use of this evacuation in such cases of violence, in that species of injury particularly called concussion, many lives have been lost. Of this, it is satisfactory to learn, that surgeons seem at length to be convinced, and have now adopted in such cases, a very opposite method of cure indeed, and with manifest advantage.†

Now, if venæsection was in like manner to be discouraged in other kinds of disease, in which it has been found that the use of it may with advantage be superseded, and that done by authority sufficiently respectable to influence the public mind, might we not expect that equal advantages would accrue from the change?

Upon the whole, I think that I am sufficiently warranted from experience, to draw the following conclusions respecting the use of venæsection in the practice of medicine, viz. That it is never necessary, seldom safe, often hurtful, and sometimes fatal.

The blood has justly been styled the *pabulum vitæ*; and so absolutely necessary is it for the preservation of a due degree of health

\* It is not a little surprising how often we hear opinions and discoveries ascribed, exclusively, to the genius and industry of Mr. John Hunter. I allude to Mr. Pulley's assertion, that the disease of which Dr. Vaughan's patient died, was unknown, till Mr. Hunter taught us the nature of it. I have also to notice, an expression of Dr. Drake's, "It has lately been maintained, by the most celebrated Physiologists, among whom, Mr. Hunter stands foremost, that pus is a secreted fluid; as if Mr. Hunter was the first who proposed this theory of the formation of pus; or, that his authority was of sufficient importance to fix the public opinion. If these gentlemen have received any part of their education at Edinburgh, they must recollect to have heard Dr. Monro describe the disease above mentioned with an accuracy that bespoke his thorough knowledge of its nature; as also the morbid appearances on the arms of the unfortunate patients shown to his pupils.

With regard to pus, Dr. Monro's words, are "When an abscess is forming, you may suppose another gland added to the body." We further learn from the late Dr. Gregory's text-book, that he considered pus to be a secreted fluid. Besides, in one of the volumes of the Medical Commentaries, (that, I believe, for 1788 or 89,) there is a quotation from a book published fifty years ago by Dr. Simpson, of St. Andrews, expressive of a similar opinion as to the nature of pus.

† Discourses on the Nature and Cure of Wounds, by J. Bell, page 139.

health and vigour, both of mind and body, that, as every circumstance of blood-letting evidently shews, by taking from the body this important fluid, either copiously or suddenly, we deprive it of a "somewhat" that, probably, is never renewed. Or there is some sudden derangement of the minute organization of the body, that time cannot, or but imperfectly, repair. Though the constitution may from circumstances, such as losing its blood in a slow and gradual manner, or from losing it in small quantities, and at short intervals, be able to conform itself to this reduced quantity with a tolerable share of health, yet that degree of vigour, which required the full quantity of blood for its support, is for ever gone.

Lastly, as all the phenomena of inflammatory fevers evidently point out their seat to be in the sentient system, and which operating as the cause of the irregularity of the sanguiferous, would not our practice be more rational, if it consisted in the use of such means, as from their known powers will most effectually, as well as speedily exhaust the sensorial power, which had been accumulated during the cold stage, previous to the accession of the pulse, increased heat, local pains, &c. instead of then suddenly diminishing, by a large evacuation of blood, the activity of the whole body; on the entire degree of which necessarily depends the secretion or production of this sensorial power in sufficient quantity for the purposes of life? But it may justly be apprehended, that the due production of sensorial power in quantity proportioned to the necessary expenditure thereof by the usual stimuli, thus suddenly interrupted, may never again be acquired.

I am, GENTLEMEN,

Your humble servant,

A. HUGGAN.

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*Mr. REEVE, on a successful Case of Hydrocephalus.*

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

GENTLEMEN,

IF the following case of Hydrocephalus Internus, which occurred in my own child should be deemed of sufficient importance to deserve a place in your very valuable Journal, the insertion of it in your earliest Number, will much oblige,

West Suffolk Regiment,  
Chelmsford, Oct. 26.

Your most obedient Servant

R. REEVE, Surgeon.

The



The subject of this history, at the age of eight months, in the beginning of December, 1798, could stand alone, and had every appearance of a healthy, forward child. His temper was unusually placid, and his spirits invariably good. Towards the end of the month he became extremely costive, and though medicine for a time relieved him, he was frequently and violently seized with pain in the abdomen, which was generally mitigated by a clyster. He had at times a great heat, and apparent uneasiness in the posterior part of his head, and seemed unable to support it; was extremely restless at night, and watchful to an extraordinary degree, all which were supposed to arise principally from teeth. From this time he ceased to grow, except the head, which, towards the end of January, 1799, was perceptibly increased in size, and his costiveness was become so obstinate as scarcely to yield to the most active purgatives. It was this singular state of the alimentary canal, which had existed upwards of six weeks, that first led me to suspect some material derangement in the state of the brain. On the 12th of February, he was convulsed in the night, and there was such an accession of fever that it was thought adviseable to give small doses of antim. Tartaris. till it should have sufficiently cleansed the primæ viæ; but it produced little or no effect. The following day he took castor oil, which was repeated a second time before any motion was procured; the abdomen was very hard, and of an extraordinary size; his stools were of a clay colour, and of such an adhesive nature that they could not easily be separated from his napkins; his urine was frequently high coloured, secreted in large quantities, and gave a yellow tinge to his linen. On the 16th, he was put in a warm bath, afterwards wrapped in flannel, and put to bed; a dose of James's Powder was given him, which occasioned several motions of the above description. He cried incessantly towards evening, shrieked in the most distressing manner, and appeared delirious. His fever now ran very high, pulse frequent, 130 to 140 in a minute; incessant thirst; and he had such a voracious appetite that he would take with indifference either medicine or food. The next day the warm bath was repeated, and some neutral salts and absorbent medicines were given, but apparently with no advantage, the fever still continuing with unabated fury till the 19th, when a mitigation of his sufferings took place, and for a few hours he appeared perfectly easy; but at four o'clock the following morning the fever returned, pulse 130, in which state he continued for several days, and during that time never closed his eyes. In the evening of the 21st he was evidently delirious, his eyes had a most dazzling brightness, and were continually rolling; his cheeks redder than scarlet. On the

the 22d the fever abated a little, but no sleep. On the 23d a drowsiness came on, which continued uninterruptedly till the 28th; he moaned incessantly, tossed his head from side to side frequently, put his hand up to it, ate voraciously, but took no notice of any thing. The nature of the complaint was now decided; the increased size of the head was very apparent, and the veins running up the left parietal bone extremely varicose. On the 29th his drowsiness abated, and he appeared less oppressed. March the 2d, a blister was applied to the anterior fontanelle, and it was determined to give a grain of calomel twice or three times a day, as the stomach and bowels were found to bear it; but it was soon observed to occasion too much pain and irritation to be continued; it was therefore given up for the Ung<sup>t</sup><sub>m</sub>. Hydrarg. fort. of which half a drachm was rubbed in every night. During this time, till the 16th, no material change took place; but his oppression was now increased, and the fever greatly aggravated; he looked death-like pale, moaned much, tossed his head incessantly from side to side, put up his hands to it, coughed violently, vomited a little, and had slight convulsions in the eyelids and muscles of the mouth. All hope at this time of his recovery was lost; he cried a great deal, had much pain in his bowels, which were distended by flatus to an alarming degree, and the only relief that could be obtained was by clysters. He continued in this deplorable state till the 26th, with so little variation that it would be tedious to give the occurrences of each day. The mercurial friction during this period was omitted for a few nights, owing to the excessive irritation he was in, and neutral salts, carminative and absorbent medicines were given, in order to palliate the most distressing and prevalent symptoms. The blister was still kept open, which discharged copiously at the fontanelle. On the 26th he began to revive again, and to appear easy and take notice. At this time a profuse perspiration came on, particularly about the head, which was encouraged by enveloping it in warm flannel. The mercurial frictions were again had recourse to, and the quantity increased to two scruples every night, for the admission of which into the system; the most scrupulous exactness and attention was observed; for several days he continued nearly in the same state. On the 2d of April, his bowels were in excruciating pain, and much distended with flatulency, though every thing that could be suggested, had been done to counteract that tendency. His diet consisted of the most nutritious broths, with little or no farinaceous matter; his strength was supported (when a cessation of feverish symptoms justified the exhibition) by a cold infusion of bark and Madeira: he screamed four hours incessantly, and very



very frequently alarmed those around him, who expected death every hour as a welcome visitor; but on the 3d, the alarming symptoms were considerably abated, and he went on from this time getting progressively better, till the 1st of May. Great hopes began now to be entertained of his recovery; but on that day he shewed great uneasiness—the fever returned—his nights were restless, and though opiates were given, little or no sleep could be procured. On the 5th he was taken sick in the night, had violent pain in his bowels, and was very feverish all day. On the 8th, the fever again abated, and he remained without any material change for many days. It was now judged advisable to discontinue the mercury, which was accordingly done, and the blister healed on the head, but a small one was opened behind the ear. I cannot date the commencement of his recovery, till the period of dentition, which took place on the 4th of June, when an incisor of the upper jaw made its appearance. From this time to the 11th, he continued easy and cheerful; but now his fever returned—he had restless nights—cried suddenly and violently: these symptoms, however, abated gradually, and on the 26th, he was taken into the air, enjoyed it much, and seemed to mend perceptibly. Colliquative perspirations continued for some time, but at length gradually abated, and he began bathing early in September. His head is restored to its natural size, and there is no vestige of disease remaining in that part, except a small elastic projection at the anterior fontanelle, which is more open than it ought to be with a child at his age. I ought to have mentioned, that previous to his illness, a slight curvature of the spine was observed, and has increased considerably with his weakness, and renders him at this time, unable to sit up; but as I conceive this to be a consequence of an affection of the brain, it will be entirely got the better of, as he acquires strength. The lower extremities were also much affected in this disease. He usually lies on his back upon the carpet, and is now able to turn himself from side to side with great activity, and is uniformly cheerful and comfortable. His bowels are quite restored, and he had left off all medicine. The mercurial friction was continued 35 nights, during which time, two ounces, three drachms, and one scruple of the mercurial ointment were rubbed in. It will scarcely be credited, but I appeal for the truth of the assertion to the testimony of Mr. Slater, a surgeon of eminence at Margate; a gentleman as much distinguished for his humanity, as for his abilities in his profession, under whose particular care this very singular case occurred. And here let me pay that tribute of gratitude to which he is entitled, for his unremitting zeal and constant attendance, for  
upwards

upwards of six months in the above very distressing disease; to whose exertions, candor obliges me to acknowledge, I attribute entirely the happy result of the case. The blister was kept open eleven weeks. I have not been particular in mentioning the different medicines prescribed for the various symptoms which occurred from the moment of his first attack; as I conceive they had no tendency, till the mercurial plan was adopted, to occasion re-absorption of the water in the head. His mouth was never much affected by the mercury, though sometimes he appeared to have a difficulty in swallowing. In this case, it was remarkable, that not the smallest dilatation of the pupils of the eyes was observed, through the whole progress of the disease, though he often betrayed much sensibility and uneasiness, on being suddenly exposed to the light.

