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A Description and Engraving of the Operation of Oesophagotomy, by WILLIAM BLAIR, A. M. F. M. S. Member of the Royal College of Surgeons in London, Surgeon of the Lock Hofpital and Afylum, of the Finibury Difpenfary, and of the Bloomibury Difpenfary, &c.

ALTHOUGH the operation of making a longitudinal incifion into the offophagus, for the purpole of extracting fome foreign substance threatening the death of the animal, has been performed with fuccefs on various brute creatures, (efpecially the cow, me horfe, and the dog,) it has always been regarded by furgeons as a very important and hazardous undertaking on the human fubject. The first hint I find relating to this operation, is contained in the fecond volume of Pathologie de Chirurgie, par Jean Baptiste Verduc, who, in treating of the mode of extracting foreign bodies from the celophagus, fays, if you cannot succeed, this operation may be had recourse to. " Je crois qu'on pourra fort bien hazarder l'operation, en faifant une incifion à l'œfophage pour avoir ce corps étranger. On fera la même chose qu'à la bronchotomie; il faudra d'abord féparer les muscles bronchiques, pour aller d'une main adroite chercher l'œsophage, et faire une incision longitudinale à l'endroit du corps étranger. Je vous avouë que cette operation est difficile; mais il vaut mieux l'entreprendre, que d'avoir le déplaifir de voir mourir le malade."

The above defcription is too vague and concife to guide the inexperienced furgeon. It does not appear that M. Verduc himfelf ever performed the operation; but an eminent practitioner of Rome has left us more explicit directions, in the Memoires de l'Académie Royale de Chirurgie, Tome iii. p. 351, 4to edit. Essai sur P.Oesophagotomie, par M. GUATTANI. In another work of VERDUC, indeed, we are told that this operation has been performed by feveral practitioners with the most happy event. Vide Abreg. compl. de la Chirurg. de GUY de CHAUL. chap. sing. artic. de l'Exerese; et Mem. de l'Acad. NUME, XXX. O de Chir. Tome i. p. 590. Various examples* are also on record of patients having recovered, after accidental wounds of the œsophagus had been inflicted; so that we are sufficiently authorised to have recourse to this method of relies, in cases of imminent danger.

M. GUATTANI obferves that it is neceffary, in order to perform this operation properly, to know what is the relative fituation of the œfophagus. It was noticed, he fays, by Euftachius, afterwards by Vefalius, by Winflow, by Haller, &c. that the œfophagus lies a little on the left fide of the trachea; this was always found to be its polition in the many bodies diffected by Guattani. So important a fact, now well eftablifhed, ought to guide us in performing the operation. He therefore directed it to be done in the following manner:

The patient being placed upon a chair, let an affistant bend his head ftraight backwards, and fecure it in fuch a way as to render every lateral motion of it impossible. The operator then places himfelf immediately before the patient; and having, with his left hand, drawn the fkin tight into a transverse fold, on the right fide of the neck, which is also done on the left fide by an affiftant, he divides the integuments of the neck with a straight scalpel, longitudinally, from the upper part of the trachea down to the fternum. He now feparates the cellular, adipofe, and membranous parts, in fhort, whatever appears between the fterno-thyro-hyoid mufcles and above the trachea, with the fame fcalpel; which he then pufhes, on the left fide, (as the œfophagus generally projects more on this fide than on the other) deeper in, between the above-mentioned muscles and the trachea; whilft, at the fame time, in order to obtain room, the lips of the wound are drawn afunder by means of two double-pronged hooks. The deeper-feated cellular fubstance, furrounding the trachea, he feparates with his finger, or, if neceffary, with the knife, till the cefophagus is brought diffinctly into view, which he then opens longitudinally, beginning from below; and where the circumstances require it, he enlarges the wound at the upper part with a crooked pair of feiflars.

After the operation has been conducted thus far, Guattani directs us to ule curved forceps, if they be wanting, to extract the foreign fubftance; or, if that be not practicable, it may be pufhed down to the ftomach. Any hæmorrhage that occurs may be ftopped by preflure with the finger, or by the ligature; and

* By Parey, De La Faye, MUNNICKS, HABICOT, PIGRAY, GA-RENGEOT, SCHENKIUS, BOHNIUS, PONCENARD, BELL, &c.

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and the recurrent nerve may be avoided, with care. The wound will heal without much difficulty, and is to be dreffed in the most fimple manner possible. During the cure we must keep the patient on the lowest diet, or rather, support him with nourifhing clyfters.

This account of M. Guattani is accompanied with a detail of fome experiments, tending to fanction his practice; and the Academy of Surgery, to whom he prefented the Memoir, have feemed to adopt his ideas, by joining to his Memoir an account of two cafes of Oefophagotomy, practifed fuccefsfully, after his method, on living men. These operations were performed by M. M. GOURSAUD and ROLAND, Histoire de l'Acad. Roy. de Chir. Tome III. p. 13. vii. The fame method is advifed to be pursued by SABATIER, de la Med. Operat. Tome III. p. 471; alfo by M. M. CHOPART and DESAULT, Traité des Mal. Chir. et des Oper. Tome I. p. 273: likewife by BERTRANDI, who fays he has feveral times done it fuccefsfully on dogs, Trattato delle Operazioni di Chirurgia, Cap. xx. NANNONI, a late Italian furgeon, and Mr. B. BELL, in their respective fystems, have also commended the method of Guattani.

The only objections I have met with against this operation, have been recently brought forward by a German furgeon, who propofes feveral deviations and improvements: Ueber das Ausziehen fremder Körper, aus dem Speisekanle und der Luftröhre. von J. D. ECKHOLDT, M. D. & Chir. &c. Kiel, 1799. This author has written the most elaborate work now extant, accompanied with fplendid engravings, on all the means used for removing extraneous bodies from the celophagus and trachea. I fubjoin what he fays on the prefent fubject, and have annexed a copy of his engraving of the operation.

The opening of the œlophagus, he observes, is indicated, in the first place, when the foreign fubstance, which, either on account of a spasmodic affection, or the tumefied state of the parts above it, or owing to the incompetency of our inftruments, cannot be extracted upwards, is either difficult of folution, or altogether infoluble. Secondly, when it is of a pointed or angular form, which affords caule to apprehend a violent inflammation, not only in the cefophagus, but alfo in all the reft of the alimentary canal, in cafe it should reach the stomach. Thirdly, when its fize is fo large that we have no reafon to hope that it will be able to pass through the alimentary canal without danger; in which cafe it commonly happens that, even during its flay in the œfophagus, it produces fuch a preffure upon the trachea, as fometimes to render neceffary both operations, namely, the fection of the cefophagus and that of the trachea. As As a counter-indication to this operation, among others, the cafe in which the foreign fubftance is fituated very low down in the alimentary canal, is generally mentioned. However, the force of this counter-indication is done away by the invention of the author's extracting inftrument, which may be introduced equally well, either through the wound or the mouth.

Great debility of the patient has also been confidered a counter-indication, though with what right he cannot comprehend, as it is every phyfician's duty to do what he can, as long as there remains the faintest hope that the patient's life may be preferved. At any rate, the confequence of the opposite practice is inevitable death.

Another, and Mr. Eckholdt confesses a very important, counter-indication is generally mentioned; namely, the too great inflammation and tumefaction that has taken place in the cefophagus and neighbouring parts. This, however, he cannot admit unconditionally; nay, he maintains, on the contrary, that fuch a ftate of the parts ought by no means to deter the lurgeon from performing the operation, but rather induce him to undertake it the fooner the better. For the very circumftance, which in fuch a cafe is most apprehended, namely, the injury that may be done to confiderable blood-veffeis and nerves, is here not fo eafily poffible; for thefe parts, which of themfelves undergo a proportionally lefs alteration than the reft, are more difplaced from their natural fituation, and removed farther from each other, by means of the inflammatory fwelling, on which account they are far lefs exposed to the danger of being cut during the operation. Moreover, under fuch circumftances, the cutting of the other inflamed parts is not only not detrimental, but rather beneficial, on account of the difcharge of blood which it occafions from the fmaller veffels.

This may be fufficient concerning the counter-indications that have commonly been adduced againft this operation. The author observes, that the section of the œsophagus is an operation hitherto almost univerfally dreaded by furgeons. In order to ascertain whether this dread be well or ill founded, we muss trace it to its cause, which, from what has already been faid, appears to depend partly upon the danger of injuring confiderable blood-vesses and the recurrent nerves of the eighth pair, and partly upon the difficulty with which the cure of the wound is attended. The dividing of the first may produce fatal confequences; and that of the last, if it be done on both fides, the entire loss of voice; or if only on one, a great feebleness of it, as we may frequently see in the examples of perfons who have attempted to cut their throats.

Mr. Blair, on Oesophagotomy.

It certainly cannot be denied that there is no fpot on the human body in which there are fo many fingle parts, the lefton of which may be productive of very ferious inconveniencies, contained within a finaller fpace, than the neck; it is therefore very neceffary that great caution fhould be employed, not only in choofing the place where fuch an incifion is to be made, but alfo in performing the operation itfelf. However, our fureft guide, experience, fupported by the anatomical knowledge of this part, has proved that a cautious and fufficiently experienced operator may undertake the fection of the cefophagus without apprehenfion. Even the variations of the forms of different parts, which but too often occur, need not deter the furgeon, and ftill lefs fhould they embarrafs him in performing the operation; for he can and muft know what he ought to do in fuch cafes.

After defcribing Guattani's operation, the author fays, this method of operating is attended with feveral inconveniencies, which the furgeon can never entirely avoid, unlefs he choofes another and more convenient place for performing the operation. The first great difficulty which here prefents itfelf, is, that it is impossible for us, by drawing asunder the trachea and the muscles which cover it, to obtain so much room as we require in order to use the knife properly, and conveniently to extract the foreign fubstance. The fhortnels of the muscles in queftion, their fituation, the more rigid and lefs yielding ftructure of the trachea, do not permit those parts to be drawn afunder to the degree that is requifite for the accomplishment of our intended purpose. Moreover, in operating at this part, we are naturally exposed to the danger, (which is increased under the above mentioned circumstances) of injuring the inferior thyroid artery and the recurrent nerve ; especially the latter, which, in most subjects, ascends towards the larynx exactly at the place where the incifion into the cefophagus is to be made. Now, how is it poffible to avoid this nerve in fo confined a fpace? Another no lefs important obstacle is the thyroid gland, whole fize is not always fuch that it can be entirely spared. The lefton of it, indeed, is of itfelf attended with no material danger; but the violent hæmorrhage which it produces, even though it fhould not influence the fuccels of the operation, however, retards the furgeon, to the great difadvantage of his patient. Finally, the most weighty objection that can be adduced against the place chosen for performing this operation is, that the re-union of the wound, whole superior or external part has more tendency to re-unite than that which is deeper fituated, can never be accomplished in a perfectly uniform manner; consequently, in the first stage of the cure, whilft

whilf the wound of the œfophagus has not yet clofed, and the fpace above it is not yet filled up, can fcarcely be kept open without the application of fome degree of force.

Induced by these confiderations, which will certainly be allowed to have their weight, Mr. Eckholdt fixed upon another place for performing the operation in question, which he now proposes and recommends without fear of contradiction, as the most eligible.

The manner in which he performs the fection of the cofophagus is as follows:

The patient being placed upon a bed, in as unconftrained a pofture as poffible, his neck refting upon a fmall bolfter ftuffed with hops or chopped ftraw, and his head bent backwards and inclined to the right fide, in which pofture he is fecured by an affistant, another affistant is directed to collect the skin, on the left fide of the neck, over the muscle that runs from the malloid process to the clavicle and sternum, at the place where the feparation of its inferior crura commences, into a fomewhat oblique transverse fold; in doing which the operator affists him, at a small distance, with the fingers of his left hand. He then, with a convex knife, cuts through this ftretched fold of the fkin, together with the broad muscle of the neck fituated immediately under it, and in the fame manner enlarges the wound downwards, as far as the anterior articulation of the clavicle with the fternum. It is effentially requifite that this incifion should be made exactly in the middle of the above mentioned ; muscle, and that it should run in the same oblique direction from above to below, as is peculiar to this mulcular part. When this first incision has been made, there prefents itself to our view that triangular fpace, which is formed in this part by the division and course of the two inferior crura of the above mentioned mufcle, and the mufcle which runs above, at the beginning of this division, obliquely across from the os hyoides to the scapula. It is this which affords the furgeon access to the cefophagus, and renders the operation eafy and fecure. For without being under the neceffity of using any cutting instrument, he may now eafily arrive at the cefophagus, by deftroying the very loofe cellular fubftance which connects the two crura of the muscle and fills up the space above, with the flat handle of his knife, but the deeper fituated cellular fubstance with his fore finger, fo as at the fame time to undermine the thyroid gland at the fide. This being done, he examines whether the fpace be wide enough to afford a fufficiently diftinct view of the cofophagus and the recurrent nerve of the eighth pair, which runs along its anterior fide, next to the trachea. This is not always the cafe, as in fome fubjects the division

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division of the muscle does not commence till very low down, whereby this fpace is rendered fomething narrower: Under fuch circumftances we must divide this muscle a little farther up; taking care, however, not to cut the mulcle which goes from the os hyoides to the fcapula, and which is fituated in a crofs direction under the former muscle. In order to avoid this accident, we fhould cut gradually from without to within, not from below to above. When I have either found the fpace fufficiently wide, or rendered it fo by the operation just defcribed, I direct the two edges of the wound to be drawn afunder, as far as it can be done without violence, by means of two crooked double-pronged hooks, whereby are exposed to view (as may be feen in the PLATE) at the back part, the great cervical artery, which does not project much; at the fore part, a portion of the thyroid gland and the trachea fituated under it; at the upper part, the middle tendinous portion of the muscle fituated between the os hyoides and the humerus; at the lower part, a portion of the muscle that goes from the thyroid cartilage to the fternum; and in the middle, the celophagus, together with the inferior thyroid artery, which runs across it in feveral circumvolutions, and the recurrent nerve. The two fides of the wound being now perfectly fecured, and drawn afunder by the two hooks, a longitudinal incifion must be made into the cefophagus with the requifite caution, taking care not to injure the above-mentioned nerve or the thyroid artery; and this incifion the operator enlarges by means of a crooked pair of feiffars, as far as he has room; for the fides of a small wound may eafily fuffer by contusion in extracting a foreign body.