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*General Remarks on Aliments produced by the different Classes of the Animal Kingdom, and their Influence on the Human Body. • By J. J. VIREY, of the Val de Grace.*

[Read to the Medical Society of Paris, the 7th Messidor, 6th Year.]

Non aer, non pontus, non tellus, denique cuncta  
Sufficiunt nostræ vix elementa gulæ.

THE nature of the aliment with which we are furnished by every species of animals, has not hitherto been investigated with that attention which the importance of the subject requires; either the practical application of chemical knowledge has been neglected, or the opinion of the ancients, that crude result of an obscure and verbose system of physic, has been confounded with facts. Supported by sound experience, we shall attempt to travel over this thorny path with rapidity.

Sed quanto plura restant, quantoque mirabiliora inventu! Illa enim majore parte cibi, aut odoris decorisve commendatis ad numerosa experimenta duxit.

It is erroneous to maintain, that the nutritive quality is principally in the gelatinous substance of animals, since this is much less nourishing than the albuminous substance. The latter, when entirely animalised, requires only a light exercise, and a greater degree of oxygenation, to be converted into fibrous substance; but the gelatinous matter, being analogous



to the mucilaginous substance of vegetables, requires a greater effort of nature for assimilation, and a more considerable separation of hydrogen and carbon. Besides, herbivorous animals cannot endure hunger for any considerable length of time, while the carnivorous can sustain it with less difficulty for several days; for instance, dogs, the different species of cats, birds of prey, and many of the sarcophagous insects.

Though there are some nations who subsist entirely on vegetables, and man being naturally more granivorous than carnivorous, as according to Broussonet, his teeth have the proportion  $= 20 : 12$ ; it would nevertheless be impossible for him to abandon his animal regimen in the northern climates of the globe, without reducing himself almost to dissolution. It is well known that animal food imparts much vigour to man, and that the ichthyophagous nations, such as the Chinese, the Dutch, and others, are very prolific.

The animal substances which yield most aliment, appear to be those which in their structure approach nearest to that of the human form. The less perfect the animal is, the less it yields nutrition to man. This is manifested by examining the series of these creatures, and comparing their different substances. The albumen abounds only in those animals which have red blood, and particularly in those whose blood is warm. In descending the scale of animalisation, the albumen gradually disappears. At first, it is succeeded by a strong jelly, which becomes more and more attenuated in other animals; and that which forms the whole body of the zoophytes, may be said to be an inspissated serum.

The mammiferous animals, and birds with red and warm blood, approach nearest to that of man, and have a considerably larger quantity of albumen, a more substantial jelly, and their muscular fibres abound more with azote and carbon than any of the other classes. The reason of this is, that their blood is of a more fibrous nature, and its proportionate mass is stronger. Their fat contains more of the mild principle discovered by Scheele. But the muscles of all carnivorous animals are too hard, in consequence of their manner of living, and because their humours are too much inclined to putrefaction, to furnish an agreeable and nourishing food. The skins, intestines, and eggs of birds, and aquatic mammiferous animals, have a smell like that of mire, and a disgusting putrescency. They have much blood, and their fat is oily and abundant. The other animals of these two classes, particularly the nibbling and ruminating kinds, as well as the gallinaceous, and sparrows, (birds which Linnæus compares with the last mentioned) furnish the most agreeable and palatable food. The yolk of the  
eggs

eggs of aquatic birds, is proportionably less valuable and delicate than that of other fowls. The milk of animals that chew the cud, is the only kind from which good cheese can be made. It is probable that the digestive organs of this order, which give to their fat the sebaceous consistence, likewise increase the caseous and butyraceous matter in their milk. I have observed that the milk of bitches was rather thick, and had the disagreeable taste common to that of all carnivorous animals.

All flesh of the same class of animals, however, is not equally nutritive. The flesh of young animals affords less nourishment than that of old ones; and this difference is much more obvious in hot than in cold climates. There is also another difference, which consists in the greater or less degree of vigour the aliment of animals imparts to those who use it. This arises from the various degrees of stimulation which animal food exerts in the human body. It is remarkable, that certain kinds of flesh, without the aid of spices, or seasoning, increase the tone and vigour of the system. ATHENÆUS mentions an athletic Theban, who, by living on goat's flesh, became more robust than others who subsisted on pork, which is flabby and too fat. The goat-herds, who eat much animal food, sometimes even in a raw state, are of an athletic constitution. The ancient Germans, the Bretons, the Tartars, or Scythians, the Esquimaux, and even the people of the southern climates, as the Ethiopians and Arabs, confirm this observation. Alexander Selkirk, a native of Normandy, who had been much reduced, acquired an incredible degree of strength by living on raw flesh in the Isle of Juan Fernandez; but relapsed into his former debility, by adopting the regimen of polished nations. The same effect is observable in other carnivorous people. It seems as if a portion of the life of the animal that expires under the teeth of the devourer, passes into his stomach. This diet is particularly necessary to the Northern nations, who require the most powerful stimulants, and part of whose lives is, as it were, consumed by continual cold. We also find several persons, particularly among the Tartar Kalmuks, who have stronger, sharper, and more pointed teeth, and the *molars*, or grinders, sometimes less numerous than among the negroes.\* The prominent teeth of the latter appear to me to indicate a very extensive system of mastication;

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\* BLUMENBACH, in the *Philos. Transact.* 1794, Part II. p. 182, makes some interesting remarks on the form of the teeth of different nations, and on those of the ancient Egyptians, according to their mummies, which still remain. OLEARIUS, *iter Persic. et Moscov.* has also made some observations on the teeth of Northern nations.



mastication; which, independent of the climate they inhabit, proves, that they are designed by Nature to subsist chiefly on vegetables. Hence, the snouts of herbaceous quadrupeds are longer than those of the carnivorous: in short, the latter are more unmanageable, and become more vigorous, according to the quantity of flesh they feed upon. The dog would soon become as ferocious as the wolf, if he lived in a similar manner. The people of the North have always been more courageous, cruel, and ungovernable, than the peaceable inhabitants of the equatorial regions, whom they have often subdued.

The food derived from animals that have perfect organs of generation, however disagreeable it may be to the taste, especially when the blood, under the influence of desire, boils in their heated veins, is a violent stimulant, and increases the muscular action and susceptibility, considerably more than the soft and almost insipid flesh of castrated animals.

The flesh of reptiles, *amphibia*, Linn. presents as great a difference of food as those of the preceding classes. Their bodies contain less albumen, less jelly, and are generally drier; their blood is likewise not so rich in crassamentum,\* and their irritability is more adherent; a circumstance which seems to depend on their organization, and particularly on respiration, and the circulation of the blood.

The fat of sea turtles is green, and their eggs contain so small a quantity of albumen, that the white does not coagulate by heat. The flesh and eggs of the crocodile, smell like musk, and this odour is also found in several serpents, particularly in their excrements. The spawn of frogs is perfectly gelatinous. Besides the singular property of several reptiles, that change their colour by different affections, many striking singularities are discoverable in the use of their flesh. That of the tortoise turtle, *Testudo Caretta*, L. and especially that of the *scinc*, have been extolled as aphrodisiacs. If these animals possess that property, it is probably derived from their feeding on insects, which it is well known, powerfully stimulate the kidneys and bladder. TRNKHA praises the flesh of several reptiles, as efficacious in hectic fever.

It seems to be demonstrated by a number of observations, that the internal use of these animals, carries to the surface of the human body, the different virus with which it is infected, such as the leprosy, and other cutaneous maladies, but particularly the venereal disease. It has also been asserted, that reptiles were

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\* The blood of these animals coagulates only by means of fire.—CERAMELIN, Hist. Avent. Tom. I. p. 99. relates the same of the turtle.

were hurtful in lues, because they occasioned a relapse before it had been perfectly cured.

• It is not my intention, at present, to treat on the poisons of animals, lest they should be confounded with alimentary substances.

Most Mahometans, particularly those of the sect of ALL, consider reptiles as unclean: only the poorest people use them as food; and in the province of Thebes, the lower class of the inhabitants subsist chiefly on lizards.

Mythology informs, us that NEREUS was the first who instructed mankind to feed on fish. These animals have red blood, and vertebræ; they are innumerable, and consequently afford abundant aliment. They are easily caught, are agreeable food, require but little trouble in preparing, and abound in oleaginous substances. Such are the principal advantages which fish afford to the people of Kamtschatka, the Samoiedes, the Dutch, and many other fishing and maritime nations. Numbers of persons eat them raw, smoked and dried, or even frozen and putrid! Others drink large draughts of their nauseous oil with avidity. Could we, in the present age, relish that putrified seasoning, the *garum* of the ancients?

Expirantis adhuc Scombri de sanguine primo  
Accipe foecofum munera chara garum.

MARTIAL.

Several of the western nations substitute for *garum* the *caviare*, or the *botargo* of the Christian Greeks. In the present age, however, we do not gormandize these fish to such excess as the luxurious Romans did. Our modern Pollios have not yet caused their slaves to be devoured by lampreys, and we do not go into mourning for the death of the latter. It has been asserted, that the eggs of some fish, as those of the barbel, are drastic; this error has been refuted by BLOCH. Ichthyologists no longer believe, that herrings sally forth in battle array, from the bottom of the Northern ocean: the sexual impulse alone brings them to our shores. It is the same with salmon, the red flesh of which becomes white, when the act of reproduction is accomplished. Aquatic birds do not digest the eggs of fish, nor do they even deprive them of the power of developing themselves. Nature seems to have appointed those birds to be the disseminators of fish.

The soft kinds of fish, such as the malacopterygians, and chondropterygians of Artedi, afford unwholesome and often putrid aliment, particularly in those torrid regions where there is continual sun-shine: hence the Hebrew legislator forbade the use of fish without scales, as are most of those above-mentioned.

They



They certainly furnish a large quantity of light jelly, especially in their skin,\* and which communicates to their whole body a slimy and rapid taste.

[ To be continued in our next Number.]

*On the Puriform Destruction of a great Part of the Substance of the Brain, without any visible Cause. By*  
*Cit. CHIZEAU, of Nantes.*

[ Extracted from the 34th Number of the *Recueil Periodique.*]

A Child of a very healthy appearance, and whose mother was likewise in good health, had been for four months afflicted with slight indispositions, which were attributed by the mother to the want of milk. The child was in consequence weaned and fed with new cow's milk, a decoction of pearl barley and rice, and a light pap made of wheat flour previously dried in an oven. About fifteen days afterwards it was seized with a cough, accompanied with uneasiness and vomiting of the pap, mixed with slimy matter. The alvine evacuations were regularly performed, but the child did not sleep sound. At this time Chizeau was consulted, who ordered a change of diet, gentle cathartics, and the use of the syrup of ipecacuanha, which produced scarcely any effect. He had intended to apply leeches, but was prevented by the weak state of the child. A good wet-nurse was procured, but the symptoms still continued. The child became dull, its eyes lost their brilliancy, the eye-lids frequently closed, and it seemed to take no notice of surrounding objects. The pupil was dilated, and the iris did not contract at mid-day; its whole frame was less sensible; convulsions often appeared in the eyes, face, and limbs, and at length, a complication of the most distressing symptoms. He then prescribed some antispasmodics; and a small quantity of wine, in a diluted state, as given with a view to support the strength of the body. A fortnight afterwards there appeared on the arm and left hand a light tumour, which much impeded the motion of those parts; the left eye was nearly closed; the child seemed to see indistinctly, and could not suck. The last means employed were

\*OLAUS BORRICHIVS has discovered in the cod more carbonat of ammonia (concrete volatile alkali,) than in any terrestrial animal. Hence he concludes, that fish possess most hydrogen, and the other animals most azote.

were pectoral syrups, a little milk, chicken broth, with emollient clysters, and a small blister to the region of the stomach; this application was directed with a view to stop the hiccough, which suddenly increased, and much fatigued the child. As little benefit was expected from these remedies, the patient died, after languishing six weeks, at the age of nine months and a half.

On opening the cranium, at the moment of separating the occiput, a quantity of limpid water issued forth. The left hemisphere and ventricle of the brain were perfectly sound, but the dura and pia mater were thick and inflamed in the part corresponding with the right hemisphere; the cortical substance was found, and interspersed with spots similar to those of an inflammation; but the greatest ravages had taken a deeper seat: the whole of this hemisphere was one purulent mass, without smell, and had not the smallest trace of its natural organization. The tentorium cerebelli appeared changed, and on lifting it up, it was found to contain a quantity of limpid fluid, which issued through the foramen ovale, along the medulla oblongata and spinalis. The abdomen had also undergone some change: the stomach and the small intestines were shrivelled; the larger, on the contrary, appeared distended and inflamed; in consequence of which the bladder contained a quantity of urine.

What is the cause of so many diseases, which do not originate from any blow or external injury?—This is the question addressed by Cit. Chizeau to observers; an answer to which may be of great utility, as will appear by the following details.

*Extract from the Proces-verbal of the Sitting of the 22d Prairial, Seventh Year, containing the Observations and Reflections of the Members of the Society, on the foregoing Observations.*

A member stated, that he knew a citizen, who was the father of four children; the eldest of whom, after having enjoyed a good state of health till he was nearly four years of age, fell into a state of languor and debility, which brought him to the grave: this disease arose from hydrocephalus. The second continued in health till he attained the same age, when he also fell sick, and died; though blisters, cauteries, and other appropriate means were employed. When the third child was two years old, a cautery and seton, as well as various remedies, were unsuccessfully tried, and its life could not be preserved. The fourth child is now three years and a half old; it enjoys good health, but its parents are in the greatest anxiety.—What means ought to be adopted to prevent the danger which threatens this child?

Another member knew a healthy father and mother, who lost  
three



three children successively in a similar manner: he likewise wished to obtain some useful hints from the deliberations of the Society.

Several persons gave their opinion. One of the members observed, that the disease in question was endemic at Geneva; but the causes and prophylactic treatment of it were not discovered. Another member supposed it to proceed from an organic defect. It was unanimously proposed to keep the belly at liberty; to produce an abundant perspiration; to employ the actual cautery; to apply the *moxa* to both sides of the neck; to remove children threatened with this disease to a pure and dry country air, and cover their head entirely with a blister. The two last means had been unsuccessfully tried on some of the patients above mentioned.

There are two distinct species of dropsy of the brain; one is produced by relaxation; the other by an inflammation, often occasioned by the effort of nature in dentition; or sometimes in consequence of metastases from *tinea capitis*. The former cause brings on a serous discharge; the latter produces suppuration. In the first case, diaphoretics, dry frictions, depuratives, tonics, and cauteries, are indicated; in the second, the antiphlogistic treatment, leeches, and revulsive remedies are proper.

### *A Concise History of the Principal Discoveries in Anatomy.*

[Extracted from the original German of Prof. CURT. SPRENGEL's History of Medicine, Vol. III. Sect. XI.—Continued from our preceding Volume, p. 463.]

AFTER having pointed out the individual merits of the most celebrated anatomists in that century, given a general account of their respective works, and examined the progressive discoveries and improvements made in *osteology*, *myology*, and *angiology*, particularly relative to the circulation of the blood, and the knowledge of the lymphatics, we now proceed to the no less important subject *splanchnology*.

§ 24. The nature of the peritoneum and its processes puzzled the anatomists of this century considerably, and yet they could not attain to any degree of accuracy. MASSA described it, and likewise the mode of exenterating, but both unsatisfactorily.\* It

It was generally believed, that the peritoneum were perforated in the annulus abdominis, and that, at least, none of its processes accompanied the descent of the testes. Even VESALIUS was of this opinion.\* SYLVIVS, his vehement adversary, was at least this time perfectly right, in opposing the sanctioned error, and proving that the peritoneum frequently is not perforated in those places. It is singular, however, that this strenuous vindicator of the old school did not venture to draw any general results from his own observations, but would rather ascribe to præternatural causes what must always be considered as the common course of nature.† FALLOPIUS likewise explains the origin of ruptures, especially in the female sex, from the elongation of these processes of the peritoneum.‡—The duplicatures of the peritoneum around different viscera are well described by COLUMBUS.§ VESALIUS was the first who accurately represented the duplicatures, which constitute the omentum, and their continuation with the stomach, the spleen, and the colon, demonstrating particularly that the omentum in men never descends so much, as GALEN observed in quadrupeds: he gave a good description of the *appendices epiploicæ* of the colon. || But FABRICIVS wrote a very full account of the omentum,\*\* with a detail of its origin from the region of the spine; its oblique descent towards the stomach; its connection with the *lobulus Spigelii* of the liver; its adhesion to the colon and to the spleen, and the retortion of one lobe upwards to the umbilical region.

With respect to the *stomach*, VESALIUS corrected GALEN'S error, who maintained, that the neighbourhood of the lower orifice of the stomach was closed by a glandular substance. VESALIUS admitted its existence in dogs, but at the same time he first described the real nature of the orifice, and particularly the sphincter pylori,††, which afterwards was copied by GUIDI‡‡. As to the *liver*; the processes, which the peritoneum sends off to the liver, were already observed by BERENGAR, though he considered them as a separate membrane, and did not sufficiently distinguish them.§§ The old idea of the liver being divided into four or five large lobes, which undoubtedly originated from dissections of dogs, was still retained by BERENGAR. ||| But MASSA adopted one single fissure, which, however, did not divide the whole

\* Lib. v. c. 2. p. 414.

† Fallop. observ. p. 408.

|| Vesal. de radic. chyn. p. 643.

†† Vesal. lib. v. c. 3. p. 417.

§§ Comment. in Mundin. f. 144, b. ||| Ib. f. 145. a.

† Sylv. observ. f. 71. b.

§ Lib. xi. c. 11. p. 433.

\*\* Fabric. de omento, p. 123, 124, 3.

†† Vid. lib. v. c. 5. p. 338.



whole liver, but only formed two lobes.\* VESALIUS treats at large of this subject, and observes at the same time, that the form of the liver, and its divisions, are subject to several deviations, and do not constantly present the same appearance.† SYLVIVS admitted, that there were only two principal lobes of the liver, but that two smaller ones were frequently observed, which consequently made four.‡ PUTEUS pretended that he had found five lobes in the liver of a prince of Savoy :§ but COLUMBUS sufficiently refuted this opinion.||—On the biliary ducts, ZERBI made the observation, that they partly convey the bile into the stomach.¶ VESALIUS had likewise observed the same, but justly considered it as a deviation.\*\* FALLOPIUS appears, notwithstanding, to doubt the truth of this observation, as he had never made it himself.†† The valves, which DU LAURENS imagined he had found in the ductus communis choledochus,‡‡ have not been verified by experience, as little have the immediate ducts from the liver to the gall-bladder, which JASOLINI, a pupil of INGRASSIAS, described and even represented in engravings.§§ Probably these figures were taken from the livers of fishes and birds, in which we find such ducts.||||

§. 25. It has now and then been supposed, that the anatomists of the sixteenth century, knew the *pancreas*, as they make use of the name; but what they denominate thus, is nothing but a congeries of glands, in the centre of the mesentery, which WINTHER VON ANDERNACH describes, in a manner not at all correspondent to our pancreas.¶¶ SYLVIVS gives a similar description of this viscus.\*\*\* With FALLOPIUS also, this name signifies a collection of small glands in the middle of the mesentery, for the purpose of transmitting the splenic vein from the spleen to the vena portarum.††† VESALIUS‡‡‡ and COLUMBUS§§§ describe this viscus in a similar manner; the former even asserts, that the pancreas is covered with the duplicature of the omentum.|||| FALLOPIUS carefully examined the inner coats of the intestines, and described the folds of which they are formed.¶¶¶ BERENGAR first accurately described the *cæcum*,\*\*\*\* with its adhering process, and made the remark

\* Introduct. f. 27. a.