Should it be objected, that in this method of performing the fection of the celophagus, a deviation from the common ftructure of the parts, which could not be discovered from any external appearance, might entirely alter the cafe, and render this method of operation equally dangerous with that hitherto in use; M. Eckholdt answers, that such a circumstance, provided only that the deviations be not too confiderable, and confine themfelves merely to the fituation of those parts which we are obliged to avoid, can be of no very material confequence. For as, after the first incision through the external integuments, there is no neceffity for using the knife till we come to open the cefophagus, every thing that lies in our way may eafily be fpared; and, thould even in any cafe the recurrent nerve be fituated more upon the middle part of the œlophagus, it might, in fuch a free space, be eafily discovered, and drawn afide, by means of a blunt hook, from the place where the incifion is to be made. The fame applies also to the large veffels, when they are fituated too far forward; and to the inferior thyroid artery, artery, when feated deeper than ufual, efpecially at the place where it forms its laft inflexion. The latter, alfo, fhould it not be practicable to draw it alide, might, in cafe of neceffity, be tied without difficulty, and divided without danger.

He does not think it neceffary to fay any thing more concerning the extraction of the foreign fubftance, after the œfophagus has been opened, than that, if it be fituated near to the wound, the forceps he has delineated fhould be employed; but if it be fituated lower down, we fhould ufe the other inftruments defcribed as adapted for the purpofe; and that we fhould be as cautious as poffible to avoid any contufion of the lips of the wound in the œfophagus.

When the foreign fubstance has been extracted, our first bufinefs must be to endeavour to promote a proper and accurate reunion of the wounded parts. This the furgeon fhould confider as a matter of equal importance with the operation itfelf. Should any one think flightly of it, let him only recollect what has already been faid, and confider what a material influence a bad cicatrization of the œfophagus must have upon its functions. Guattani, as well as others, have fhewn by experiment, that a wound of the œfophagus may eafily be cured, and without its edges forming any adhesions with the neighbouring parts, provided it be treated according to the rules which the art prefcribes. Let it therefore be our particular endeavour to bring its edges, at every point, into accurate and uniform mutual contact, and to retain them in this fituation during the first days after the performance of the operation. This may fometimes be accomplifhed by means of graduated compreffes ap-plied to both fides of the external wound, and a bandage, which keeps the head inclined towards the opposite fide. But in cafes where the lips of the wound of the cefophagus have, during the extraction of the foreign fubstance, been much ftretched, bruifed, or even lacerated, we are obliged to have recourse to the quill - future, which is preferable to every other, becaufe it can not only be applied and removed with greater facility than any other, but alfo poffeffes the advantage of leaving the wounded part of the colophagus still fufficiently in our command. This may eafily be performed by means of a small needle cafe; but we should be careful not to twist the ends of the threads that hang out too tight, nor to fuffer the neck to be firetched whilft we are applying the dreffings to the external wound.

In the author's opinion, the cure of the external wound fhould be left to the efforts of Nature till the fourth day, when the threads may be drawn out with fecurity; it fhould, therefore, only be covered loofely with lint, and a light comprefs, which

Lord Berkeley's Letter to Dr. Jenner.

which may be kept moift with fome proper liniment, and fecured by means of a circular bandage. At the fame time we fhould endeavour, as has already been observed, to keep the head conftantly inclined towards the opposite fide, by means of another appropriate bandage. That invented by the late Dr. Koehler, of Jena, and delineated in plate vII. fig. 2, let. A, of his Treatife on Bandages, appears to be the best adapted for this purpose.

As to the treatment of the patient after the operation, befides the general remedies usually employed in such cafes, and what will naturally fuggeft itfelf to the mind of the judiciouse practitioner, it is abfolutely neceffary, that for feveral days the patient fhould not be permitted to fwallow any thing but liquids, in order that the fresh united edges of the wound may not be again torn afunder by any violent motion of the cefopha-For my part, fays the author, I do not allow my pagus tients to fwallow even liquids, as long as I am not convinced that the canal has perfectly cicatrized; but during the first period of the cure, employ merely nourifhing clyfters, or, fhould it be neceffary, nutritive baths. He adds, I am firmly convinced, as I have already afferted, that in the deglutition of fluids, the cefophagus exerts itfelf in a no lefs, if not more, violent manner, than in fwallowing food of a pulpy or folid confiftence. This I might demonstrate from repeated experiments which I have made, were I permitted to do fo by the bounds I have allotted to this work.

Lord Berkeley's Letter to Dr. Jenner, on the Cow-Pox.

My DEAR SIR,

Y OU will doubtlefs be much pleafed to hear of a circumftance that has happened in my family, to confirm, in the moft fubfantial manner, the power the Cow-pox posses of preventing the Small-pox. One of my house-maids was so unfortunate, fome weeks ago, as to catch the Small-pox, and after ftruggling with it for upwards of three weeks in my house here, the at last became its victim. - My youngest son, you know, was inoculated by you about a year ago with Cowpox, and about the fame time, a maid fervant, by Mr. Shrapnell, furgeon to my regiment; and another, upwards of four years back, by fome one in the country. As foon as matter NUMB. XXX. P could

could be procured from the fervant girl with the Small-pox, my fon, and one of the girls who had previoufly had the Cowpox, were inoculated. The inoculated part looked red and angry, as if it would fefter, for a few days, but then died away, without producing any effect; the other girl was repeatedly exposed to the infection, without inoculation, during the tubole progress of the disorder, but has not felt any thing from it. I did not inoculate this laft mentioned girl, from a certainty in my own mind of the impossibility of giving the Small-pox when the Cow-pox had been properly given, having myfelf been witness for thefe fifteen years pass to your perfevering labours, which at laft have attained fuch perfection, that in a few years the Small-pox mult be eradicated, and thoufands of your fellow-creatures, annually, will owe their lives to your difcovery.

I may add, that the child and the other fervant who were inoculated, were also exposed to infection.

These facts appear to me to very firiking, that I could wish you to make them public in any way you may think proper.

> I am, My dear Sir,

Cranford Lodge, July 4, 1801. Your most obedient fervant, BERKELEY.

P. S. Allow me to mention, that there is an old fervant in my family, on the verge of feventy, who had the Cow-pox from milking cows, when a boy. From that time he has never been in the leaft cautious in guarding himfelf from the Small-pox, but has exposed himfelf again and again, without being fenfible of its effects. I mention this circumftance, becaufe, in conversation on the subject, I fometimes find that the Cowpox is supposed to be a temperary security only against the Smallpox.

To the Editors of the Medical and Phyfical Journal.

GENTLEMEN,

IF I can add any thing to what has been lately written and faid in favour of the external application of cold water in various difeafes of the human body, that may contribute in the leaft to firengthen the opinion of its utility, I fhall confider myfelf eminently gratified.

Having

Having had frequent opportunities of feeing the benefits arifing from fuch practice, I am authorifed to speak of it with a degree of confidence.

We are very much indebted to an ingenious phyfician for his publication on the fuccels attending the external use of cold water in typhus, and I have heard its commendations often repeated in conversation, by feveral gentlemen who have experienced its efficacy in that diforder.

I cannot fay that I have ever feen it used in that species of fever; but what I confider as equivalent, and what I have employed for many years with the ftrongest marked evidence of every wished-for advantage in the same diforder, is cold vinegar.

Typhus fever, about twenty-five years ago, was a very prevailing difeafe in St. Peterfburgh, but of late years, though often occurring, is much lefs frequent there; whether its appearing feldomer than formerly, is to be attributed to the improvement of the city, by being more built upon, or from drains dug fince that time to carry off the ftagnant water, or from the removal of part of the forests in its neighbourhood, I will not pretend to decide; but certain it is, there is no compa-. rifon between its frequency now and at the time above-mentioned.

In typhus fever, as I before observed, I have been long in the habit of using cold vinegar, and that very liberally.

My method of employing it after previous evacuations, the fever being formed and characterized, was by dipping a napkin in it, and applying it to the abdomen, the patient being turned on his back for that purpofe; an operation feldom neceffary towards the end of the fever, the patient then, from weaknefs, generally lying in that posture.

The application was frequently renewed, and at the fame time vinegar was fprinkled over the bed clothes, floor, and every part of the room, and a handkerchief or rag dipt in the fame, kept continually to the nofe, at which the patient generally expressed figns of refreshment. From this mode of practice, with free admiffion of air, clyfters of cold water and vinegar now and then injected, and plenty of cooling drink, with a convenient use of wine, I have experienced very great fuccefs, without using bark, a medicine to which, from its great reputation, I was formerly very much attached.

So great benefit has been derived from the exhibition of cold water in a variety of complaints to which the human conflitution is incident, that it cannot be too much infifted on and recommended. In typhus, from the experience of many of the first practitioners in this kingdom, it has gained incontrovertible reputation.

reputation, and in many other difeafes it has been known to have been used with remarkable good effects.

It is in common use in northern climates in its extremest degree. In angina inflammatoria, by rubbing it on the outfide of the throat in the state of ice. In acute rheumatism, by rubbing the part affected with it in the same aggregate form. In strangulated hernia, its use has been long and beneficially experienced; nor has it acquired less credit in ophthalmia, after proper evacuations.

I fhall now relate a few cafes where I have feen it fucceed in an extraordinary manner.

A middle aged man, immerfed in bufinefs to a degree of embarraffment, became infane; all the fymptoms of mania in a fhort time came on; his pulfe was full and flrong, his eyes eager and inflamed, his ideas foaring to the fummit of imaginary grandeur, fancying himfelf related to the greateft perfonages on earth, whilft his raving was inceffant with continual infomnia. He was plentifully bled, purged, and vomited, ufed antiphlogiftics of various denominations, and was kept fome hours every day in the warm bath; but nothing abated the violence of his fury.

He became at length fo refractory and unmanageable, that recourse was had to the itrait waiftcoat, medicines being given at the fame time, without any good effect. I afterwards or-dered his head to be fhaved, and a large blifter to be applied to it, which after remaining twenty-four hours was taken off, and four days afterwards, (the bliftered place being then in a healing ftate,) his head was gently rubbed all over with a lump of ice; but the pain it feemed to produce would not allow me to continue its use long together; however, as foon as the uneafinefs it produced appeared to fubfide, it was again had recourfe to, and renewed every now and then till it manifeftly incommoded him lefs. After fome hours applying it, he begged we would releafe him from the flrait waiffcoat, promifing to be quite obedient to our commands, and that he would use the ice himself; his request being complied with he kept his word, was quite compofed, took the ice, and began rubbing his head with it, with more force than we had dared to do, and became fo enamoured of the operation, that he was almost continually occupied in nfing it; and fuch was the refult of his affiduity, that it foon procured tranquillity, induced fleep, and abated the violence of every fymptom. He proceeded to get better, till he was enabled again to attend his bufinefs, which he was incautioufly fuffered to trouble himfelf too much about, and the confequence was a relaple, from which, I believe, he again efcaped, under

under the care of another gentleman; but on a third attack, I heard he died in England.

The fecond cafe I have to relate, is that of a Ruffian nobleman labouring under a retention of urine, to whole affiltance I was fent for in the middle of night, in the depth of winter, when Reaumur's thermometer indicated 20 degrees of cold, corresponding with 11 of Fahrenheit's below zero. On the circumftances of the cafe being related, I found that no urine had been difcharged for thirty-fix hours, although many means had been employed to promote it, fuch as bleeding, purging, emollient and turpentine clyfters, with opium, &c. bougies and the catheter had likewife been attempted, but the refiftance at the neck of the bladder had been fo obftinate as to allow no admittance.

On my arrival, the patient complained of great pain about the region of the pubis; and the lower part of the abdomen was very much fwollen and tenfe. His pulfe was yet full and hard, which encouraged me to repeat venefection, although he had been pretty well evacuated before I faw him; but this affording him no relief, he became exceedingly anxious and impatient, imploring eafe in the most plaintive manner. Now foiled, and almost at the ne plus ultra of my fkill, I recollected the old trite adage of Celfus, "Anceps remedium, &c." and refolved to advife his feet and legs to be put in cold water, a remedy I had fomewhere heard mentioned or read of, as a powerful diuretic in obstructed urine. He reluctantly complied with this propofal; but on my promifing him that he fhould take them out in five minutes, he went through the experiment, fitting on his bed's fide.

The water he made use of was taken fresh from the river, the ice being broken for that purpole, and his legs were plunged into a pail full of it nearly up to his knees. He complained bitterly of the pain it occasioned, but had resolution enough to bear it till the expiration of the prefcribed five minutes, when he was releated from his purgatory, (his legs and feet wiped dry) and put to bed, foon after which, as he expressed himfelf, he felt a comfortable glow of warmth diffule itself over all his body, and in a few minutes afterwards called for a urinal, as he thought he could make water, which being given to him he by an endeavour forced out a few drops; this happy prefage enlivened my hopes, and emboldened me to give to him and the by-ftanders ftrong affurances of a favourable iffue, which were verified by the event, for in about an hour, etfi guttatim, he filled the glafs, and before morning had difcharged a chamber-pot full. From this time the paffage became free; and, as I was not his ordinary phylician, I took my leave, and heard but

but little of him afterwards; but from what I did hear, and having feen him frequently pafs the flreets in apparent good health, I am inclined to think he received every benefit from the treatment he underwent that could be expected in fuch a cafe.

The third and laft cafe I fhall mention, was of a woman, extremely bilious and low fpirited, who, though her condition in life was above mediocrity, unfortunately indulged herfelf too much in the ufe of fpirituous liquors; the confequence of which was frequent hæmorrhagy from the nofe, in general not difficult to flop by the common methods ufed for that purpofe, as vinegar, ice, &c. to the temples, noftrils and forehead, but on greater diffolution of the blood, the bleeding was more difficult to arreft, and on one occasion became fo alarming as to make me apprehensive for the patient's life.

All the means administered on former attacks were now practifed in vain, the bleeding was not to be ftopped by any of them, but continued to flow in an abundant fream for feveral hours, till the ftrength of the body was reduced to a formidable state of weakness. No time was now to be lost, the hæmorrhagy must be suppressed, or the patient fink from inanition. The only probable mean of fuccefs that I could think of was ice, which, by its fedative power, might leffen the impetus of the blood, by diminishing the action of the heart and arteries; and here I was not difappointed, for on ordering ice to be applied to the cheft, abdomen, and vagina, in a few minutes the discharge of blood from the nose was checked, which, from flowing in a ftream, began now to escape only by drops, and in a few hours the hæmorrhagy entirely ceafed, the ice being occasionally repeated till that ceffation had taken place. No bleeding at the nofe happened again in this patient; but from weaknefs brought on by the great evacuations the had experienced, and from perhaps a difeafed liver, the died dropfical about fix months after the period fpecified.

I could add many more inftances of the benefits accruing from cold applications, but am afraid I have trefpafied too much on your conveniency by what I have already faid.

Great Russel Street, Bloomsbury. July 16, 1801. 1 am, &c. J. ROGERS.

Diseases

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june to the	2010	of July, 1801.
No. of Cafes.		No. of Cafes.
ACUTE DISEASES.		Menorrhagia 2
Typhus	22	Chlorofis 5
Febris Intermittens	I	Afthenia 2
Pneumonia		Hypochondriafis z
Cynanche Tonfillaris	8	Hyfterica 3
Acute Rheumatism	3	Scrophula 2
CHRONIC DISEASES.	A MARY	Diarrhœa 5
Cough	18	Hæmorrhois 3
Dyfpnœa	9	Scabies I
Cough and Dyfpnœa -	12	Herpes
Phthifis Pulmonalis	3	Chronic Rheumatism 12
Pleurodyne	I	PUERPERAL DISEASES.
Hydrothorax	2	Menorrhagia Lochialis - 3
Apoplexia	I	Low Puerperal Fever 2
Paralyfis	2	• Abfceffus Mammarum - 1
Cephalalgia	5	INFANTILE DISEASES.
Dyfpepfia	7	Febris Infantilis 2
Anafarca	4	Rachitis
Afcites	2	Aphthæ
Amenorrhora	3	Herpes 8
	-	

Account of Difeases in an Eastern District of London, from the 20th of June to the 20th of July, 1801.

It will appear from the annexed lift, that the fever, which has long formed a large proportion in former lifts, continues to prevail, and that the number of patients under its influence is still large. This difease has propagated itself to a confiderable extent, particularly amongst the lower orders of fociety; fo that there is hardly a family that has been visited by it, in which almost every member of it has not been more or lefs affected. Together with the other fymptoms of this difease, which have been frequently recited, fome affections of the throat have of late, in feveral instances, been experienced. In thefe cafes there has been a flight inflammation of the mucous membrane of the fauces, and fome enlargement of the tonfils, occasioning a degree of pain and difficulty in deglutition. These lymptoms have, however, foon yielded to the inhaling of the fteam of warm water, or frequently fipping fome tepid emollient liquor, or the use of moderately aftringent gargles.

Similar affections of the throat, but in a higher degree, have in fome inflances conflicted the primary difeafe. The patient has first complained of fliffnefs and fullnefs about the throat, with difficulty of deglutition; the tonfils and the whole of the internal fauces have been much inflamed, and the degree of fever indicated by the fullnefs and frequency of the pulle, and the heat of the fkin, has been confiderable.

112 State of Diseases in the Bristol Dispensary.

The use of aperient medicines, keeping up a determination to the fkin by antimonials, and the use of emollient gargles, have generally been attended with success, and in a few days the dilease has been removed.

To the Editors of the Medical and Physical Journal,

GENTLEMEN,

OME more firiking proofs of the efficacy of yeaft in typhus and putrid fevers have lately occurred in my practice; if thought worthy a place in your Journal, you will oblige me by inferting them.

Having under my care a young man ill with Typhus fever, belonging to a large family, I foon perceived many of them falling victims to it. Being obliged to visit the house every day on the young man's account, and finding two more taken very ill, I recommended them the use of yeast, as I was prevented affifting them otherwife from their not being able to procure Difpenfary notes. In the course of two or three days, the father, mother, and another child fell ill; and as they had only one room for all fix to lie in, two of them were carried to the Infirmary, and I procured Difpenfary notes for the other three. Finding the two who were removed to the Infirmary had been fo much relieved by the yeaft before they were taken away, I was induced to try it with the others, who were delirious nearly the whole of the time. I perfevered in the ufe of the yeaft, without any thing elfe, until after the crifis was over, when I gave them an infusion of bitters for a few days, and they all perfectly recovered. I am, &c.

Bristol, 10, 1801.

W. D. ROLFE.

State of the Patients of the Bristol Dispensary, from the 1st of June to the 1st of July, 1801.

Typhus Fever	- 43	Puerperal Fever I
Rheumatifm	5	Afthenia 7
Tuffis	1	Variola 8
Cardialgia	2	Febric Simpler
Gaftrodynia		Inflamed Breafts 2
Cephaialgia	I	Afcarides I
Anafarca	3	Menorrhagia 3
Aicites		Pluretic
Diarrhœa		Hydrops Ovaria 1
Peripneumonia		Gravel I
Podagra	1	Cynanche Maligna 3
Confumption	8	Mania I
Ulcerated Sore Throat	1	

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Resolutions of the Benevolent Medical Society. Resolved,

1ft. I HAT the thanks of this court be given to Dr. Jenner, for his invaluable Treatife on the Variolæ Vaccinæ, wherein he has clearly and fatisfactorily demonstrated, that the inoculated Cow-pox is a certain preventive of the Small-pox.

That as men of humanity, affociated for the purpofes of benevolence, we fhould be wanting to the character we affume, did we neglect the prefent opportunity of bearing our teftimony to the value of this providential difcovery, which, if generally practifed, we are of opinion, would effectually eradicate the Small-pox, one of the fevereft fcourges of the human race.

That this court, in thus requefting Dr. Jenner to accept their unanimous thanks for his ineftimable publication, entertain no doubt but pofterity* will do honour to his memory, and record his name amongst the real friends of man.

2d. That the refolution now unanimoufly paffed, be fairly transcribed, and fent to Dr. Jenner by the chairman, and a copy of it fent for infertion in the Medical and Physical Journal, and also in the Chelmsford and County Chronicles, and that the names of the members prefent be added thereto.

BENEVOLENT MEDICAL SOCIETY for the Counties of Effex and Herts. Court of Audit, holden at Dunmow, June 8, 1801.

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The state of the state of the state of	rreiei	11,	10-15-3
John Andree, M. D.	1	Mr. Gretton,	1 200
Mr. Burr,	Same and	Mr. Barlow,	C. Lin
Mr. Bradley,	a material	Mr. Willfher,	Children !!
Mr. Cribb,	1S.	Mr. Boodle,	IS.
Mr. Clarence,	Surgeons.	Mr. Seymour,	Surgeons.
Mr. Lawrence,	- En	Mr. G. A. Gepp,	Cod
Mr. Cooper,	Su	Mr. Harrifon,	. Su
Mr. Richard James,	344.51	Mr. Butler,	
Mr. John James,		Mr. Farr,	
Mr. James James,	No. 2	Mr. J. Clarance,	in car
all the state the second second		Mr. NEWELL, Chair	man.

The foregoing refolutions, we understand, were transmitted to Dr. Jenner in a very handsome letter written by Mr. Newell the Chairman.

* We not only hope that posterity will pay this tribute to Dr. Jenner, but that his contemporaries also will not be unmindful of his merit. ED.

Extract

NUMB. XXX.

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Extract of a Letter from Mr. Blount to Mr. Summers, of Bond Street.

HAVE enclosed you the copy of my letter to Dr. Jenner, refpecting the children inoculated at the Afylum; this you may use as you think proper.

Our Inoculation at the Difpenfary goes on very flowly, but with unvaried fuccefs. We are particularly attentive to ufe transparent fluid only. We also have found two, if not three cafes, to whom we have not been able to communicate either Small or Cow-pox. My private inoculations do not exceed thirty; and my five brethren may have done as much. Our numbers at the Difpenfary are a few flort of 300; of these we have heard nothing unpleasant. I have examined three reports of Small-pox fucceeding the Cow-pox inoculation; the refult of these is highly in its favour, not one had the least foundation.

DEAR SIR,

Twins

fubject.

WITH the Cow-pox matter you was fo obliging to fend me by my friend Mr. Samuel Rudder, I inoculated, April 17th, four children, viz.

> John Lloyd, aged 2 years. Maria Joyce, 2 years. John Foxall, 2¹/₂ years. Thomas Foxall, 2¹/₂ years old.

Of thefe, the inoculation of John Foxall only fucceeded. I fhall not trouble you with the daily progrefs of the inoculated part; only fhall observe, that in this cafe, as well as the five fucceeding ones, the appearance in the arms was exactly what you have defcribed in your first publication upon this interesting

1779, April 24. Thomas Foxall and Maria Joyce were again inoculated with transparent fluid, taken from the arm of John Foxall, both of which took effect.

May 2d. John Lloyd was inoculated with transparent fluid from the arm of Maria Joyce; this fucceeded.

May 10th. * * * * * was inoculated under the fame circumftance from John Lloyd.

May 18th. **** was inoculated from the arm of ***. Not one of these children had the least apparent conflictional indisposition. I could not discover any symptom of fever, nor had any one of them any eruption whatever. Their arms got well as soon as usual under the Small-pox Inoculation. The only difference I could observe was, that in every one

of

Address to the Poor, on Vaccine Inoculation.

of them, the inflammation feemed to be more phlegmonous, if I may fo express myself. These children make part of a family of 300. The house in which they live is about a mile diftant from Birmingham. Every attention is paid to cleanlinefs and ventilation; fo that I think the fame effects may be expected as you ufully find in the country.

From *** I took fome matter upon thread, with which I inoculated three children, all at the breaft, about fix months old; paupers in the crowded poor-houfe in a clofe part of Birmingham; two did not take effect, and the third was taken to a diffance by the mother the day after inoculation, fo that I never faw the child after; but I have fince heard, that the mother returned again in a few days with the child, who had about fifty eruptions, of what the thought was the Small-pox. The difease appearing to flight, the did not think it neceffary to trouble me with it; thus I loft the only opportunity of feeing the difeafe in this form, and of making any remark on the peculiarity of its appearance.

August 1.- I inoculated these fix children with fresh crude variolous matter, but without effect.

25th .- I again repeated the variolous inoculation with the like refult; and I intend to repeat it again as foon as I can procure fome proper matter for the purpole.

When I have an opportunity of repeating the vaccine inoculation, which I hope to have foon, I will take the liberty of applying to you for fome matter.

Birmingham.

1 am, &c. I. BLOUNT.

June 14, 1801. Since the above was fent to Dr. Jenner, these fix children were put to fleep with a child who had the Small-pox in the natural way, and not one took the difeafe.

The following, or similar, Addresses are distributed in the Metropolis, and many other Parts of the Kingdom.

SOCIETY FOR BETTERING THE CONDITION OF THE POOR.

OTWITHSTANDING the advantage of Inoculation for the Small-pox, it is a melancholy fact that the poor do ftill fuffer very greatly by that diforder. The following addrefs,

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drefs from the phyficians, furgeons, and apothecaries of the medical hofpitals at Manchester, on the fubject of Inoculation for the Cow-pox, may, it is hoped, have its effect in producing from our medical hospitals, offers fimilar to that in the addrefs, and also in preparing the minds of the poor to take the full benefit thereof. Two families near Manchester have lately inoculated for the Cow-pox many hundreds of the neighbouring poor, who have all recovered without any fickness to confine them a fingle day. Twenty of them were afterwards inoculated for the Small-pox; for a few days the usual figns of infection were perceived on the arms, but foon difappeared, without communicating the Small-pox to any one of the twenty patients on whom this very fatisfactory experiment was made.

ADDRESS TO THE POOR.

The experience of feveral years has fully proved, that inoculation for the Cow-pox is a 'certain preservative against the Small-pox; and is, befides, fo mild and fafe a diforder, when compared with the inoculated Small-pox, that it has been generally introduced among the better informed and more wealthy inhabitants, both of this kingdom and of various parts of Europe. In order, therefore, to impress ftrongly on the minds of the poor, the ufefulness and fuperior advantages of this new plan of inoculation, the medical gentlemen belonging to thefe charities have thought it their duty to flate, in this public manner, the following observations, for the ferious perufal of all those poor perfons who feel a proper affection for their offspring, and who are defirous of promoting their own interest and comfort.

1. Inoculation for the Cow-pox has been practifed for feveral years, with conftant fuccefs, in various parts of this kingdom.

2. It has never failed to prevent the infection of the natural Small pox.

3. It may be communicated with fafety to perfons of every age and fex, and at all times and feafons of the year, with equal advantage.

4. The Cow-pox is much preferable to the Inoculated Smallpox, as being a milder and fafer difeafe, and not capable of infecting the perfons living in the fame family, or even fleeping in the fame bed.

5. It does not produce eruptions, which fcar and disfigure the face; and is feldom, if ever, attended with any other marks of the difeafe, than what appear on the arms from inoculation.

6. Neither fwellings, blindnefs, lamenefs, nor any other complaints, which are known frequently to be the confequences of the natural Small-pox, (and fometimes, though but feldom,

of

of the inoculated Small-pox) have been observed to follow the Cow-pox.

7. Alarming fits frequently feize children when fickening of the Small-pox; and while cutting their teeth, this diforder often proves dangerous: But no fuch objections lie against the Cow-pox.

8. So far from proving hurtful, delicate and fickly children are often improved in health by having paffed through this complaint.

9. Scarcely any remedies or attendance are required for the Cow-pox.

10. There is no necessity for a course of physic either before or after inoculation.

11. The time of the parents will not be taken up in attendance upon the sick, to the injury of the fupport of the reft of the family: and to poor families, this is an object of no small importance.

The prejudices of the poor against inoculation for the Smallpox, by which thousands of lives have been annually faved, have been often lamented; but if they fuffer unjust prejudices to prevent their laying hold of the advantages now offered to them by the inoculation of the Cow-pox, they will neglect the performance of a duty they owe to themfelves, to their families, and to fociety at large. For furely it is little lefs than criminal to expose their helplefs children to the attack of fo terrible and fatal a malady as the Small-pox, when it may be readily avoided by the inoculation of fo mild, fimple, and fafe a difease as that of the Cow-pox.

N. B. All poor perfons, whole affection for their families leads them to embrace this favourable opportunity, may have their children inoculated for the Cow-pox, at the holpitals and difpenfaries, from twelve to one in the afternoon, every day in the week, (Sunday excepted) throughout the year. No time ought to be loft by the poor in freeing their families from the apprehenfion of the Small-pox, which daily increases both in frequency and malignity throughout this town.