† Sylv. ifag. p. 70—Vesal. calumn. depuis, p. 111.

§ Apolog. pro Galen. f. 135. b. ¶ Lib. vi. p. 299.

¶ Zerb. Anatom. p. 34.

\*\* Lib. v. c. 8. p. 436.

†† Obs. p. 145.

‡‡ Lib. vi. c. 20. p. 471.

§§ Jafolini de poris choledochis, p. 55. (4to. Neap. 1577.)

|||| Haller Element. Physiolog. vol. vi. p. 532.—compare Fallop. obs. p. 415.

¶¶ Instit. Anat. lib. i. p. 26.

\*\*\* Ifag. f. 179. a.

††† Obs. p. 414.

‡‡‡ Lib. v. c. 4. p. 420.

§§§ Lib. xi. c. 6. p. 425.

|||| L. 3. p. 422.

¶¶¶ Obs. p. 412.

\*\*\*\* Comment. in Mundin. f. 115. a

mark confirmed by MORGAGNI,\* that sometimes no cavity is observed in this appendage, which he believes to be the case, particularly in persons who have habituated themselves to excessive eating. VESALIUS corrected the erroneous opinion, which prevailed since the time of GALEN, that the *cæcum* constituted so spacious a cavity, as to induce anatomists to consider it as a second stomach. He shewed, that the process that adhered to the *cæcum*, was smaller in men than in carnivorous animals, from which, apparently, GALEN borrowed his description.† MASSA‡ and SYLVIVS,§ likewise represented the appendage of the colon, better than their predecessors. The latter, notwithstanding, seduced by his predilection for GALEN, explained the cases which occurred to him, as preternatural. FALLOPIUS compares the *cæcum* of men, in regard to its small size, to a lumbricus, and reckons it as a part of the colon.¶ FABRICIVS very properly distinguishes the size and situation of the *processus cæci vermiformis* in men, and in different kinds of animals; but makes it also a part of the colon.¶

This idea, that the *cæcum* appertained to the colon, probably arose from the circumstance, that, by closer examination, the process of the former, proved to be so uncommonly small, in comparison to the description of the ancients: hence, also the reason, why the valve in the commencement of the colon, which was early discovered, was referred to the *cæcum*. Besides ACHILLINI, who speaks rather obscurely of this famous valve,\*\* LAGUNA describes it a little more distinctly;†† after him FALLOPIUS, from observations made on apes;‡‡ then VAREOLI,§§ who arrogates to himself the discovery of it; then POSTHIUS,||| who saw it at Montpellier, where he dissected under RONDELET; after him, SALOMON ALBERTI, in the year 1563; ¶¶ and lastly BAUHIN, who observed this valve in 1579. The two last mentioned anatomists first furnished us with representations of that valve.\*\*\* Although DU LAURENS informs us, that BAUHIN is the discoverer, it is well ascertained, that he only can claim the merit of having given the first detailed and good description of this valve; and that

HALLER

\* De sedib. et caus. morb. ep. LXVII. n. 11.

† Lib. v. c. 5. p. 426

‡ Introduct. p. 21.

§ Obs. f. 71. b.

|| Instit. Anat. p. 433.

¶ De Intestin, p. 147.

\*\* Annotat. in Mundin. Anatom.

†† Lacun. Anatom. Method. p. 16.

‡‡ In a MS. never printed, and of which Blumenbach gives an account in his Medicin. Bibliothek, (in German) vol. i. p. 373.

§§ Anatom. lib. ii. c. 3. p. 70. ||| Obs. in Columb. p. 54.

¶¶ Hist. part. corp. lum. p. 49, 174.

\*\*\* Theat. Anat. lib. i. c. 17. p. 63, 64. Institut. Anat. p. 40.



HALLER is very wrong,\* in referring ALBERTI's observation to the year 1589,† when the latter expressly says, he has observed this valve, twenty-one years prior to that period, dating the preface of his work with the year 1585. Nor does HALLER's quotations of GUIDI,‡ give a better test of the existence of this valve, since that only refers to the folds, formed by the inner coat of the intestines. PICCOLHUOMINI described the valve, the next after BAUHIN;§ as FABRICIUS likewise did.||

§26. The uropœtic vessels were first examined by BERENGAR. His object was to decide the question, chiefly suggested by ZEBRI, whether the urine was parcolated and secreted in the kidneys, in a manner similar to a filtre. In order to ascertain the fact, BERENGAR instituted the following experiment: he fixed a tube in the emulgent arteries, and injected the basin of the kidneys with warm water, but nothing passed into the ureters; he then dissected the kidney, and found that the finest branches of the emulgent arteries did by no means inosculate with the branches of the tubuli uriniferi, as was supposed before him; but that they diverge in the papillous substance: he also properly described these papillæ.¶ Next to BERENGAR, the observations of EUSTACHIUS on the kidneys, have much promoted the true knowledge of these viscera. In determining the situation of both the kidneys, he deviated from all his predecessors; and maintained, that the right kidney seldom lay higher than the left; that their situation is for the most part constant, and sometimes even the left kidney a little higher than the right.\*\* VAROLI acceded to this opinion.†† EUSTACHIUS likewise first described the glands, situated above the kidneys, now known by the name of *glandulæ renales*, or *renes succenturiati*; ‡‡ he accurately demonstrated the adipose membrane of the kidneys,§§ and justly censured those authors, who, misled by zootomy, adopted several cavities in the substance of the kidneys;||| he was more successful with BERENGAR's experiment of injecting the emulgent arteries; the liquor passed into the ureter; which

\* *Laurent Hist. Anatom. lib. vi. c. 14. p. 429.*

† *Element. Physiol. vol. vii. p. 132.*

‡ *Vid. lib. v. c. 5. p. 237.*

§ *De Intestin. p. 142.*

¶ *Anatom. Prælect. p. 86.*

|| *Comment. in Mundin. f. 178. b. 179. a.*—It ought to be remembered on this occasion, that BERENGAR could have no idea of the peculiar function of the veins, as he ascribed to them secretion.

\*\* *Eustach. de renum struct. c. 12. p. 31.*

†† *Vavoli Anatom. lib. iii. c. 7. p. 79.*

‡‡ *Eustach. l. c.*

§§ *ib. c. 4. p. 11.*

||| *ib. c. 9. p. 24.*

which induced him to decide in favour of the ancients, that the urine was secreted from arterial blood.\* He demonstrated admirably, that the substance of the kidneys is interwoven with many nerves, is exquisitely sensible, and that no valve exists at the orifice of the ureters;† thus refuting inveterate prejudices. FALLOPIUS likewise made the important discovery of tubes in the papillous substance of the kidneys,‡ which had erroneously received its name from BELLINI. MASSA§ at first, and after him, EUSTACHIUS|| more perfectly demonstrated, that the ureter consist only of one membrane. For the discovery of the *sphincter vesicæ*, we are indebted to FALLOPIUS: ¶ the description of this muscular body by VESALIUS being such, that one might rather take it for a lateral muscle of the prostate gland, than a sphincter.\*\* But VAROLI represents the sphincter properly, after FALLOPIUS.††

§ 27. On the parts within the cavity of the thorax, we shall only remark the following. The great process of the pleura, called *mediastinum*, was first accurately examined, and distinctly described by VESALIUS. He particularly pointed out the error of the ancients, who admitted a cavity, formed by the septum and in which a part of the lungs was contained. This cavity, says VESALIUS, really exists in different animals, endowed by Nature with more divided lungs; but in men, the interstice between the two membranes of the mediastinum is partly filled up with cellular texture, and this cavity only relates to the region under the sternum,‡‡ where it can be well demonstrated by inflation. EUSTACHIUS, in his drawing of the mediastinum, has erroneously represented its membranes as exactly parallel, whereas they join in the anterior and inferior part, but are separated in the superior and posterior part, by the thymus gland.§§ VESALIUS demonstrated the single structure of the pleura, and thus corrected the error of Galen, who had enriched it with a double membrane. But COLUMBUS,||| who, like GALEN, took the external cellular texture for one of the membranes of the pleura, rejected the opinion of VESALIUS, and the erroneous idea of COLUMBUS has been adopted and spread, till it was completely refuted by WINSLOW.¶¶ VESALIUS so frequently

\* Eustach. c. 37. p. 94.

† Fallop. obs. p. 415.

|| L. c. c. 19. p. 52.

\*\* Lib. v. c. 11. p. 445.

‡‡ Lib. vi. c. 3. p. 495. seq.

• §§ Eustach. tab. xv. f. 1. Compare Haller elem. physiol. vol. i. p. 261

||| Columb. lib. xi. c. 3. p. 414.

¶¶ Exposition anatom. de la structure du corps, tom. iv. p. 86.

† Ib. c. 20. p. 56, 57.

§ Introduct. p. 22.

¶ Fallop. obs. p. 412.

†† Anatom. lib. iii. c. 7. p. 81.



frequently observed the lungs adhere to the pleura after death, that he was thence induced to conjecture *ligaments of the lungs*.\*

In the *larynx* BERENGAR discovered both the *arytænoïd cartilages*, as only one was known before his time; and likewise a muscular substance, probably the *arytænoïd gland*.† Nay, VESALIUS and FABRICIUS describe even two thyroid glands, either as a deviation in the human species, or from their observations on animals.‡ The first good description of the *ventriculus laryngis* was given by COLUMBUS.§ The muscular fibres which occupy the posterior part of the larynx, and assist the office of the anterior cartilages, were considered as ligaments by the anatomists of those times.||

§ 28. On the parts in the cavity of the mouth, we shall here mention only the remark of FALLOPIUS, that the *uvula* does not belong to the soft palate, as we were taught by the ancients, nor does it serve to modulate the voice, as was then the general opinion.¶ All the anatomists of the sixteenth century were acquainted with the orifice of the *Warthonian* salival duct under the tongue, which had been described by GALEN. We find an account of it in the works of ACHILLINI\*\* and BERENGAR†† BAUHIN seems to have discovered the *Stenonian* duct.‡‡

In the human eye, the organs of secretion and the lachrymal ducts were now first examined with accuracy. BERENGAR knew the *puncta lachrymalia* to be orifices of the *cornua lachrymalia*. He observed in them a flocculent membrane, which served to restrain the tears; from these lachrymal ducts, according to him, the tears flow through the ducts of the nasal bones into the nostrils and fauces, which is the reason why we perceive the odour, and sometimes the flavour of this fluid. §§ ZERBI knew before this time the *puncta lachrymalia*;||| but the first anatomists of this century, nay, even COLUMBUS, misled by zootomy, adopted a double lachrymal gland in the human eye, mistaking the caruncle for the second, although it has no connection with the ducts between which it is situated.

VESALIUS,

\* Lib. vi. c. 7. p. 504.

† Comment. in *Mundin.* f. 393. b.

‡ *Vesal.* lib. ii. c. 22. p. 214. *Fallop.* obs. p. 452.

§ *Columb.* lib. i. c. 13. p. 83.

|| *Vid.* lib. vi. c. 4. p. 280.—*Laurent.* lib. iii. c. 9. p. 193.

¶ Obs. p. 382.—*Instit. anat.* 452. \*\* *Annotat. in Mundin.* p. 11.

†† *Commentar. in Mundin.* f. 401. b.

‡‡ *Theatr. anat.* lib. iii. c. 89. p. 520.

§§ *Berengar.* comment. in *Mundin.* f. 467. b.

||| *Anatom.* f. 121. b.

VESALIUS\* first removed this error: He distinguished the great lachrymal gland, situated above the external angle of the orbit, from the caruncle; determined the use of the latter, by maintaining that it served to convey the tears into the lachrymal ducts, and to separate the eyelids; he also described the semilunar membranes which expand before it, and form in some animals a third eye-lid.† MASSA likewise carefully distinguished these two bodies.† FALLOPIUS still more exactly represented the course of the cornua lachrymalia into the sacculus lachrymalis, and thence into the ductus nasalis; § as likewise TAGLIACOZZI, who vindicated the true destination of the lachrymal caruncle.¶ GUIDI mentions the rudiment of a third eye-lid in man, by the name of a small cartilage; ¶ and SALOMON ALBERTI\*\* adopted the discovery of his predecessors, and described admirably well, for the age in which he wrote, the secretory organs of the tears. FABRICIUS, after such predecessors, ought to have given a more accurate account of the parts before-mentioned; he is therefore less intitled to our praise.††

The tunica albuginea of the eye, the more ancient anatomists supposed to be derived from the periosteum of the orbit: MASSA was the first who corrected this error.†† FALLOPIUS first described the ciliary processes, and maintained that they ought not to be called membranes: He discovered the capsule of the vitreous humour, or hyaloidea (*tunica hyalina*), and determined more accurately the figure of the crystalline lens. §§ VESALIUS was still undetermined both as to the figure, and the true use of this substance. ||| He also adopted an equal proportion of the diameter of the humours in the eye, a conjecture in which he was refuted by ARANZI. ¶¶

[ To be continued in our next Number.]

\* Lib. x. p. 399. 400.

† Introduct. p. 91.

|| De curtor. chirurg. lib. i. c. 7. p. 24.

¶ Vid. lib. ii. c. 10. p. 69.

\*\* Alberti Orationes. 8. Norib. 1585.

†† Introduct. p. 92.

||| Lib. vii. c. 14. p. 559.

† Exam. observ. Fallop. p. 826.

§ Obs. p. 426.

†† Fabric. de oculo, p. 198.

§§ Fallop. obs. p. 427.

¶¶ Obs. c. 20. p. 69.



## HINTS AND IMPROVEMENTS.

IN THE PRACTICE OF

## MEDICINE, SURGERY, AND PHARMACY.

*On the Medicinal Effects of the Carbonat of Potass, or Salt of Tartar, in Puerperal Fever: by Citizens ALLAN, DEYEUX, GILBERT, et LAFISSE.*

[Extracted from a Memoir of Cit. GUINOT, inserted in the xxxviith Number of the Recueil Periodique de la Societe de Medecine de Paris.]

CITIZEN GUINOT divides this important paper into two distinct sections: the first contain the theory on which the author has founded his practice; and the second consists of eight observations on cases selected from a number of patients whom he had under his care.

He observes, that being little satisfied with the principal works published on puerperal fever, he has for a long time employed himself in making new inquiries into this subject. The result of several experiments has induced him to consider the real cause of this dreadful disease to be *a predominance of acid*.

1. He took the urine of women attacked with puerperal fever, and diluted it with distilled and filtrated water. It imparted to the solution of turnsol a deeper red than that produced by the same dye, mixed with the urine of a healthy person, or of a woman recently delivered without accident. These experiments being several times repeated, uniformly gave a similar result.

2. He observed, that in puerperal fever an ichor sometimes flows through the vagina, which has an acid smell, similar to that of milk which is beginning to turn sour.

3. The humour, partly lactiform, and partly casiform, found in the abdomen of women who have died of puerperal fever, has likewise an acid smell; and, when diluted with distilled and filtrated water, it gives a red colour to the solution of turnsol, which leaves no doubt of its acidity.

The abovementioned experiments induced the author to imagine that alkali would either neutralize the superabundant acid, or prevent its formation. Having learnt that LEVERET successfully

fully used the carbonat of potass, internally as well as externally, against metastases of the milk formed under the skin, he thought the same means might be advantageously employed in such lacteous metastases as happen in the abdomen, or other parts, in puerperal fevers.

Wishing to be more confirmed in his opinion, the author triturated the caseous substance which commonly covers the exterior surface of the intestines of women who die of the disease alluded to, with a given quantity of the carbonat of potass, and observed that substance adopt the appearance of a milky fluid. He also tried white cheese, as well as most other cheeses known at Paris; by adding water and the carbonat of potass, they were completely dissolved. Having mixed several sorts of milk with this alkaline substance, he boiled them and left them exposed to the heat of the sun, without being able to make them curdle; in which, however, he immediately succeeded, when he repeated the experiment with milk, unmixed with the carbonat of potass.

Being thus convinced that puerperal fever arose from a superabundance of acid, and that the carbonat of potass would be an excellent means of cure, Cit. Guinot, after several successful experiments, exhibited from ten to thirty-six grains a day, not only in puerperal fever, but in all diseases connected with the secretion of milk in the female breast.\*

He also employed soaps and alkalis externally, without neglecting other remedies indicated by the circumstances and symptoms of the case.

[ To be continued in our next Number. ]

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\* The effects of the salt of tartar in diseases of child-bed women are well known, both in England and Germany. Induced by the example of several physicians on the continent, Dr. W. has frequently prescribed from 25 to 30 drops of *Ol. Tart. per deliquium*, to be taken two or three times a day, in a cup of strong mutton or veal broth, with singular success. This remedy often afforded speedy relief from tingling pains in the breasts of young mothers, who were nursing their first or second children, and had either mismanaged, or neglected to secure their breasts in cold weather. He has also recommended it in a late case of a woman who was troubled with callous and painful breasts from external injury, so that she was apprehensive of an incipient cancer. Here the exhibition of the abovementioned medicine afforded more effectual relief from pain than opiates, though it did not eventually remove the complaint.



*On a new Species of Salt, and its Use in the Tréatment of several Diseases. By Cit. CHAUSSIER.*

[Abstracted from the Recueil Periodique, No. xxxvii. p. 23 and seq.]

AFTER some general reasons advanced by Cit. Chaussier, to prove that sulphur deserves much attention in the practice of medicine, not only because that substance is found in the membranes and fluids of organized bodies, and is the cause of several phenomena; but also, as it furnishes several compositions which are used with advantage both in the arts, and in the treatment of diseases, he presented to the Society a new species of salt, which differs considerably from the sulphats, sulphites, and sulphurs. The properties of this salt are very remarkable, from the state and nature of its component substances, as well as from the manner in which they are united.

This salt is a combination of hydrogenated sulphur with soda; in which the sulphur is found in considerable proportion, and the hydrogen serves as the medium of union, while it in some degree imparts the property of an acid.

The new salt is formed spontaneously in manufactories where, with a view to obtain soda for exportation, the sulphat of soda, or Glauber's salt, is decomposed according to the process suggested by Citizens MALHERBE, ATHENAS, and ALBAN. This process is adopted in the manufactory of Cit. PAYEN, and consists in melting, in a reverberatory furnace, the sulphat of soda with a certain quantity of carbon and filings of iron. As we cannot at present give our readers the whole course of this process, we shall content ourselves with stating, that the sulphurated hydro-sulphur of soda is found in the residuum of the leys, when they no longer yield the carbonat of soda by ebullition. As these mother-leys still contain a certain quantity of caustic soda, they are collected and preserved in the manufactory with the intention of extracting from them the remaining sulphat of soda. After standing for some time, a crystallization more or less abundant is formed in the midst of the alkaline residuum of these leys; but the crystals are not a carbonat of soda, as might at first be supposed; nay they are entirely different in their form as well as their composition. Much care should be taken not to mix them with the soda already prepared; as they render it impure, give it a sulphureous smell, and make it unfit to be used in several pharmaceutical and other preparations. In short, this new salt is the sulphurated hydro-sulphur of soda. As, in the first crystallization, the salt is yellow, and soiled, or tinctured

tinctured by a blackish powder attached to its surface, it is necessary to dissolve it in a certain quantity of water, and after it is filtered, and nearly dissolved, it is put in a cool place to crystallize. Thus purified, this salt is distinct from all others in many of its properties, of which the following are the principal:—

1. It forms large, brilliant, colourless, and transparent crystals, in the form of a quadrangular prism, terminated by an hexagonal pyramid.

2. It does not change the blue, violet, or yellow colours of test papers; hence it is a perfectly neutral salt.

3. It has a fresh taste, which soon becomes slightly bitter, and leaves in the mouth a sensation like that imparted by hydrogenated sulphur, which remains for some time.