To the Editors of the Medical and Physical Journal.

Gentlemen,

HREE children in this neighbourhood having lately received the Small-pox after a previous inoculation for the Vaccine difeafe, I am induced to lay the circumftances attending that

Dr. Fawssett, on spurious Vaccine.

that inoculation, through the medium of your Journal, before the public, to remove any doubts that may have arisen of the fecurity of the new practice being invalidated by the accident.

On Sunday, October 19, the four children of Mr. Whitworth, of Cuxwold, in this county, were inoculated with matter received the day before from the Vaccine Inftitution. Owing to the ftruggling of one of them, (Harriet) a deeper incifion was made in her arm than was wifhed, and it appeared the next day flightly inflamed. This inflamination was not increafed on the Tuefday morning, though fhe complained of fome pain in the arm; at night rather more inflammation was perceptible, but the part was thought to be irritated by pulling off her frock: The inflammation gradually increased on the Wednefday and Thurfday, though fhe ceafed to complain of pain from it; and on Friday a flight watery discharge took place from the inoculated part. This continued, as did the extension of the inflammation, during Saturday and Sunday. On Sunday morning the took fome dofes of an aperient mixture, which operated mildly, and in the afternoon fhe appeared to be flightly feverifh. On Monday the difcharge from the arm was diminished, and the inflamed areola, which was scarcely of the diameter of half a crown, feemed at a stand. On Tuesday a scab had formed, covering a little purulent matter; from this time the inflammation fubfided, and a dry dark coloured fcab, fuch as commonly fucceeds to a Cow-pox puftule, continued on the arm for fome weeks.

No diffinct veficle or puftule was ever formed.

The eldeft and youngeft child were not at all affected by the inoculation.

The arm of the remaining child (Georgiana) was thought to be flightly inflamed on the day fucceeding inoculation, but this was not perceptible on either Tuefday or Wednefday. Early on Thurfday morning fhe rubbed it a good deal; at noon it was inflamed, and a minute veficle was vifible on the inoculated part: The inflammation gradually extended itfelf, and on the Saturday there was a watery difcharge from the veficle. On Monday the difcharge was leflened, and the inflammation, which was about the breadth of a fhilling, feemed at a ftand. From that time both gradually abated, and were fucceeded by a fcab exactly fimilar to that on Harriet's arm.

On Thuriday, October 30, Mary and William were again inoculated with matter taken on a thread, at the beginning of the fecond week, from Harriet's arm. The plafter was removed on the third day, and no inflammation was visible on the arm of Mary, though a flight one appeared on that of William. The inflammation extended itself on the arm of the

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Dr. Fawssett, on spurious Vaccine.

the latter in the fame gradual manner it had done on those of his fifters, and on the fixth or feventh day a watery d scharge took place. He was never severish during the progress of it, though he had been much out of health the week or two before; and about the ninth day the inflammation, which was rather larger than a shilling, became stationary; the discharge gradually subsided, and the scale formed precisely as on the other two. No pussule or vesicle was ever formed in this case.

The inoculation of Georgiana, in whom the inflammation had apparently been excited by her rubbing her arm, was again repeated, and of Mary a third time, with matter taken from their brother, but entirely without effect.

It was inconvenient to the family, who were brought to this town for the purpose of inoculation, to remain longer here; and all but Mary, on whom every attempt to produce infection had been fruitles, were removed.

The point in which the cafes above detailed principally deviated from the regular appearance of the Vaccine diteafe, was in the abfence of the very characteristic vesicle* or pussel, fo well known to every one who has had an opportunity of witneffing the complaint, and fo admirably delineated in Dr. Jenner's publication.

The inflamed areola too was rather finall in each of them, and became flationary fomewhat earlier I think than it generally does. I could not difcern any variety of tinge in the inflammation, as fome of your correspondents have noticed in irregular cafes, nor did I observe that the hardness round the inoculated part was later in its appearance than usual. The matter discharged from the fore was at first perfectly limpid.

The early appearance of inflammation might, perhaps, be objected to, in the cafe of Harrier; but it was fo very flight, and did not increase till the third day, that it was attributed to the puncture being accidentally deeper than was intended, and it was not expected that the nature of the difease could be altered by that circumftance.

The inflammation not appearing on Georgiana's arm till fhe had rubbed it a good deal, on the fourth day, rendered the refult of her inoculation particularly unfatisfactory, and it was accordingly repeated, but without effect. The after progrefs of

* Georgiana, it was mentioned, had a minute veficle on the inoculated part of her arm; but it was more transparent, more globular, and applared to have a thinner pellicle than marks the most decided Cow-pox putule, of the inflammation on her arm was gradual, and precifely as the reft.

The abfence of the veficle appeared to me the moft important deviation from the ordinary progrefs of the difeafe, and enough to render the efficacy of the inoculation, in all of them, ambiguous; but as two cafes occurred here two years ago, in which it was equally wanting, and the patients were neverthelefs unaffected by a fubfequent Small-pox inoculation,* 1 was in hopes our prefent patients would have enjoyed the fame fecurity. At the fame time, could any recent matter have been then obtained, I fhould certainly have wifhed to repeat the inoculation in every one of them. That opportunity, however, was not afforded me; and a general inoculation for Small-pox taking place foon after in the village where they lived, they, with the reft, were fubjected to it, and received the difeafe in a very mild and regular manner.

The failure of the above cafes, though from the circumfances here mentioned it was, in two of them at least, unexpected, ftill cannot be confidered by any one who has paid due attention to the fubject, as invalidating the fecurity of the Cow-pox inoculation, where the progress of it has been un-equivocal. It teaches us, indeed, that a flight deviation from the regular appearances may affect that fecurity, and where a favourable repetition of inoculation is not in our power, muft of courfe, induce us to with-hold our responsibility for its efficacy in fuch inftances. It ftrongly enforces too the neceffity of minute attention to the progress of the local affection, as the only criterion of a fuccessful reception of it; fever, tendernefs in the axilla, and other more certain fymptoms of conftitutional affection fo frequently being wanting; nor, as appears from one of the above cafes, does a flight appearance of the former afford any additional fecurity, where the local affection is not fatisfactory.

In the country, we labour under great inconveniences in feldom being able to obtain recent matter, that fent from a diftance fo often failing to produce the difeafe, that little reliance can be placed on it. Several times it has lately happened in this neighbourhood, that the matter received from the Vaccine Inftitution has either failed to produce any inflammation, or, as in these cases, only occasioned an imperfect form of the difeafe.

* The patients above alluded to were inoculated by a thread, and as the plafter was not removed before the fourth day, the vehicle might be broken in doing it. In feveral other cafes, though managed in the fame way, that did not happen.

Mr. Stevenson, on spurious Vaccine.

difeafe. Till better means therefore of preferving the matter are difcovered, the progrefs of the Vaccine Inoculation in the country will, I f ar, be but flow, notwithstanding every day's experience fhould continue to confirm its importance.

The eldest of the children who was left at Horncastle, was inoculated fome weeks afterwards with recent matter procured in the neighbourhood, had the difcafe in its most decided form, and has fince been twice inoculated for Small-pox without any effect.

One of your correspondents has remarked, that perfons with a finooth clear fkin, flaxen hair, and light eyes, are least fufceptible of Vaccine infection; these children were precisely of this temperament.

Horncastle, Lincolnshire, July 7, 1801.

I am, &c. JOHN FAWSSETT.

The Editors perceive that Dr. Fawfett's ideas on this fubject are perfectly correct, and affure him that proper virus, inclosed between two glafs plates, may be fent to China, and never fail to communicate the difeafe. This method of fending virus to a diftance is always employed by Dr. Jenner, who never uses any that is not taken before the areola is fully formed. When taken later it is not to be depended upon as a preventive of Smallpox, although it will produce a difeafe imitative of the true Vaccine.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

F the enclosed communication be deemed worthy a place in your excellent Mifcellany, its infertion will much oblige your conftant reader and well wither, IOHN STEVENSON.

Kegworth, July 1, 1801.

THE numerous and very refpectable testimonials, detailed in the various numbers of your excellent Journal, relative to the fuccefsful and extensive inoculation of the Vaccine Difeafe, might feem to render any further communications on the fubject unneceffary, fince its character as a prophylactic to the variolous infection is now, it may be supposed, fully established. Notwithstanding, however, the mass of apparently satisfactory evidence in its favor, I cannot perfuade mylelf that the practice has been brought to the zenith of perfection, and; as fuch, incapable of farther elucidation and improvement. Elfe, how fhall R NUMB. XXX.

Mr. Stevenson, on spurious Vaccine.

fhall we reconcile the difcordant reprefentations of its great feverity, and even mortality in fome individuals, with the infinitely greater proportion of fuccefsful cafes, in which the fubjects of the difease have experienced little conftitutional derangement, though they have equally participated of its falutary preventive influence? I am aware that the abettors of the new fystem will answer, that this contrariety of effects depends upon the degenerated flate of the matter employed, and a want of difcrimination between the genuine and fpurious Vaccinia. It is not however to be expected, notwithstanding the attention that has been beftowed upon its inveftigation by men eminently qualified both by their talents and opportunities for making accurate observations, that all its different modifications and nice dependencies are, at fo early a period after its introduction, compleatly developed. I am ready to admit that where the Vaccine virus has exerted unufual violence in its operation, the caufe is to be fought for in the peculiar irritability of the conffitution of the individual at the time of infertion, disposing it to take on a morbid train of actions, rather than to its specific deleterious nature. At the fame time, from the two cafes which have fallen under my immediate infpection, and which I shall here beg leave to enumerate, I do not feel perfectly fatisfied that it is universally and infallibly an antidote to the Small-pox.

This fupposition is at least admissible, if we may be allowed to deduce our opinions from the prevalence of what are confidered the diagnostic fymptoms of the genuine Cow-pox, as in no inflance that has come to my knowledge, has their existance been fo clearly marked, and fo fully divested of obscurity in every particular, as the following,

Master Thomas-Harvey-Toton Notts, aged two years, was inoculated with Vaccine matter on the 1st of June, 1800, taken from a young lady in the fame village, on the ninth day of the difease, and immediatly inferted without dilution, in its perfectly limpid state, into both arms. On the fourth day, the matter had evidently taken effect, and on the fifth a fmall veficle appeared, which gradually enlarged till the eighth, when my patient became uneafy, fretful, and fomewhat feverifh. These symptoms abated in the space of forty-eight hours. The beautiful eryfipelatous circumfcribed efflorescence, or areola around the puffule, which was diffended with a transparent fluid, continued to increase in circumference till the twelfth day. From this period it fpontaneoufly though gradually fubfided, the matter in the puffule being all this time of an aqueous colour and confiftence. The pultule began now to affume a dark complexion, and an efchar formed, which feparated in about

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about a fortnight afterwards. On the ninth day a few red eruptions appeared, fcattered thinly over the body like meafles, which in the space of four days turned brown, and soon defquamated, nor did they contain any fluid during their continuance. In fhort, I know not of any variation in the fymptoms from the commencement to the termination of the difeafe, from those which uniformly occur in the Cow-pox, fave the cutaneous eruptions, which are not a neceffary or ufual concomitant.

On the eighth day, Master Edward-Harvey, aged feven years, was inoculated with matter taken from his brother. It would be nugatory to ftate the particulars of his fymptoms, and it is only neceffary to mention that he went through the difease in a more mild, though equally diffinct form.

In fix months afterwards, both these young gentlemen were inoculated with recent variolous matter, in order to remove from the minds of their parents all doubts of the efficacy of the Cow-pox as a prefervative against the contagion of the variola. As for myfelf, I entertained not the leaft apprehenfion of any effects from the inoculation, and in this conviction I deemed a preparative courfe quite fuperfluous. The matter which had been thus introduced, inftead of dying away on the third or fourth day as I had anticipated, began to produce inflammation on both their arms. You may conceive my confusion and chagrin, when on the eighth day, I received a meffage requefting me to vifit my young patients, who complained of head-ache, chillnefs, ficknefs, and the other precurfory fymptoms of Small-pox. On my arrival, I found, to my fincere regret, that there was little doubt of their having the genuine variolous fever. The putules on the arms of both were fully diftended with purulent matter, and confiderably inflamed around their margins. In Mafter Edward, on the following day, a full crop of eruptions fupervened. With refpect to his brother, the eruptive fever was much milder, a circumftance that was owing probably to his being more exposed to the open air in addition to the very foluble ftate of his bowels. The puffules too, never attained to that high degree of maturity as in Mafter Edward. For after being red, and bounded by a marginal inflammation, and being filled with a much lefs proportion of purulent contents, they fooner turned brown and exficcated, a fymptom not unufual in very favourable cafes of variola.

That this fecondary difease was the real Small-pox, admits not of a doubt, fince many children were inoculated fuccefsfully with matter taken from Mafter Edward. It may be proper to observe in this place, that the young lady from whom Master T. Harvey received the Cow-pox, has been lately inoculated with variolous matter, but did not take the infection. This

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This fact coincides with fome inftances of Small pox, in which the patient (as is faid on good authority), is endowed with the power of communicating the genuine difease to other individuals who shall be susceptible of the contagion a second time, whils the constitution of the first is shielded from its repeated aggression.

These histories and reflections are transmitted, not with a view to depreciate this grand innovation in medicine, or to prejudice the minds of benevalent parents, anxious for the welfare of their tender offspring, against its further propagation. On the contrary, I feel fincerely difpoled to congratulate the world at large on the happy introduction of the Jennerian Inoculation, from the conviction, that in various and important particulars it holds a decided preference over the Small-pox, which difeafe will probably, ere long, be completely exterminated, and known to future ages, probably, (as the true leprofy is to us), only by traditi-onal knowledge. So far, therefore, am I from wifhing to check the extending empire of its benign influence, that I publish the above cafes, only as a corroboration of the close analogy that fubfifts in various relations between this new difease and the Small-pox. I am defirous also to ftimulate those who have fufficient opportunities for the purpole, to endeavour to collect fuch characteristic features of the genuine idiopathic Cow-pox, as may enable practitioners to recognize, when it will prove certainly efficacious as a guardian to the conftitution against the subsequent agency of the Variolous contagion, and under what circumstances a failure may, with equal probability, be apprehended.