4. When exposed to the action of air, it preserves its form and properties; it neither crumbles into powder nor deliquesces; in short, it does not change into a sulphat, as is the case with salts formed by the combination of the sulphureous acid with an alkaline basis.

5. A crystal of this salt placed upon red hot coals quickly melts, bubbles, becomes dry, and at length burns with a blue flame, which emits a sulphureous smell.

6. It is insoluble in alcohol; a sort of crystallization may be instantly obtained, by pouring alcohol on an aqueous solution of this salt.

7. Cold water dissolves nearly thrice its weight of this salt: the solution is limpid and colourless.

8. If crystals of this salt be exposed to the fire in a retort, they melt in temperature of  $32^{\circ}$  of the new *Thermomètre centigrade*.

9. If the crystals of this salt be distilled in an apparatus with mercury, the whole produce carefully collected, and the atmospheric air excluded, a certain quantity of water is first obtained; a portion of sulphur is afterwards sublimed, and a sulphuret of soda remains in the retort, which, like other combinations of this kind, is soluble in water, changes when in contact with air, but during the whole operation no gas is discharged.

10. This salt decomposes metallic solutions, and forms two new compounds. The solvent acid combines with the soda, and the hydrogenated sulphur unites with the metallic substance.

11. All acids decompose this salt, by displacing its soda which forms an essential part; but some of them in their action present peculiar phenomena.

A. If sulphuric acid be poured on the crystals of this salt, the mixture almost immediately boils; there is likewise heat and a



discharge of sulphurated hydrogen gas, and sulphureous acid gas; there at length remains a sulphat of soda, incrustrated with a yellow, flexible, and soft pellicle of sulphur.

B. A discharge of hydrogen gas and sulphureous acid likewise takes place, when the sulphuric acid is poured on an aqueous solution of this salt; and the sulphur alone is precipitated in a very fine powder.

C. Similar results are obtained, with little difference, by the nitric and muriatic acids.

D. The sulphureous acid decomposes this salt, and precipitates a sulphur.

E. The acetous, tartarous, boracic, and oxalic acids, arsenic, &c. also decompose this salt, and precipitate a sulphur, but without causing any sensible discharge of gas. Some of these decompositions present phenomena, which Cit. *Chaussier* proposes to publish at a future period. We shall only remark, that according to him the gases obtained by the affusion of acids, are not always the same, but are in proportion to the greater or less affinity which the acid bears to water, or to the facility with which it is decomposed: and though by the affusion of some acids a discharge of sulphureous acid gas is obtained, and this salt is immediately formed, as has been already stated, by combining a sulphite of soda with sulphurated hydrogen, &c. yet, when the combination is made, no acids any longer exist, at least they cannot be discovered by these processes which appear the most certain. In short, if a small quantity of a solution of barytes in water is poured into an aqueous solution of this salt, no precipitation, or perceptible change takes place, except that in a few seconds the liquor grows yellowish, which indicates a new combination of sulphur; the liquor becomes alkaline, and reddens paper prepared with curcuma. If a larger quantity of the water of barytes is poured on, in a few minutes there is a saline crystallization formed, which adheres to the sides of the vessel, and the liquor becomes more and more alkaline. At length the salt is entirely decomposed; the barytes combines with the hydrogenated sulphur, and the soda, pure and caustic, remains dissolved in the water.

12. From these and analogous experiments it is ascertained, that the component parts of this new salt are in the following proportion:

Hydrogenated sulphur	—	—	34	9
Soda	—	—	24	6
Water	—	—	40	5
				<hr/>
				100
				<hr/>

Cit. Chauffier has employed this salt with advantage in the treatment of inveterate herpetic affections, which were not accompanied with fever, or inflammation; it may also be prescribed in some diseases of the viscera, arising from metastases, or the repulsion of a ploric and scorbutic virus.

It may be prescribed for internal use, in doses of from 30 to 40 decigrammes, either dissolved in water, or made up in pills. As this salt contains sulphurated hydrogen, it may be used with advantage as a substitute for the sulphureous mineral waters, which are brought at a great expence from distant places, and consequently lose their efficacy. It may be employed in shower baths, lotions, or potions.

The internal use of this salt should always be commenced with small doses, and gradually increased. Cit. Chauffier preferred the use of it in pills of three decigrammes, or about six grains, made of the crumb of bread, and ordered ten or eleven to be taken every morning and evening. He also mentions that he cured, by this remedy, a venereal affection, attended with two exostoses, flying pains, and a great number of spots and pustules on the skin.

The efficacy of this remedy is promoted by ptisans, and other drinks proper for the patient. In short, it is with this as with other medicines, which are only efficacious according to the method in which they are employed, the proper time of their application, and the aid which their operations receive from regimen.

This salt is sold at the manufactory of Cit. Payen, and at Cit. Pelletier's, apothecary, in Jacob-street.

### Pharmaceutical Processes.

Cit. Bouillon Lagrange read a Memoir on the Analysis of the *Cassia senna* of Linnæus.—A great number of experiments on the leaves of this plant, which is frequently used in medicine, have convinced the author, that his analysis differed little from that of the bark. He thinks, that the same result will take place with all dry vegetable substances treated in a similar manner, and that ligneous vegetables produce the same effects, when treated with the same re-agents; so that one analysis of this kind, well performed, may serve as a precedent for all others of an analogous nature. As to the manner of employing the senna, Cit. Lagrange, in every instance, advises a cold infusion to be made, and not to combine it with acid tinctures and spirituous liquids, which change the nature of this medicine by oxygenating the saponaceous principle, which, by that means, acquires



acquires the nature of resins. This change makes it act differently on the animal œconomy; it then occasions violent colics without purging, while in the former case it purges without griping.—*Rapport Général des Travaux de la Société Philomatique de Paris*. Vol. I. p. 53.

Prof. LICHTENSTEIN proposes the following method of preparing nitric æther, *without the application of fire*. Having placed a tubulated retort in snow, or cold water, with a proportionate receiver, fastened by a soft bladder, and provided the apparatus with an air tube, you fill it with three parts of alcohol, and gradually add two parts of nitrous acid; you then close the retort with a glass stopper, tied on with a wet bladder. The mixture soon begins to effervesce and boil, air bubbles are disengaged, and fill the receiver with a vapour, which, when condensed into a fluid, yields nitric æther. The precaution of furnishing the apparatus with an air tube, is, on account of the elastic fluid disengaged during the process, always necessary, to secure the operator from the danger of the vessel being blown to pieces; a circumstance which is likewise confirmed by the experiments of Prof. Gottling, *Berlin Jahrbuch für die Pharmacie*. B. III. p. 222.

Prof. LOWRZ has discovered a very easy method of *depriving æther of its alcohol*, which will prevent the necessity of its frequent rectification, always attended with loss. On pouring the æther charged with alcohol upon dry muriat of lime, and sufficiently agitating the whole, the alcohol is absorbed, and the æther brought to such purity and perfection, that its specific gravity at the temperature of  $+20^{\circ}$  Reaum. is  $= 732$ . If it be a second time distilled over dry muriat of lime, it will sink even to 716. During the rectification, the æther arises in the form of gas, and the receiver ought to be cooled with snow water, or ice broken small, in order to condense it into drops. *Gren's Journal*, B. III. p. 313.

The method of *rendering alkalis caustic*, adopted by Prof. TROMMSDORF, is, on account of its facility, worthy of our attention. To the boiling alkaline solution, he gradually adds finely powdered quick lime, till the whole is perfectly saturated. The liquor is then filtered, and submitted to the usual mode of treatment. The advantage of this process is, that the lime does not so readily effervesce, as when slacked in water, so that the separation of the alkaline ley is much more easily effected.—*Pharmaceut. Experimental Chemie*, p. 146.

Mr. KIRCHHOFF has, according to the directions of Prof. LOWITZ, completely decomposed the oxyd of tungsten, *via humida*, by means of carbonat of potass. He incessantly triturated a fine powder of the mineral, with a concentrated solution of the salt, till the mixture assumed the consistence of a liniment; and he afterwards exposed it to a moderate heat for digestion. Prof. LOWITZ promotes the process, by nearly evaporating a mixture of  $1\frac{1}{2}$  lb. of oxyd of tungsten, and 2 lb. of vegetable alkali with 3 lb. of water, at four successive times, while the whole must be continually stirred. The muriatic acid yielded, during the solution of the barytes, only 6 drachms of residue; a convincing proof of the decomposition of the oxyd. *Journal der Pharmacie*, B. III. p. 354.

Although Prof. TROMMSDORF does not entirely approve of the mode adopted by VAN MONS for the preparation of magnesia, yet we are induced to recommend it as advantageous to the attentive observer; we shall therefore give the following account of the process. A solution of the sulphat of magnesia and muriat of soda is placed in a cellar, and left undisturbed till a complete decomposition of the particles has taken place; from which, sulphat of soda and muriat of magnesia are produced. Carbonat of lime is then added, to effect a new decomposition, of which muriat of lime and carbonat of magnesia are the result; the latter in the form of crystals. That the magnesia may not be intermixed with silicious earth, it is necessary to use calcined oyster shells. As, however, the just proportion of these substances ought to be previously ascertained, which, as Prof. TROMMSDORF justly remarks, is attended with some difficulty, this process can be recommended only to the experienced operator.—*Journal der Pharmacie*, B. III. p. 277.



## MEDICAL AND PHYSICAL.

## INTELLIGENCE,

( Original and Selected. )

CITIZEN VAUQUELIN communicated to the Philomatic Society an observation on crystals, formed by a mixture of oil of rosemary with a solution of gold. He observed at the bottom of the vessel several clusters of transparent needles, consisting of quadrangular prisms terminated by pyramids with four sides. This substance was brittle, and had the taste of oil of rosemary: the different experiments to which he submitted it were not sufficient to discover its nature; he only ascertained that it was not camphire, though M. Proust asserts, that he has found that substance in several volatile oils.—*Rapport Général des Travaux de la Société Philomatique de Paris*, v. i. p. 47.