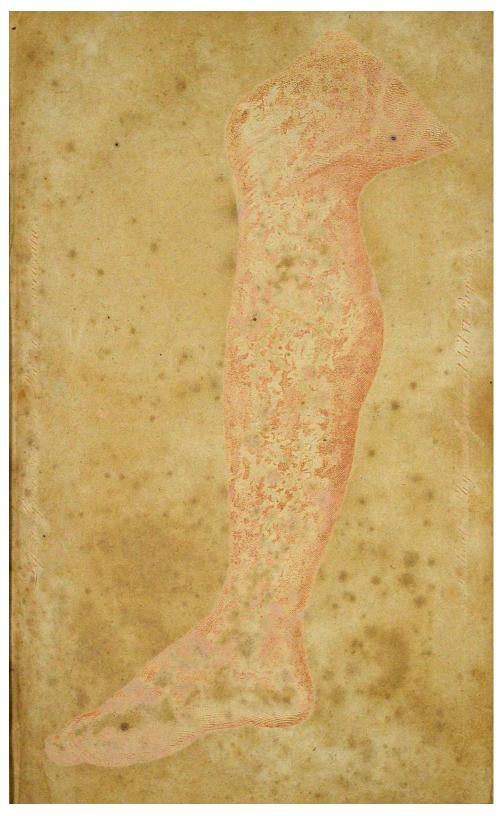
This point appears the grand defideratum in the new Inoculation, which, if once obtained, would do away the miftakes ariling from a fpurious difeafe, and eventually eftablish its reputation on a permanent and unobjectionable basis.

A Cafe of Lepra Grecorum, or Psoriasis Inveterata; by Charles Pears, F. M. S. &c. &c.

[With an Engraving.]

To the Editors of the MEDICAL and PHYSICAL JOURNAL. GENTLEMEN,

AVING met with a fevere cafe of that fingular difeafe, called the Lepra Grecorum, I was anxious to preferve the appearances



Mr. Pears's Case of Lepra Grecorum.

appearances of it, and therefore obtained the drawing which accompanies this communication. Your obliging readinefs in accepting of what I have hitherto fent, induced the hope that this would not be refufed; and fhould it be fo far approved as to be made the fubject of an engraving for more accurate delineation, I fhall effeem myfelf highly bonoured; and only beg that the following account of the cafe, (drawn up in fo much hafte as to preclude the poffibility of adding those obfervations I meant to have fent) will be received as a fufficient explanation, and that I may be allowed the indulgence of another communication for the remainder, at a future opportunity.

In July 1800, I was applied to by THOMAS STUBBS, aged 49, who thus defcribed his fituation. He was attacked fix years fince with a fense of fliffness in the legs and arms. The cuticle desquamated in pieces equal to the fize of two fingers in breadth. This continued for fome weeks, and occasioned fuch a degree of debility, as to confine him to his bed; after which he recovered, and continued well for the space of four or fix weeks. Another attack then commenced. The nails were fhed, and fucceeded by new ones. The patient sometimes experiences pain, but this has not been the cafe lately. His appetite is good. He is reftlefs, from an itching which prevails all over the body. Thefe attacks generally recur every three months; and during their continuance, a quart of the cuticle has fallen from the body in branny flakes every night, for a fortnight or three weeks, and half a pint is removed from the bed two or three times during the day.

His bowels are regular. The debility is fuch as to prevent his working as a carpenter, and " when he flands long at the bench," pain follows the exertion. In 1796-7, he was admitted a patient in St. Thomas's Hospital, but discharged withoutbeing relieved: and alfo from the Surry Difpenfary, where he afterwards applied. His hands are fometimes to bad, and the fiffures in them fo deep, that all motion is prevented. The cuticle on these parts has desquamated in the form of a glove. From the feet also, in the shape of those parts. The whole of the body fuffers this desquamation, except the pubes, scrotum, &c. where it never has taken place; but where it has lately began to fhew a difposition thereto. The face and head are affected as other parts of the body, more efpecially the roots of the hair. The return of every attack is preceded by a violent itching, which always indicates its approach.

The general appearance of the body is of a dark or reddifh brown, which appears more ftrongly marked when exposed by

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the

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the recently fallen off white and branny cuticle; evincing a more flriking contraft.

For the removal of this fevere difeafe, I gave the following: R. Hydrargyr. muriati. gr. x. Spt. ætheris nitros. 3j. Tinct. opii. j. M. Cap. gtt. x. bis in die. R. Hydrargyr. muriat. gr. iij. Aq. fontan lb. ij. M. ft. lotio. To be applied every night to the parts affected.

By Sept. the 8th. the fkin became much fmoother, the fcales or flakes of defquamating cut cle were much lefs, and the patient generally much better, being able to walk, and alto to work in a degree. The fentible heat of the fkin was much lefs.

Oct. 13th. He was feverely attacked with cholera morbus, on which account I difcontinued the hydrar. mur. but the ufe of the *catechu* having recovered him by the 15th inftant, he again refumed the ufe of the former medicine.

24th. The red fpots, inftead of enlarging and producing scales, died away, and left the fkin fmooth and clear.

Dec. 20th. The patient difbelieving that the medicine could produce fuch a spendy effect, I ordered its ufe to be discontinued, in order to evince its power over the difeafe, which returned fo foon with aggravated violence, that he immediately acknowledged his miftake, and begged for his medicine. Since this time he has continued the ufe of his mixture and lotion, and found the attacks of the difeafe recur lefs frequently, and at longer intervals. The laft, which occurred in March laft, continued about four weeks, fince which time he is again recovered, and finds himfelf in good health, continues his work as ufual, and his body is in a very good and favourable condition. The dofe has been gradually increafed to 15 drops, three times a day.

So far does the hiftory of this cafe reach the prefent time. Its future procedure muft confequently be an after recital, which I fhall the more anxioufly await, from the opinion of fome, that *mercury is always ineffectual*, and generally hurtful, however contradicted by the fuccefsful practice of others: fo that the diffinction thus derived, of its difference from *syphilis*, is not well founded.

Thomas * fays, "This truly horrid and loathfome diforder, which feems peculiar to warm climates, is evidently of a very contagious nature." But this does not feem to be the cafe here, in colder climates; for the numerous family of the above patient,

• See Thomas's Medical Advice to the Inhabitants of warm Climates, p. 119.

Mr. Hutchinson's Case of lacerated Femur.

patient, using every domestic utenfil after him, are never affected by it. Lommius * obferves, that " the fourth species of impetigo, called the leprofy, is of all others the most terrible, becaufe it is incurable." This alfo appears to be, happily, an untruth, as the above inftance added to others may evince. Omiting, however, to enlarge further at this time, I fhall only observe, that the drawing is so far from being an aggravated reprefentation of the limb, which fairly refembled the whole body, that it is not nearly fo bad as the parts really were, both before and afterwards.

Rockingham Row, Newington Butts, I remain, &c. April, 1801.

C. PEARS.

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To the Editors of the Medical and Physical Journal.

GENTLEMEN,

SHOULD the following fingular cafe, which has lately fallen under my care, appear to you fufficiently interefting to merit a page in your valuable Journal, it is much at your fervice.

Southwell, Notts. July 3, 1801.

I am, &c. BENJAMIN HUTCHINSON, Member of the Royal College of Surgeons.

ON the 30th of laft May, I was called to Thomas Jephfon, twelve years of age, and fervant to Mr. Chadwin, a farmer at Winkburn, in this county. It was fuppofed that he must be dead from an excels of hæmorrhage before I could poffibly reach the village, at a diftance of three miles and a half. On my arrival, however, I found the boy in a ftate of fyncope; and on enquiring into the particulars of the accident, was informed, that on returning from ploughing, he rode a reftive horfe, and carried fome plough irons before him; the horfe beginning to be unmanageable, the boy threw the implements from him, one of which fluck perpendicularly in the ground: he was immediately thrown, and fell with the posterior part of his right thigh upon this iron, which tore its way through the

* Vide Jodocus Lommius's Medicinal Observations, Winter's Translation, Luk 2. p. 184.

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the anterior part, dragging with it in its course the femoral artery, just below its bifurcation into the profunda. The artery was completely divided, and its lacetated extremities were forced externally through the wound. Owing, I confider, partly to the contraction of the veffel, to the coagulum formed within its tube, and probably more particularly to the complete state of fyncope which fupervened, the hæmorrhage had ceased before I had reached the village. This large artery being fo immediately in view, I had no difficulty in fecuring with tape ligatures, each divided extremity; and from the evident and impetuous pulfation, convinced that my patient was living, I introduced the veffel within the gaping laceration of muscles, leaving the ends of the ligatures externally. By means of futures and flips of adhefive plafter, the lips of the wound were fatisfactorily approximated, and having applied fimple dreffings, I fecured them by a long flannel roller. The deliquium was removed by the irritation occasioned by the ligatures and futures.

Confidering my patient in the fame state as after the operation for popliteal aneurism, I left him with an impression of anxiety on my mind, not without hopes, however, that the profunda, with the anaftomofing arterial ramifications, would be fufficient to furnish a due circulation for the nourishment of the limb. On the following day, I found he had paffed a reftlefs night, notwithstanding he had taken a draught with twenty-five drops of tincture of opium; the wound was painful; he was yet free from fever, and the limb retained its natural heat. The quantity of opiate having been increased the second night to thirty drops, he was not fo reftlefs, ftill, however, fuffering confiderable uneafinefs, and complaining of a numbnefs in the whole limb. Care was taken to keep his bowels in a fufficiently open state; and with the affistance of the fame quantity. of opium, he again passed a comfortable night. The degree of pain in the wound varied until the fixth day, when I cautioufly removed the dreffings, which were completely moiftened by a copious effusion of coagulable lymph from the mouths of the divided lymphatics. On the day following my patient was feen by Mr. Beechor, a most respectable surgeon of this place, and Mr. Thompson, a well informed practitioner of Newark, who concurred in opinion that the boy was doing better even than might have been excepted. Appearances now continued much in our favor; the pain was inconfiderable, and the extremity gradually recovered its regular temperature and fenfation. Nothing occurred to interrupt the healing of the wound. On the twelfth day from the accident, the ligatures were detached from the artery, and in the course of five weeks the wound was com-

Mr. Peck on Quackery.

completely healed, and the boy recovered the perfect use of his limb.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

A LTHOUGH many pertinent remarks have been offered to the medical world (through the medium of your valuable Miscellany) on the subject of Empiricism, I almost fear it is less considered than it ought to be. Some plan for the suppression of these infidious pretenders is rigorously demanded, in justice to the community, as well as the interest of regular practitioners.

That the common practice of vending quack medicines has proved highly deleterious to fociety, impaired habits and exhausted perfons too decidedly indicate; and fo long as those fraudulent impostors are permitted, *unmolested*, to hurl their rhodomontade among the credulous, fo long will the delusion continue. The advertising part of those infallible tricksters are daily increasing their depredations, are hourly imposing on the community nostrums of nullity or nonfense, and with dauntles effrontery are procuring patents for what is in *common* use in every apothecary's shop.*

It is true that the *revenue* may in fome measure be benefited, in confequence of the numerous quantity of flamps iffued by the venders of medicine; but, that mankind in general flould continue to be plundered of their property and health, in order to enhance the yearly profits of government, is furely not confiftent with reason, or compatible with found policy.

Independent, however, of *this* order of quacks, there are others, who, perhaps, are equally (if not more) obnoxious to fociety; profeffing themfelves infallibly capable of diffinguifhing difeafes by a flight infpection of their patient's urine. This clafs (not unaptly denominated Urinarii) is not very numerous; and it would be fortunate for mankind did their impoftures only average their number. They feem to have leaft honor in their own country, though, even at home, there are many whole credulity exposes them to *empirical ravage*.

Strange as it may appear, it is incontrovertible, that inflances are not wanting, where emiffaries are regularly fent abroad,

* Witnefs Mr. Ching's celebrated worm medicine.

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with

with urinals, to collect the *fignificant* ftreams of the undifcerning afflicted, which mellengers as conftantly forward the *mafs* or *ingredients* to the poor deluded fufferers! Thus, gentlemen, is a liberal profeffion fhamefully undervalued, while fociety at large is notorioufly imposed upon. *

To point out a malady without promifing a remedy, will avail little to the fufferer; I therefore give it as my decided opinion, that nothing flort of an interference of the legiflative power is equal to the intention of reftraining the evil, is alone capable of counteracting its milchievous effects, and thereby of promoting the general good of fociety. I further add, that, (as the fubject is of confiderable moment to the regular practitioner) in order to accomplifh an object fo defirable, the neceffary fleps towards fuch an end fhould be purfued immediately.

That a practice to ignoble fhould continue to be supported by a country, whole boaft is to live in an enlightened age, and which abounds with medical talents who do no fmall credit to the day in which they practice, is, to the confiderate mind, a matter of furprife; that it is becoming more and more extenfive, and serioufly prejudicial to the interests of the faculty (as well as increasingly detrimental to the good of our fellow-creatures) is very evident; and, that it deferves their most fober regard and determined opposition, must strike all who have the smallest respect for their own prosperity, or the reputation of a liberal profession. Should the end not be answered by any unforeseen causes presenting themselves, I am persuaded a serious reflection on the dignity of the medical character, and a confequent endeavour to thwart every means tending to degrade it, will not be undeferving of the notice of my brethren. Animam liberavi.

Higham-Ferrers, July 8, 1801.

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I am, &c. THOMAS PECK.

Case

 Many cafes might be adduced, where patients (although convalefcent) have collected fums of money of their neighbours in order to employ an empiric, while their apothecary's ledger teems with unfettled accounts.

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Case of Erysipelas followed by general Anasarca, succeeding the Vaccine Inoculation, and terminating fatally.

Communicated by Mr. CLUTTERBUCK.

SARAH WHITBURNE, refiding at No. 12, Little James Street, Bedford Row, was inoculated with the Vaccine matter in the left arm, at the Small-pox Hofpital, where the was admitted an out-patient, on the 12th of May, 1801. She was feven weeks old at the time, was fuckled by the mother, and in all respects a fine healthy child, except being occasionally dif-ordered in her bowels. The parents were, to all appearance, in the best health.

On the 9th day, the arm having the ufual marks of infection, the child fickened, had much fever, and was at times much convulled. On the 10th, the inflammation furrounding the inoculated part was very intenfe, and the lymphatic glands fituated on the left fide of the neck were observed to be swollen with much rednefs in the fkin covering them: there was, however, no continuity of inflammation from the arm to the neck, the former having the ordinary circumfcribed appearance. A copious rafh had at this time appeared over the whole body, but in two days after wholly vanished. The arm and neck were directed to be fomented with flannels wrung out of hot water, with the effect of removing the inflammation from those parts : the inoculated part speedily dried and scabbed over, and did not afterwards flow any disposition to inflame or ulcerate.

From the neck, however, the inflammation fpread on to the face and head, which became much fwelled, with the ufual appearances of eryfipelas on thefe parts, the eye-lids being nearly closed, and numerous vehications arising on the furface of the fkin. The difease continued to creep along the cheft, and gradually over the whole furface of the body, leaving the part before affected as it paffed on to the neighbouring fkin. The elbow and fore-arm on the inoculated fide were to much fwelled and inflamed, that fuppuration feemed at one time to be threatened. It is curious that there was no return of inflammation on the inoculated part, or its immediate vicinity; the difpolition to erylipelatous inflammation appearing to have been completely prevented by the original Vaccine inflammation.

A fortnight elapfed before the eryfipelas had completed its courfe, dating from its commencement on the 9th day after inoculation; and as the inflammation fubfided, analarcous appearances fucceeded, affecting efpecially the extremities and labia pudendi, which were enormoufly swelled. Great general irritation,

Mr. Clutterbuck's Case of Erysipelas, &c.

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tion, as might have been expected in fo young a child, accompanied the difeafe, with frequent returns of convultion, and at length infentibility; the hydropic effution continuing to increafe till the period of the child's death, which took place on the 15th of June, just five weeks after the inoculation.

The cafe which has now been defcribed can be confidered in the light of an exception only, and certainly affords no argument against the practice of the Vaccine inoculation; yet we can fcarcely hefitate, I think, to refer the eryfipelas, and confequently, *indirectly*, the death of the patient to this fource. The commencement of the inflammation in the neck corresponding fo exactly with the conflictutional affection on the 9th day from inoculation, marks pretty clearly the relation of one to the other. The Vaccine poifon, we know, is more ready to excite eryfipelatous than phlegmonous inflammation ; in which refpect it differs from the Variolous. Although, therefore, the fpreading and extent of the difeafe are probably to be referred to a conflictutional caufe, they were not fo likely to have taken place under the Variolous as-under the Vaccine Inoculation.

Whether the eryfipelatous affection was owing to the abforption of the Vaccine poifon, and the general action of this in the fystem, rather than to fympathy, admits, perhaps, of a queftion. The enlargement of the lymphatic glands on the fide of the neck would feem to render fuch a fupposition not improbable: yet it has not been demonstrated, I believe, that the abforbents purfue this route in their progrefs to the fubclavian vein. This, however, is no argument against fuch a communication exifting, as it is little more than the main trunks of these vellels that have been traced by diffection. The place where the puncture was made was fituated a good deal higher than the infertion of the deltoid mufcle, and confiderably above the lymphatic trunks which pafs up the arm in their progrefs to the axilla; and no branches are delineated in Mr. Cruik-Thank's tables, as taking this rout from the fuperior part of the humerus; absorbent vessels, therefore, may pass from the part in queftion to the lymphatic glands of the neck, although they have not been traced by the knife of the anatomift.

I wo cafes very fimilar to the above are given by Mr. Maddock, of Nottingham, in the 24th Number of the Med. and Phys. Journal, one of which terminated fatally on the 26th day after inoculation; the other patient recovered after five weeks duration of the eryfipelas, an abfcefs, apparently critical, taking place in the axilla. The unfavourable cafes related in the 22d Number of the fame Journal, as occurring in the neighbourhood of Clapham, and which (unfairly I think) were attempted to be afcribed to fome negligence on the part of the practitioner, tioner, were probably of the fame nature with those above mentioned. In the inftance here related, no doubt can be entertained of every neceffary circumftance having been attended to in the operation.

It may be proper to obferve, that no prejudice is likely to arife againft the Vaccine Inoculation by the fatal termination of Whitburne's Cafe; the mother suppoling the child to have been inoculated for the Small-pox, and attributing its death to the difappearance of the eruption, or, as the terms it, the ftriking-in of the pock on the roth day. The only inference the cafe feems to furnish, is, that we should not under-rate the *polfible* danger of the difeafe, and thereby afford a handle to prejudice or malevolence to oppose a most uleful and important practice.

P. S. It is almost fuperfluous now to adduce evidence in favour of the new Inoculation; and I agree with Dr. Pearfon, in thinking it best to bring forward unfavourable cafes only, when fuch occur. I may observe, however, that I have met with two inftances lately of the *permanently* preventive power of the Vaccine. Two female fervants of Mr. Cater, of Gracechurch Street, were inoculated with Vaccine matter, the one two years and a half, the other fifteen months ago. They have both been employed lately in nursing a child of Mr. C's in Smallpox, with a numerous crop of puscules; and neither of them have fuffered.

Walbrook, July 12, 1801.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

W UCH as the medical properties of Digitalis have been lately inveftigated, it has been little employed in furgery. Yet from my own experience of its powers, it is, I think, greatly entitled to notice, and fecondary to none of the more uleful remedies except bark, opium, and mercury. At prefent, however, I fhall confine myfelf to the ftrangulated hernia; and as a proof of its efficacy in it, fhall fubjoin the following cafe.

On the 19th of June my affiftance was requested for a young man labouring under an incarcerated forotal hernia on the right fide, for which he had formerly worn a truß. The defcent was occasioned by over-exertion at his business as a weaver, and was attended with the usual fymptoms. Before I faw

Mr. Simmons, on Digitalis.

faw him, reduction had been attempted, after employing phlebotomy and calomel, the warm bath, enema nicotianæ, and a folution of fal ammoniac locally; and as inflammation had fupervened in the fcrotum on the fame fide, leeches had been applied to it. The failure of these means presented the operation by incision as a final resource; yet, not entirely discouraged by disappointment, the enema nicotianæ was ordered to be repeated, ice to be applied to the fcrotum and frequently renewed, and a grain of Digitalis to be immediately adminiftered. In two hours their fedative effects were ftrongly manifested, all resiftance was subdued, and the hernia now reduced.

I have afcribed the chief merit to the Digitalis, becaufe the enema nicotianæ and cold applications had previoufly failed, and the circulation was interrupted in a remarkable degree. The pulfe was hardly perceptible, the countenance funk, and the general deprefine for great, that æther and other ftrong ftimulants were judged expedient after the return of the inteftine.

Foreign writers have infifted much on reforting early to incifion, which, though dexteroufly performed, is certainly hazardous. But I am under a perfualion, that the neceffity for it may be fuperfeded, in general, by the proper employment of these sedatives. The exceptions to which I allude are, where from the particular manner of descent, the efforts at reduction oppofe an obstacle to the return of the intestine; a variety of which I have feen, and which must baffle every other refource of art: Otherwife, very few cafes, I apprehend, would prove irreducible. Where a fingle dose of the Digitalis does not answer, it may be repeated every second or third hour, in conjunction with the means commonly employed, according to their fentible effect; relying on the judgment of the practitioner in attendance when to abandon them. And I must caution him not to continue the ice too long, especially when mixed with falt, by which a greater degree of cold is generated, left gangrene fhould be induced, and the event of the operation, it neceffary, rendered more doubtful.

Reduction is chiefly prevented by the inflammatory flate of the contents of the herniary fac; which flate conlifts in an increafed frequency and vigour of the arterial pulfations, producing an effufion, and accompanied with a morbid fenfibility and tenfion. Thefe augmented dimensions are further extended, by the hindrance given to the return of the venous blood, and by the watery fluids of the inteffines diffilling into the ftrangulated cavity, as well as by the expansion of the gas contained within it. While, on the one hand, every caufe of dilatation

dilatation must tend to lighten the stricture, admitting the tendon to be wholly paffive; on the other, a diminution of bulk must obviously facilitate the replacement of the protruded contents. The fedatives employed in this cafe feem well calculated to fulfil the feveral indications. By the Digitalis the fupply by the arteries is stinted, and muscular refistance obviated by it and the nicotiana; and it is the well known property of cold to diminsh fensibility, and contract the circumference of substances coming in contact with it. I have faid nothing of inverting the body, fuppofing it to be done in every instance attended with difficulty, as in this. My method is, to fuspend the patient by the hams over the fhoulders of a ftrong perfon, fitting or kneeling on a bed, and to incline the head and body a little forward; in this polition, the inteftines recede towards the diaphragm, affift by their weight the external force, and draw back first the part last protruded; the fluids may alfo escape into the abdomen by their own gravity, and the muscles immediately concerned are still further relaxed. Coarfe as it is, the one adopted by our ancestors was more so; but their object was the fame. It may not be amils to remark, that the fluid contained in the incarcerated inteffine should be difcharged by preffing laterally, or by endeavouring to approximate its fides, and not by preffing from the fundus upwards. Where the aperture is not very ftrongly clofed, after reducing the tenfion, a little time fpent in this way will feldom fail to empty it; for the ftricture must be tight indeed to refist the transmission of a fluid thus impelled by the hands of the operator.

You have before recorded an inflance of the fuccefs of Digitalis in the ftrangulated hernia (fee Vol. iii. p. 330,) of which this may therefore be deemed a confirmation.

Manchester, July 11, 1801.

I am, &c.

W. SIMMONS.

Observations on Phiegmatia Dolens, by Dr. HULL. [Continued from our laft, pp. 51-63.]

II. Observations on Mr. White's Theory of the Disease. IN the fecond part of his "Inquiry," the ingenious author makes the following remarks: "When a healthful woman, who has not had the anasarca gravidarum, is feized with this diforder, in her lying-in in its fimple, perfect, but uncomplicated

plicated flate, and it is confined to one fide only, which happens about nine times out of ten, it is then allowed by all authors who have written profeffedly on the fubject, that the fwelling is confined to the limb, nates, lumbar and hypogaftric region, groin, and labium pudendi of that fide, and I must add, that it occupies all those parts, and never in the fmallest degree deviates from that line." p. 58.

Though it is clear from the former part of my paper, that the above flatement is incorrect, I am willing to admit on Mr. White's authority, that the affection was exactly of this kind in every cafe wherein he will fay, that on a careful examination he found it fo. Moreover, in difcuffing his theory of the difeafe, which he feems to deem applicable only to this particular variety, named by him *Phlegmatia alba dolens paerperarum*, I will not avail myfelf of the objections that might be urged againft it, from taking a more comprehenfive view of the malady; but will endeavour to prove, that his theory is at variance with his own obfervations and cafes. His eighth cafe I muft beg leave to infert entire in this place, as I thall have occafion to refer to different paffages in it hereafter; and I am defirous that it fhould appear to every reader, that the quotations from it are made with perfect fairnefs.

" ELIZABETH ROTHWELL, of Gravel Lane, Salford, a very healthful young woman, aged 24, free from any chronic diforder, and who had always enjoyed a most perfect state of health, was delivered of her fecond child, as fhe lay upon her left fide, on the 19th of January, 1783, by a midwife; had an easy time, and fuckled her child. She was kept very warm, never went out of her room, nor did any thing by which fhe could poffibly catch cold, till twenty days after delivery, when a window was opened in the room about a minute or two. In an hour after, she was seized with a pain in her right side and shoulder; but had no cough; she was bled, which eased the pain. Two days after, the was attacked with pain in the groin, labium pudendi, thigh and leg of the fame fide, which swelled, and then the pain abated. The parts were tenfe and hard, attended with fever. She was made a home patient of the Infirmary under the care of Dr. Bell, and is now got perfectly well." Inquiry, P. I. p. 23 and 24.

Before I enter upon the examination of the theory of this difeafe, as given by Mr. White, it may not be improper to premife a few obfervations. 1. On the nature of the fluid poured out by the exhalants into the different circumfcribed cavities of the human body, both in a healthy and difeafed flate. 2. On the nature and properties of the lymph. And, 3. On the flructure, courfe, &c. of the lymphatics, especially

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in the inferior extremities and the other parts of the trunk, ufually affected in Phlegmatia Dolens.

1. The exhaling fluid in the natural state of the body, is not in fufficient quantity to diftend the cavities into which it is confrantly paffing from the extremities of the arteries opening upon them; it merely moiftens the internal furfaces of the membranes; to the touch it is vifcid and mucilaginous, and is analogous to the ferum of the blood. In dropfical cafes it is accumulated in fufficient quantity to be eafily obtained and fubjected to a chemical analyfis. M. Ronelle and Fourcroy have examined the exhaled fluid of hydropics, as taken from the cheft, pericardium, ovary, abdomen, &c. and have found it poffeffing all the properties of the ferum. According to the latter author, it is ordinarily vifcid, yellowish, of a fweetifh and faltish tafte; it fometimes contains greyish yellow flakes in greater or smaller quantity, which confift of coagulated albumen. It coagulates by heat, acids and alcohol, precipitates on the addition of calcareous and metallic falts, and turns the fyrup of violets green. The coagulum, formed by heating it, is of a fulphur colour, is light, porous, and of a tremulous confiftence; a flightly yellow liquid oozes from it, which is not coagulable, and contains fulphur, phofphates of lime, &c. Diluted with water and heated, the exhaled fluid of hydropics affords a milky liquor, which does not coagulate, but yields a yellow pellicle: A true jelly cannot be obtained from it, therefore the albuminous matter contained in it, is not in the true state of gelatine.* In inflammatory difeafes the exhaled fluid thrown into the different cavities of the body, coagulates, a portion of the coagulating lymph of the blood, or fibrine, according to the new chemical nomenclature, being contained in it. A feparation of the fibrine from the ferous part afterwards takes place, and this, when it becomes perfectly folid, either attaches itself wholly to the internal furfaces of the membranes lining these cavities, or partly adheres to them, and partly is formed into flakes or loofe coagula, and intermixed with the fluid part.

2. The lymph, or fluid, contained in those absorbents which do not convey chyle to the thoracic duct, has by different writers been confidered as the fame as, or at leaft as analogous to, the ferum of the blood; and a priori it may feem allowable to confider it as the fame identical fluid with that exhaled into the circumferibed cavities, or with this and a flight admixture.

* See Fourcroy Systeme des Connaissances Chimiques, Svo. Tom. ix. p. 165.