Cit. VAN MONS transmitted to the Society the result of an experiment on melting some caustic potash with metallic oxyds, and particularly the oxyd of mercury, in which these substances emitted a nitrous odour, whence he concluded that the potash had azote for its constituent principle. Citizens Vauquelin and Hecht, having been requested by the Society to verify this assertion, declared that they discovered no similar phænomenon. They remarked that the oxyd of mercury was reduced, without discharging a single bubble of oxygen gas, when they used a retort of flint glass, but the liquor then became green: when exposed to the air, it changed to a violet colour, and deposited a brown sediment, which they discovered to be manganese. The potash contained a quantity of silica; hence they concluded that the oxygen of the mercury had passed into the manganese; so that the latter had been dissolved by the potash which corroded the retort. To confirm this explanation, they repeated the experiment in a porcelain retort, when the oxygen gas was discharged, but the substance did not change its colour. In both experiments the potash underwent no change in its nature, and they observed, that even if the nitric acid should result from the process, it would necessarily remain combined with the potash, unless it was reduced to its elements, oxygen and azotic gas, in a very high temperature.—*Ibid.* p. 49.

Cit. Vauquelin and Brongniart were appointed by the Society, to authenticate the assertion of Valli, that the gluten of wheat and the animal fibre, when treated with the acetic acid, change their nature;

nature; the wheat turning to feculence, and the animal fibre to jelly; and that flour is one of the alimentary substances which contains the greatest proportion of phosphat of lime. They found, on the contrary, that gluten and animal fibre, when triturated with acetic acid, readily dissolved, and after having continued some time in that state, a few drops of alkali made them re-appear with all their properties. They also discovered, that a pound of flour contains only 84 grains of calcareous phosphat.—*Ibid.* p. 51.

• Cit. BRONGNIART has repeated the experiments made by Cit. Benedict Provost, of Montauban, on the means of rendering the effluvia of odoriferous bodies perceptible to the eye. These experiments tend to prove, that all odoriferous bodies are surrounded with an atmosphere of an elastic fluid which is forcibly disengaged.—*Ibid.* p. 52.

• Cit. BOUILLON LAGRANGE communicated a Memoir on *camphire* and *camphoric acid*. He has discovered that camphire is a volatile oil, rendered concrete by carbon; that, on being distilled with alum in a retort, the carbon and volatile oil may be obtained separately; and that camphire, when treated with nitric acid, produced an acid different from that of all known vegetables.—*Ibid.*

The same Member informed the Society of a Memoir read by him to the National Institute, on the analysis of cork, and on the nature of the peculiar acid which he obtained from it, by means of the nitric acid. He also extracted from this substance a resinous matter, which by its softness had great analogy to vegetable wax.—*Ibid.*

• Cit. LAMARK read to the Society several memoirs on the essential particles of compound bodies, the immutability of their forms, and the unity or identity of their nature. He established as a principle, that all homogeneous natural bodies were composed of particles exactly similar to each other, which remain alike as long as the number, the proportions, and the arrangement of the principles which compose them remain the same; that the aggregate of these particles constitutes the perceptible masses of bodies; that in the act of their combination, a disunion of the principles of the integral particles takes place; that the combination being once made, the component parts again form homogeneous bodies, the integral particles of which have particular and constant forms, as well as those which compose them; and that mere aggregation occasions the heterogeneity of bodies. From these assertions he concludes, that twofold and threefold component parts do not exist in the manner which modern chemists have maintained, and that the residuum or produce of chemical operations is not contained in bodies submitted to analysis.—*Ibid.* p. 56.



Cit. LACROIX read the result of some experiments which he had begun on the analysis of snow water: he observes, that the elastic fluid which escapes on melting snow, contains only twenty-three parts of oxygen gas.—*Ibid.* p. 57.

Cit. LELIEVRE communicated a report made to the Committee of Public Welfare, on the extraction of soda from marine salt. He called the attention of the Society to the process used at Javelle, to extract soda from the sulphat of soda, by means of iron reduced to small pieces. On the process employed by Citizens LEBLANC and DIZE, in which the sulphat of soda is decomposed by means of carbon and chalk, and on that invented by Citizens MALHERBE and ATENAS, which consists of immediately decomposing the muriat of soda by the sulphat of iron, he observed, that the last method appears the most advantageous, on account of the great abundance of pyrites which may be employed for this purpose.—*Ibid.*

A Memoir having been presented to the Society, in which several means were proposed for the preservation of water in long voyages, and particularly that of violently shaking stagnated water to combine with it a large quantity of atmospheric air, Cit. VAUQUELIN announced, that an individual had successfully used lime water, with which he washed the inside of the casks, and which, by changing into calcareous carbonat, effectually prevented putrefaction.—*Ibid.* p. 61.

Cit. LEFEBURE stated, that having bought spoons which he supposed to be tin, his family, soon after using them, were afflicted with colics; in consequence of which he resolved to analyze their composition. He ascertained by his experiments, that the spoons were made of seventy parts of tin, twenty of lead, and ten of copper; hence he attributed their pernicious effects entirely to the lead, and added some observations on the danger of making culinary utensils of those combined metals.—*Ibid.* p. 63.

Cit. GIROD CHANTRAN communicated an experiment, which tended to prove the antiseptic property of beer. He put a piece of meat, which was entirely fly-blown, into a vessel that contained a certain quantity of beer; the liquor became tainted with a putrid smell; and after it was drawn off, the meat was sufficiently purified to make good broth, and had not a disagreeable taste. Several experiments made by the same physician, convinced him of the antiseptic virtues of that beverage.—*Ibid.* p. 68.

Cit. BOUVIER read a Memoir on the process employed to extract oil of juniper from the *juniperus oxiacantha*, and on the difference between that oil and the oil of galian, with which it is confounded in commerce. This oil is used for the cure of cutaneous diseases of animals.—*Ibid.*

Cit. HAUY stated the means which he had successfully employed, to preserve the natural colour in the petals of a great number of dried flowers. It was only necessary to immerse them for some minutes in alcohol. The colours at first faded, but in a short time they resumed their natural tint, which remained permanently fixed. The author is fully convinced of the success of this experiment, as he made it ten years ago on the flowers of various plants, particularly the *Viola odorata*, *Geranium sanguineum*, and *Vicia dumetorum*.—*Ibid.* p. 69.

M. LUCIUS, an apothecary at Cleves, having filled a jar with finely pulverized hæmatites, observed that the particles which adhered to the surface of the glass, had assumed a black colour and metallic lustre. There remains no doubt, that this phænomenon must be ascribed to the influence of light, as only the minute particles of the hæmatites, which had been exposed to the rays of light through the glass, underwent this change; but those in the middle of the vessel remained in the same state as before. The opinion of M. Lucius is therefore very plausible, that an imperfect reduction of the metal may have taken place, similar to what happens with the luna cornea. *Gottling's Taschenb.* 1797, p. 110.

When Dr. SCHERER was preparing oxydated azote for chemical experiments, by dissolved tin foil and zinc in a much diluted nitrous acid, he remarked the singular phænomenon, that though this gas was neither affected by oxygen nor nitrous gas, yet ignited phosphorus, as well as a lighted match, continued to burn in it with rapidity. *Gren's Journal*, B. III. p. 312.

From a number of experiments, instituted to discover the affinity between oxygenated muriatic acid and earths, Prof. TROMMSDORF was convinced, that this acid entered into no combination with magnesia; but with lime it formed a salt which consisted of triangular, acuminate, and radiated diverging prisms. This salt, during its solution in water, produced an increased temperature, and was different in its other properties from the muriat of lime. Argilla yielded a salt that could not be crystallized, and was likewise different from the muriat of that earth. *Journ. der Pharm.* B. III. p. 105.

The same chemist repeated the experiments of M. OSBURG, to discover whether lime were a constituent of the fixed vegetable alkali, and whether magnesia essentially contributed to the formation of mineral alkali. When these salts were exposed to a red heat in earthen and porcelain crucibles, and afterwards dissolved in distilled water, some flix and argilla were separated. But on exposing the crystallized carbonat of vegetable alkali, and likewise some crystals of soda in powder, to a red heat, twelve different times in a silver crucible, and dissolving them as often in distilled water, the Prof. could not discover the smallest particle of earth. He is consequently induced to believe, that we are not yet enabled



to decompose the fixed alkalies into their constituent parts. *Journ. der Pharm.* B. III. p. 173.

### Domestic Intelligence.

THE Vaccine Pock Inoculation has been found by many practitioners to produce, in some instances, eruptions even resembling those of the Small Pock; and the matter of those cases has been also found to produce similar eruptive cases. Hence, in practice, the rule has been, since these observations were made, to avoid inoculating with the matter of patients who had such eruptions. Different opinions have been entertained as to the causes of these eruptions, and the occurrence of them have occasioned the credit of the Cow-pock Inoculation to suffer considerably in the opinion of many persons. Dr. PEARSON has favoured us with a paper on this part of the History of the Cow-pock, in which he estimates the value of the new practice, on the supposition that such eruptive cases are unavoidable in a certain proportion. The paper came too late for insertion in this number, but will be given in our next. In the mean time, we have the satisfaction to announce, that these cases do not reduce the value of the Cow-pock Inoculation in a great degree, and that advantages unexpected are now manifest, which more than counter balance the disadvantage of eruptions.

Dr. BRADLEY will commence his Spring Course of Lectures on the Theory and Practice of Medicine, on Monday, January 20th, at the Lecture-Room, No. 102, Leadenhall-street, at Six o'Clock in the Evening. Terms, Three Guineas.

Mr. PEARSON will commence his Spring Course of Lectures on Surgery, at his house in Golden-Square, on Monday, January 20th, at Seven o'Clock in the Evening.

Dr. MOSSMAN, of Bradford, Yorkshire, has, for several years, been employed in writing an "Essay to elucidate the Nature, Origin, and Connection subsisting between *Scrophula* and *Glandular Consumption*; including, a Brief History of the Effects of *Ilhley Spa*, with Observations on the Medicinal Powers of *Digitalis*; and Strictures on some Opinions relative to that Plant."—We are, however, authorised to observe, that this Essay will contain no cases of the effects of *Digitalis* in Pulmonary Consumption; as Dr. Mossman will obligingly continue to communicate them through the medium of our Journal, and has promised to transmit to us several very remarkable cases, for our next Number.

We understand that the Eighth Volume of "Medical Facts and Observations, by Dr. SIMMONS," is now in the Press, and will be published toward the end of January, or early in February next.