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of the other fecreted fluids, according to the fituation of the lymphatics. The properties of the lymph, however, have not been fufficiently determined, owing to the difficulty of obtaining it pure, and in fufficient quantity for a chemical analyfis. It is pretty well afcertained, that its properties do vary occafionally. Soemmerring mentions the cafe of a healthy woman, in whom the lymphatics of the foot were varicole, and lymph flowed out freely on pricking them with a needle.* This lymph was found to have the following properties: It was clear and pellucid, of a flightly yellow colour: Its tafte was bland, and faline (muriatic). Expofed to the air, of the temperature of 50° of Fahrenheit's thermometer, for feveral hours, its fludity was fcarcely diminished. But on the addition of alkohol and the mineral acids it became turbid, and after fome hours the precipitate fell to the bottom, and the more fluid part fwam at the top. When it was evaporated fpontaneously in open veffels, or in a gentle heat, a good deal of a yellow tenacious matter, refembling gum arabic, and cracking like it, and pellucid as amber, remained with fome flender faline cryftals depolited upon it. When evaporated to one half the original quantity over the fire, it assumed a gelatinous nature. Being placed in 50° of Fahrenheit, it did not eafily putrefy; but after some weeks became turbid, emitted a cadaverous odour, and was changed into an apparently puriform matter. Muriate of mercury, added in powder, imparted to it an opaline opacity, and a variegated reddifh colour, and preferved it from putrefaction. Pieces of camphor also prevented its putrefaction, infomuch that, after all the camphor had difappeared, the lymph, which had indeed been diminished by exhalation, remained for fome time liquid and pellucid. Peruvian bark in powder did not long prevent it from putrefving; it was found inferior in this refpect to lime-water. This is by much the most circumstantial account of the properties of the human lymph which I have been able to meet with. Mr. Cruikthank fays, in the pureft ftate that he could procure the lymph, " it relembled water in fluidity, was transparent, sometimes of a ftraw colour, or even brown; it alfo either coagulated wholly on extravalation, or coagulated in part, as the animal from which it was taken was either ftronger or weaker. The fame thing happened in the dead body, where it coagulated from reft, or in confequence of death;" whence he fuspects, that the fluid found in the lymphatics is in part the coagulable lymph of the blood.+

Mr.

* De Corporis Humani Fabrica, Tom. v. p. 416 and 420. † Anatomy, &c. p. 96. See alfo Hewfon's Exp. Inq. P. ii. p. 238.

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Mr. Aftley Cooper informs me, that in an experiment upon the abforbents of a horfe, he put a watch glafs under the divided abforbents, and caught the lymph as it isfued, which coagulated in about three minutes, and that he has alfo taken lymph in the fame way from the abforbents of the neck of a dog, and found that it coagulated. From what has been already stated, it appears that the lymph varies in its disposition to coagulate; and from an interefting cafe, related by Mr. Patch, it would feem that it fometimes affumes a milky appearance. The boy, who was the object of this cafe, had a milky difcharge in confiderable quantity from a fmall orifice in the groin. Three or four fpoonsful of the fluid were brought to him, which, he fays, " appeared like fcalded milk ; and fome of it being heated over a candle, it foon turned to a foft curd.* There is reafon to believe, that this fluid was discharged from the inguinal abforbents, and that there was an admixture of adeps in it, as it was white, and the boy is stated to have been very much weakened by this evacuation. It is to be hoped, that those practitioners, who have an opportunity of collecting the lymph from wounds, or ulcers of the groin, cubit, &c. will analyfe it with more care than has been hitherto done.

Fourcroy feems to think, that, by paying attention to this kind of refearches, the abforbents may be opened at pleafure, and that this fort of operation, which he names lympheé, may fulfil fome ufeful indications; that it may remove lymphatic plethora, diminish the mais of superabundant white and nourifhing juices, and evacuate the lymph that is accumulated in certain cavities of the body; for, fays he, the depletion of a large lymphatic veffel, and the void which fucceeds it, muft augment the force of fuction and abforption in one region, and ultimately in the whole of the abforbent fystem.+ It does not appear, that the lymph has ever jellied, or coagulated in the veffels of the extremities in a living animal.

3. The lymphatics anaftomole more frequently than the arteries, and the anaftomofing branches are in many parts of large fize; from their very frequent communications with each other. they often form an irregular net-work. † Their coats are thinner and

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 † Systeme des Conn. Chimiques, Tome ix. p. 169.
 ‡ " This anastemesis takes place not only between the finaller branches, but between the larger trunks and the glands themfelves."-" From one lymphatic on the top of the foot, a confiderable number of other lymphatics on the leg and thigh, the greater number of the glands in the groin, on the edge of the pelvis, on the vertebræ, and the thoracic duct itielf, may in

^{*} Edinburgh Medical Effays, Vol. v. p. 238.

and more transparent, but stronger than those of the red veins, whence they are enabled to support a column of mercury of confiderable length; when distended, they have a jointed appearance, owing to their valves. In the inferior extremities, the lymphatics are in two general fets, or layers, one fuperficial, the other deep-feated. The fuperficial lymphatics are very numerous; compared with the fubcutaneous veins, they are, according to Mr. Cruikshank, as fourteen to one. They accompany the veins, named V. saphena major et minor. The deep-feated lymphatics accompany the large blood-veffels, and are lefs numerous than the superficial ones, but are at least double the number of the arteries. Both these fets of lymphatics enter the inguinal glands. Part of the lymphatics of the external parts of generation in women, of the lymphatics of the inferior part of the abdomen, of the loins, nates, and vicinity of the anus, paffes also into the inguinal glands; whillt another part of them passes by the nearest road into the pelvis, avoiding the inguinal glands: The lymphatics of the right and left fides of the inferior part of the trunk anaftomofe with each other; fo that the lymphatics of one lower extremity, and of the other parts of the trunk, ufually affected in Phlegmatia Dolens, when confined to one fide, are not more diffinct than the blood-veffels of the fame parts are.* Of the lymphatics, which proceed from the inguinal glands, and pals under Poupart's ligament, fome accompany the external iliac artery; others defcend along the fide of the pelvis near the internal iliac blood-veffels, and pafs through fome of the conglobate glands fituated there. With refpect to the lymphatics which pass through the inguinal glands, it may not be improper to remark here, that thefe glands are the centre or focus, and that the lymphatics of the loins and abdomen may with as much reason be confidered as the extreme points of this part of the lymphatic fyftem, as the lymphatics of the leg and foot. Now we find, that in five or fix of the fourteen cafes related by Mr. White, the difease in question began in the back, and ex-tended or descended to the groin, &c. + In these cases, therefore, the complaint, if it began in the lymphatics, according to Mr. White's hypothefis, must have begun at a diffant or extreme point of the affected part of the lymphatic fyftem; that

in the fame manner he injected."---" The intention of Nature by these anastomoses, is evidently to secure a number of roads, by which these important fluids, the chyle and lymph, may be carried into the blood." Gruiksbank's Anat. of the absorbing Vessels of the Human Body, p. 85.

* See Mr. White's Inquiry, Part ii. p. 58.

+ See Mr. White's Inquiry, Part i. Cales 1, 2, 3, 4, 9, and 12.

that is, at a confiderable diffance from the groin or brim of the pelvis, if we follow the route of these lymphatics. Why then, agreeably to the fame hypothesis, may not the complaint begin in a diffant part of the inferior extremity, as in the lower part of the thigh, or in the leg, and ascend or extend to the groin? And upon what ground can those cases be rejected; which begin in the leg, and are attended with the same symptoms as those which begin in the groin?

I will now proceed to examine the whole of Mr. White's Theory of *Phlegmatia alba dolens puerperarum*, as recapitulated in p. 125—131 of the Second Part of his Inquiry, premifing, that he has changed his ground, as far as relates to the manner in which the fuppofed injury of the abforbents is effected.

"When the brim of the polvis," fays this very refpectable writer, " forms a prominent line on the body of the os pubis, and is as tharp as an ivory paper folder, or as fome knives, and jagged like a faw, and the gravid uterus, by the violence of the labour pains, forces the lymphatics against this sharp edge, it mult cut or lacerate those lymphatic vellels which wrap round it and dip down into the pelvis, and they will difcharge their contents." From this quotation it appears, that the division of the lymphatics by a fharp prominent line* on the body of the os pubis is made a causa, sine qua non, of the difeafe. I his sharp ridge is, I believe, a very rare occurrence, and Mr. White has not been able to fhew, that the lymphatics, which pais over it into the tubular part of the pelvis, have in any cafe whatever been cut through by this ridge, or process. He affirms, indeed, in p. 99, that it cannot be denied, " that the fame fharp bone, which cuts through and lacerates the uterus and peritonæum, will also cut through or lacerate all the intermediate foft parts which lie betwixt the uterus and that tharp bonc." Nevertheless, I am of opinion, that neither the lymphatics paffing over this fharp bone, nor the periofteum which covers it, would neceffarily be divided in those cafes where the uterus or vagina is fo far injured as to give way during labour. Further, he has not adduced one fingle instance to shew, that this sharp ridge of the os pubis has ever existed in the pelvis of any woman who has fuffered an attack of Phlegmatia alba dolens puerperarum: But he has circumftantially related the cafe of Jane Kinnerly in page 93, which goes as far, perhaps, towards proving the contrary of his hypothefis, as any one cafe can go to prove a general doctrine, This poor unfortunate woman's

* The ferrated appearance of this ridge, which Mr. White speaks of, I should apprehend, is produced after the periodeum has been separated by maseration from some injury.

woman's pelvis had actually the very fharp prominent line on the body of the os pubis, which Mr. White makes a neceffary circumstance; and in confequence thereof the uterus was cut, or torn through, in her eighth labour, and occasioned her death. But, though the had previoufly born feven children, the never had the difeafe in queffion in any of her lyings-in. Mr. White informs us, on the authority of Mr. Cruikshank, that Mr. Hunter faw a cafe, in which the fkin being pricked by a needle which had never been uled before, or touched any infectious or irritating fubitance, occafioned the lymphatics of the arm to inflame, and fhew themfelves in the form of red lines, running towards the axilla." (p. 24.) Now, if fo flight an injury as this can excite inflammation in the lymphatics, we may a fortiori fuppofe, that inflammation of the lymphatics would be excited in some instances at least, if these were lacerated or divided, in confequence of being violently compressed betwixt the child's head and the prominent line of the os pubis. Yet Mr. W. denies that this ever takes place in Phlegmatia alba dolens puerperarum. He fays, "I believe there is not a furgeon in any practice in the kingdom, who has not feen both lymphatic glands and veffels inflamed; and yet I will venture to fay, that none of them ever faw the diforder in queftion occasioned by, or even attended with, any fuch fymptoms." p. 26. Befides, I have had under my care wounds of the lymphatics; and neither in these cases, nor in any that I have read, not even in the cafe related by Mr. Patch, where the difcharge was very confiderable, does it appear that any intumescence, fimilar to Phlegmatia dolens, fupervened to their healing. And this difease also occurs to women after the most easy natural labours. From all these circumstances I infer, that an injury of the lymphatics is not the remote caule of the difeafe, as is affumed by Mr. White.

We will now suppose that the lymphatics, which defcend into the tubular part of the pelvis, are divided, and see whether Mr. White's theory, with this concession, will account for the phænomena of the disease in a fatisfactory manner. I am decidedly of opinion that it will not.

He next fays, "In fome cafes the extravafated lymph will be immediately abforbed by the lymphatics in the neighbourhood. In others it will accumulate, coagulate, and give pain, fome days prior to the fwelling of the limb, by feparating the peritonæum from its connections with the adjacent parts, and at laft will be abforbed. But, in fome few cafes, it may not be abforbed, but *produce an abfcess.*" The only obfervations which I fball make upon this extract, are, 1. That in the former part of his *Inquiry*, &c. p. 38, where he is informing

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us that this difeafe is not a phlegmon or an eryfipelas, he adds, " neither is it an iliac abscess, or an abscess under the fascia lata, as it never comes to suppuration;" which is directly contradictory of the paffage just quoted. 2. That Mr. White fays, in the fecond part of his Inquiry, &c. p. 8, he is " well fatiffied that there is not one" (cafe) "of the genuine disease, in its fimple, uncomplicated state, fufficiently authenticated, that ever proved fatal; not one that was ever attended with any external inflammation, abscels, gangrene; or burfting of the skin in the legs or thighs, as in analarca." Yet Mr. W. tells us, in another part of the fame work, p. 80, that "whenever the fwelling of the limb lofes its elafticity, and pits upon preffure, it is probable that many of the lymphatics burft." Now, if this be the cafe, why may not the extravalated lymoh in the leg, or thigh, produce an abfcefs here as well as within the cavity of the pelvis; an inftance of which Mr. W. mentions as having actually occurred in the cafe of Jane Waters. He may not have feen a cafe where a fuppuration of the limb took place, but it cannot be fuppofed that he has feen every termination of this difeafe; and there is but too much evidence to prove, that this troublefome complaint has taken place in various instances.*

He then proceeds to fay, " In a space of time, generally betwixt twenty-four hours and fix weeks, the orifices in the ruptured lymphatics will clofe, and they will be gorged with lymph, which will be impeded in them, but it will continue to flow in those which have not been ruptured, particularly in the deep-feated lymphatics which accompany the iliac artery, and, by anastomosing with those which have been ruptured, will prevent any material injury for the prefent, and in time will entirely fupply their place. Mr. W. has not fufficiently explained himfelf upon the flate of the divided extremities of the lymphatics, betwixt the time of receiving the injury and the commencement of the difeafe. If the divided extremities close quickly, the difeafe, if it be owing to this circumftance, should arife much fooner than is generally found to be the cafe. If they be gradually contracting for a fortnight or more, the anaftomofing branches being gradually fuffering a dilatation during this period, fhould totally prevent, I think, any fwelling of the limb from taking place at the time the wounded lymphatics completely close. Again, if, as Mr. W. has afferted in the above quotation, the anaftomofes of the injured with the entire lymphatics,

* The authority of Callifen, for which Mr. White has a high respect, may be here adduced, "Interdum cedema puerperarum in abscellum lacteum vel lymphaticum transit." Princ. P. II. §. 39.

phatics, will, for the prefent, prevent any material injury, it may be confidently expected that they will effectually prevent all injury afterwards. From confidering the confequences of tying the large blood-veffels of an inferior or fuperior extremity, and from viewing the number and courfe of the lymphatics of a lower extremity, + I am induced to believe, that if every lymphatic which paffes over the ridge of the os pubis down into the pelvis were tied, or obstructed, fo that a fingle drop of lymph could not be transmitted through them, the remaining found lymphatics would, by means of their frequent and large anaftomofes with the obstructed ones, eafily convey the whole of the lymph to the thoracic duct, fo that, at most, only a comparatively flight and gradual tumefaction of the limb, unattended with the violent pain and other lymptoms of Phlegmatia dolens, would be produced. The fuppoied caufe therefore appears to me to be totally inadequate to the production of the difease.