## CRITICAL RETROSPECT

OF

## MEDICAL AND PHYSICAL LITERATURE,

[FOREIGN AND DOMESTIC.]

## PHARMACY.

*Pharmacopœa Borussica*, 1799, 223 pp. quarto, Berlin, Decker.

The last edition of the Prussian Dispensatory appeared in 1781, and has long maintained a distinguished place among the foreign Pharmacopœas; but the rapid progress of Chemistry and other auxiliary sciences, together with various attempts made by individuals to compose systems of pharmacy, more consistent with the present state of medical knowledge, induced the Prussian College to publish a new and corrected Dispensatory. To accomplish this desirable purpose, the present minister of the literary department, Count DE SCHULENBURG-KEHNERT, appointed a committee of the most able and experienced physicians in the kingdom, who have honourably acquitted themselves of their charge.

Although the authors of this work have carefully expunged many of the old and absurd compositions of drugs, and substituted others more simple and less liable to decomposition, yet, in our opinion, much remains to be done in this essential department of medical practice. To verify this assertion, we shall quote some of the compound remedies which still consist of six or eight different ingredients; for instance, the *aromatic water*, and the *stomachic elixir* of the Berlin College: the former is prepared by distilling eight ounces of sage leaves, four ounces of rosemary, the same quantity of peppermint and lavender flowers, two ounces of fennel-seed, two ounces of cinnamon, four pounds of rectified spirit of wine, and a proportionate quantity of water. The latter is rather more complicated, and requires the following process: Four ounces of ripe orange peel, two ounces of the unripe peel, a similar quantity of cinnamon, and one ounce of aerated dry vegetable alkali, are first infused in four pounds of Malaga wine, and left for several days to digest in a warm place; after which the tincture is properly strained, and then are added four ounces of bitter extract, two drachms of the oil of lemons, and two ounces of the anodyne liquor.—Instead of the former *pectoral elixir*, the authors recommend a solution of the purified extract of liquorice in six ounces of fennel-water, with the addition of one ounce of laudanum, and six ounces of spirit of sal ammoniac. The directions here given for preparing the tooth-powder, the tincture of asafoetida, the extract of quassia, and several other



other medicines, appear to us susceptible of improvement, or at least simplification of the process. Upon the whole, however, the present work deserves the preference over most other foreign Pharmacopœas, and will doubtless be still farther improved in subsequent editions. W.

*Observations on the Diseases of Seamen*, by G. BLANE, M. D. &c. the third edition, with corrections and additions, 8vo. pp. 650. London, Murray and Highley.

The former editions of this work, as well as the merit of the author, are too well known to medical readers, to require any thing more from us, than merely the announce of a new edition. We cannot, however, dismiss this third edition, without observing, that the corrections and additions are so important, as almost to entitle it to the expectations of a new work. Among these additions, we notice a chapter on ulcers, which Dr. B. believes are frequently contagious; and a chapter on casualties. Dr. B. approves of the nitrous fumigation, recommended by Dr. C. Smith, as a means of eradicating infection, in preference to his own fumigation with sulphur and charcoal.

The affusion of cold water in fevers is mentioned, but not on the author's own experience. In a word, Dr. B. appears to have neglected no sources of information, since the publication of the preceding edition.

*Medical Cases and Remarks*, Part I. on the good Effects of Salivation in Jaundice, arising from Calculi. Part II. on the Free Use of Nitre in Hæmorrhages. By T. GIBBONS, M. D. 8vo. pp. 100. London, Murray, &c.

Dr. G. has advanced twelve cases of jaundice, in support of his opinion respecting the solvent powers of calomel; from which it appears to be a valuable remedy in that disease. The usual formulæ are:

R. Calomel. gr. j. Pulv. Rhei et Confect. Opiat aa. gr. v. Syr. q. s. f. bolus bis die sumendus; or,

R. Calomel. Pil. aloes et Confect. Opiat. aa. gr. iij. Syr. q. s. f. bolus mane & vespere sumendus; which are continued till the mouth becomes affected.

In the 2d Part, Dr. G. in cases of hæmorrhage gives Nitre in doses of ʒj. every four or five hours, with apparent success. Some opinions respecting the modus operandi are given by the Author, and his friend, Dr. Drake. The work concludes with some observations on the abuse of flannel waistcoats next the skin, which Dr. G. believes are generally worn too long without washing.

*Some Observations on the Bilious Fevers of 1797, 1798, and 1799*, by R. PEARSON, M. D. Physician to the General Hospital, near Birmingham, &c. 8vo. pp. 30. London. Seeley, &c.

In an advertisement prefixed to this pamphlet, Dr. P. says, "It has fallen to my lot to see the Fever described in the following pages,

pages, throughout all its stages, and under a vast variety of forms, in this town and neighbourhood. Observing something anomalous and peculiar in its character, I was induced to watch it with close attention. I here offer such facts relative to its history and treatment, as my experience has hitherto furnished. They are but the prelude of a more complete set of observations, which I hope to communicate hereafter. In the mean time, I flatter myself this small pamphlet will be of some use, by calling forth the attention of Medical Practitioners to the true nature and proper treatment of that epidemic."

On the distinction between this fever and typhus, Dr. P. observes, "In its first stage, this fever did not appear to be contagious; but it was evidently so after the eleventh or fourteenth day, when the typhoid state was induced. At this period it spread, in many instances, through whole families. The contagious nature of this fever has procured it very generally the name of Typhus; from which, however, it differs (1st) in being accompanied, during its first stage, with little muscular debility; (2dly) in being accompanied with a more tense pulse; (3dly) with more violent head-ach, vomitings, and sensibility of the stomach; and (4thly) in being, for the most part, of a remittent or intermittent type. Unlike typhus, it not only bears, but requires large evacuations upwards and downwards, and some loss of blood. A diarrhœa, so frequently hurtful, and even mortal, in typhus, is, in this fever, for the most part salutary."

The treatment recommended, consists in V. S. or the use of leeches, during the first three or four days in particular subjects; emetics, purgatives of calomel, and neutral salts, or calomel joined with antimonial powder; saline febrifuges, with antimonial or ipecac. wine; opiates appeared to answer best in clysters, and these, as well as blisters, succeeded better after the first week than during the first five or six days, unless when lethargic symptoms appeared.

When the febrile symptoms abated, bitters seemed to answer better than the bark. — Particular symptoms required particular treatment; for an account of these, we refer to the work itself, which will well repay the perusal.

NEW MEDICAL PUBLICATIONS IN DECEMBER.

AN Essay on the Preservation of Shipwrecked Mariners, in Answer to the Prize-questions proposed by the Royal Humane Society. By A FOTHERGILL, M. D. F. R. S. &c. 8vo. 61 pp. Price 2s. 6d. London, Johnson.

An Essay on the Means of lessening the Effects of Fire on the Human Body. By JAMES EARLE, Esq. F. R. S. &c. &c. 8vo. 44 pp. London, Johnson.

The Art of Maintaining Feeble Life, and of prolonging it in incurable Diseases. Translated from the German of CHRISTIAN AUG. STRUVE, M. D. 8vo. London, Murray and Highley.

Observa-



Observations on the Bilious Fever of 1797-8-9. By RICHARD PEARSON, M. D. 1s. 6d. London, Baldwin.

The First Part of an Essay on the Anti-venereal Effects of Nitrous Acid, oxygenated Muriate of Potash, and several analogous Remedies, which have been lately proposed as substitutes for Mercury. Likewise, the Second Part of this Essay, containing additional Evidence, with critical and practical Remarks on the Anti-venereal Remedies; and an answer to some Objections made against the former Part. By WILLIAM BLAIR, A. M. F. R. S. London, H. D. Symonds.

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NEW PUBLICATIONS IN GERMANY.

*Physiologie philosophisch bearbeitet*, i. e. Physiology arranged upon Philosophic Principles. By CHARLES CHRISTIAN ERHARD SCHMID, Professor of Divinity at Jena. Vol. I. 1798. xxxiv. and 362 pp. Vol. II. 1799. viii. and 670 pp. 8vo. (Price 2 rixdoll. 18 gr. or 11s. in sheets.) Jena, in the University Shop.

*Handbuch der theoretischen und praktischen Chemie*, i. e. A Manual of the Theory and Practice of Chemistry. By J. F. A. GOETTLING, Prof. in the University of Jena, and Member of several learned Societies. Two Volumes; together 1089 pp. 8vo. 1799. (Price 3 rixdoll. 4 gr. or about 13s.) Jena, in the University Shop.

SAM. THOM. SOEMMERING, *Icones embryonum humanorum*, 10 pp. royal folio, 1799. (Price 6 rixdoll. or 1l. 4s.) Varrentrapp and Venner. Frankfurt on the Maine.

*Filicum genera et species recentiori methodo accommodatæ analytice descriptæ*, a JOANNE HEDWIG, M. D. ac Professore Botanices, &c. *Iconibus ad naturam pictis illustratæ*, a ROMANO ADOLPHO, filio, Phil. et Med. Doct. 1799.—Five sheets and a half Text, and six coloured plates, folio, (price 3 rixdoll. or about 12s.) Leipzig. Schäfer.

*Die neuesten Entdeckungen*, &c. The latest Discoveries and Illustrations in Medicine, systematically arranged. By F. L. AUGUSTIN, M. D. Physician at Berlin, &c. Vol. I. for 1798, 8vo. 564 pp. 1799. (Price 1 rixdoll. 12 gr. or about 6s.) Berlin. Felisch.

*Unterricht in der Wundarzneykunst*, &c. Instructions in the Art of Surgery, composed for the use of Academical Lectures. By METZGER, 8vo. 472 pp. (price 1 rixdoll. 6 gr. or 5s.) Königsberg, Hartung.

*System der Chirurgie*, i. e. A System of Surgery, by ARNE-MANN, with plates, Part I. Sect. I. 8vo. 336 pp. (price 1 rixd. or 4s.) Göttingen. Vandenhök and Ruprecht.

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TO CORRESPONDENTS.

• *Beſide thoſe which appear in the preſent Number, we acknowledge the receipt of Communications from Dr. Dyce and Dr. Kinglake; Mr. Twitch, Mr. Docker, and Mr. Whyte.*