" By the obstruction of the lymph," continues Mr. White, " the groin, labium pudendi, and upper part of the thigh fwell, the tumour gradually extends towards the leg and foot, and grows very painful, white, tenfe, elaftic, hard, gloffy, and uniform." - There is no part of Mr. White's theory which furprizes me fo much, as his confidering the tumefaction, during the first stage of the difease at least, as arising folely from the diftension of the lymphatics. This supposition is, in my opi-nion, wholly untenable, and, as far as I know, is only maintained by Aftruc and Mr. White. The progress and uniformity of the fwelling, all militate ftrongly against it. In the first cafe of his Inquiry, &c. Part I. p. 13, our Author fays, that the progress of the iwelling was "fo quick, that the whole limb was, in the courfe of twenty-four hours, diftended to twice its natural fize;" and, in the fixth cafe, p. 21, he fays, " the pain defcended into the groin, labium pudendi, thigh and leg of the same fide, which swelled to three or four times the natural fize." An inferior extremity of moderate fize, for example, one 36 inches long and 4 inches in its mean diameter, is equal to 452 cubic inches, or about 151 wine pints; confequently, if a limb of this fize be diftended to twice its natural magnitude, that is, till it contain twice as much matter, within twenty-four hours after the attack of this difeafe, 151 wine pints of matter must be added to the limb in that short space of time; and, if it become four times the natural fize, as stated in

* See the figures of the lymphatics of the lower extremities, given by Mr. Cruikfhank, Fyfe, White, &c.

in the cafe of Phœbe Waters, then 46 + pints of matter mult be added in the fame, or a longer space of time, for this is not specified. Now it would be difficult to shew, that the whole of the exhalants of an inferior extremity, when acting naturally, deposit $15\frac{1}{2}$ pints in it within twenty-four hours; and yet it is neceffary that they fhould deposit twice as much in that time, according to the theory under confideration, for an accumulation of $15\frac{1}{2}$ pints of lymph to take place, supposing only one-half of the lymphatic trunks of the limb to remain uninjured, becaufe the found lymphatics must abforb one half of the exhaled fluid, even if there were no communication betwixt them and the impervious lymphatics, by means of anaftomofing branches. Hence I am led to conclude, that the exhalants do pour out an unufually large quantity of fluid into the parts affected in the first stage of Phlegmatia alba dolens puerperarum: And I conclude that the principal part of this exhaling fluid is accumulated in the cellular texture, and that only a comparatively fmall part is contained in the lymphatics, I. Becaufe I do not conceive it poffible, that the whole of the lymphatics of the parts affected can contain one-third of the quantity of matter which is required to increase the bulk of the limb to the degree stated by Mr. White. 2. Becaufe we know, from cafes of pneumatofis and anafarca, that the cellular membrane of a limb is capable of being diftended, either by an elaftic or inelastic fluid, till the limb attains the fize mentioned above, 3. Becaufe we find it expressly stated by Zinn, in the cafe which he has related in the Comm. Soc. Reg. Sc. Gotting, Tom. II. that the ferum in the cellular membrane had almost affumed the nature of a tremulous jelly : " Serum enim in tela cellulofa in gelatinæ tremulæ naturam fere abiit, omni liquidiori parte reforpta." This is the more decifive, becaufe the limb was diffected. Various other writers have alfo afferted, that the accumulated matter is contained in the cellular membrane.* If the abforbents of the lower limbs fhould contain one half of the matter necessary for the production of the intumescence in this difeafe, I fhould expect to find many of these veffels much larger than a goofe quill; in which cafe the operation, named lymphée by Fourcroy, would become almost as easy as bloodletting, in limbs affected with Phlegmatia alba dolens puerperarum: Whereas I have never found one lymphatic veffel perceptible either to the eye or touch ; and am hence induced to believe, that when a perceptible enlargement of one or more of these veffels does take place, it ought to be confidered as

* See Levret L'Art des Acc. § 934, Sagar. Syft, Morb. Sympt. p. 154, &c.

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an accidental rather than an effential circumftance, and as a confequence rather than a caufe of the complaint.

" The pain," according to Mr. White, " is occafioned by the great and fudden diftention of the lymphatic veffels; the whitenefs, by the parts being filled with lymph and compreffing the blood veffels fo much, that neither arteries nor veins appear externally. The tenfenefs, elafticity, hardnefs, and gloffinefs depend on the great diffention of the lymphatic veffels, which do not eafily give way; the uniformity of the fwelling on the diftenfion of the cutaneous lymphatics, which are innumerable." And, in page 10th of this fame work, he fays: " The great pain in the loins and in the hypogaftric region, afterwards in the conglobate glands, in the groin, ham, and the middle of the leg, and laftly in the whole lower extremity, appears to be solely in confequence of fudden diftention." It is very unfortunate for Mr. White's explanation of the manner in which pain is produced, that this fymptom precedes the fwelling, and is generally very much relieved by it. " Dum partes intumescunt, dolor recedit," fays Sauvages. Sagar, in enumerating the diagnoftic marks of this difeafe, fays it may be known, " recessione doloris post eruptionem tumoris." Callifen, in one of the paragraphs quoted by Mr. White, makes this observation, " Surgit plerumque, 12mo. vel 14to. post partum die tensio & dolor inguinis, sequitur tumor. Nay, Mr. W. himfelf has flated in . the cafe of Elizabeth Rothwell, which I have transcribed*, that " fhe was attacked with pain in the groin, labium pudendi, thigh and leg of the fame fide, which swelled, and then the pain abated." Now an effect cannot precede its caufe, and we muft therefore reject Mr. White's explanation of the production of that pain which occurs at the very commencement of this difeafe. The pain which afterwards arifes from, or is kept up by, the diftention of the fkin, is of a much lefs excruciating kind. It will be a fufficient reply to the latter part of the above extract, that Mr. White has completely failed to fnew, that the accumulated lymph is contained in the abforbents. If the cutaneous lymphatics were really as much diffended as he has reprefented, we fhould expect to find the fkin lefs white than it is found to be ; veffels with transparent coats, and containing a transparent yellowish fluid, cannot impart to the skin a whiteness which they do not poffefs themfelves.

" By this great diftenfion," fays Mr. White, " and confequent compression, the exhalants are prevented from fecreting

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JZZM MIMOVA

* See above in page 136.

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fo much lymph, and confequently there is not fo great a fupply. The lymphatic glands fometimes grow painful and fwell, which is owing to the vasa inferentia fending the lymph into them quicker than the vasa efferentia can discharge it. Pains will fometimes attack parts, which have neither lymphatic glands, large nerves, blood veffels, nor lymphatics, which can only be accounted for from fympathy." 'The enormous effusion of fluid into the cellular texture of the limb appears to be checked partly by the diminished action of the arteries in confequence of this topical evacuation of them, and partly by the refiflance which the diffention of the fkin prefents. The painful enlargement of the lymphatic glands, which fometimes takes place in the course of the difeafe under confideration may, I conceive, be much more fatisfactorily afcribed to inflammation, communisated to them from the parts in which they are imbedded, or excited in them by the abforbed fluid. When the enlargement and induration have taken place, the paffage of the lymph into them will, in all probability, be obstructed, and the quantity that actually enters them diminished. There appears to be abundant caufe for idiopathic pain in every part affected with Phlegmatia alba dolens puerperarum, fo that we have no occafion to recur to fympathy for an explanation; and I must confess myfelf ignorant of any pains attacking parts, " which have neither lymphatic glands, large nerves, blosd-vessels, nor lymphatics."

Mr. White next informs us, that " the words calidus, hot or warm, when fpeaking of the fwelling of the limb, are made use of in contradistinction to leucophlegmatia, in which the limb is white and cold; in this diforder it is white and warm. When fpeaking of increased heat, it is to be understood of the whole body, not of the limb alone, as that does not appear to be hotter than the other parts of the body." In the general hiftory of this difeafe, given in his former publication, Mr. W. fays, the limb " is hot, and exquisitely tender," p. 8; and a degree of heat greater than is expressed by the term warm, is, in my opinion, meant by all the writers on this malady. Hitherto I have never taken the temperature of either the body or limb by a thermometer, which I regret: But, as far as I have been able to judge from the feel, the affected limb is generally hotter than the found one, and the whole body hotter than natural in the first stage of the diforder. I've the fensation of the patient likewife the difordered limb has, in various inftances, beeh hotter than the reft of the body, and the pain is by fome patients represented as of a burning kind.

" There is heat in all fevers," continues Mr. W. " but that does not imply inflammation, every fever is not inflammatory. There is a quick pulle, but that is owing to irritation by the fudden

fudden and violent diftenfion of the irritable coats of the lymphatic veffels." In his former publication, we are expressly told, that there is inflammation in the first ftage of the difeafe. He fays, "but as this *inflammation* is not the original difeafe, but a fymptom only, &c. &c. p. 59. Whether the inflammation be the primary or fecondary complaint, I thall have occasion to confider hereafter, when I come to defend my own theory; with respect to the quickness of the pulle, Mr. W. feems to forget, that rigors and frequent pulle, &c. not uncommonly precede the pain; and as it has been thewn above, that the pain precedes the fwelling, we cannot with any degree of propriety attribute the quick pulle to the fudden and violent diftension of the lymphatics.

Mr. White, in the next place, fays, " if you puncture the fkin with a lancet, the lymph does not flow out as in anafarca, where it is thin, and is lodged in the cells of the cellular membrane, which communicate throughout the whole body. In this diforder, you do not puncture the trunks of the abforbents, but the minima vasa only of the cutaneous lymphatics. The violent pain and diftention do not continue many days; the anastomosing lymphatics begin to enlarge, and by degrees carry off the obstructed lymph; but it is many weeks before it has obtained a perfectly free passage." It has been fufficiently demonstrated already, that the intumescence of the limb is principally, if not folely, occasioned by the effusion of a fluid into the cellular membrane, which speedily coagulates. Hence, when a puncture, or fmall incifion is made through the fkin early in the complaint, little, if any, fluid iffues out : But afterwards, as the affection of the limb approaches more to analarca, a greater difcharge of liquid iffues from a puncture of the tkin, becaufe the proportion of fluid to the coagulum in the cellular membrane is gradually increasing, as is explained in my Effay on Phlegmatia dolens, p. 208. If the lymph be collected in the lymphatics, as is stated by Mr. W. though, only the vafa minima should be punctured, I fhould expect a confiderable flow of lymph from them; for when the finall arteries or veins of a part are enlarged, thefe, when punctured, bleed freely. Mr. White feems to admit, that the intumefcence of the limb is occasioned by the effusion of fluid into the cellular membrane in the last stage of the dileafe: For he fays, in page 80, " whenever the fwelling of the limb lofes its elafticity, and pits upon preffure, it is probable that many of the lymphatic veffels burff." Now, if the lymphatics do burft, their fluid must of course pass into the cellular membrane of the limb; but if the lymphatics should burft, we might expect the inflammatory ftage of the difeafe to be reproduced according to his theory, when these ruptured lymphatics

Tymphatics became healed, which is not agreeable to facts. It appears very extraordinary to me, that the lymphatics of an inferior extremity should be supposed to be so much distended, as to contain from $15\frac{1}{2}$ to $46\frac{1}{2}$ pints of lymph in addition to their natural quantity, and that the anastomosing vessels (hould then only be beginning to enlarge. Why does not the enlargement of the anaftomoting branches keep pace with that of the - other branches of the lymphatics? And why does not the difease ceafe as foon as these anaftomoling branches are fo far increased, as to be able to transmit the quantity of lymph formerly conveyed by the trunks fuppofed to be obstructed, and long before the fwelling has arrived at half the bulk which we find it attains? Three or four lymphatic trunks, of one-twelfth of an inch in diameter, are, perhaps, all that can be divided in the lituation which Mr. White has fixed upon : Therefore, according to his hypothesis, as foon as the anastomoling branches of the limb are fo far enlarged, as to be able to transmit as much lymph as thefe three or four trunks can, which are supposed to be obftructed, the complaint should begin to subside and go off. This must happen, I conceive, long before the lymphatics of the limb can be diftended to that extreme degree which will enable them to contain the quantity of lymph mentioned above. How inconfiderable an augmentation of each of the numerous anaftomofing branches must be fufficient to convey every particle of lymph that fhould have paffed through the trunks supposed to be obstructed, to those that are uninjured and pervious!

Mr. White concludes his recapitulation, by faying, " this diforder has not been known to return in the fame limb, though women have had feveral children after having had this complaint; becaufe the fame accident cannot happen a fecond time to those lymphatics.

The first cafe which I faw, affected both the lower extremities of a lady who was lying-in, very feverely, and it was the fecond attack. She was unable to fuckle her child, and attributed it to the milk fettling there. She was not alarmed by the complaint, and knew how to manage it better than I did at that time. Mr. White may, however, reject this cafe as not a genuine cafe of his Phlegmatia alba dolens puerperarum, becaufe 1 neglected inquiring into the flate of the labia pudendi, &c. As the is now dead, I cannot obtain the neceffary information on this point. If nothing more could be adduced againft Mr. White's theory than the recurrence of the difeafe in the fame limb, I do not fee how this circumflance could be urged againft it; for we know that the intumefcence of the limb is much greater in fome patients than others. Mr. White's own cafes

cafes teach us, that the limb becomes fometimes double, and fometimes four times the natural fize. Now, the eafieft mode of accounting for this, agreeably to Mr. White's hypothefis, would be to fuppole, that one half only of the lymphatics which pafs over the fharp ridge of the os pubis, and defcend into the pelvis, is divided in the former cafe, and the whole in the latter cafe; confequently the fame limb may be supposed to have one half of these lymphatics divided in one labour, and the remaining half in a fucceeding labour, which will account for the production of the difease twice in the same limb. Further, we may conceive, agreeably to the fame hypothefis, that in one cafe an inferior extremity may become tumefied without any affection of the labium pudendi of the corresponding fide; that in another cafe the intumescence of one extremity may be accompanied by an affection of both labia pudendi; that in a third cafe, one or both of the labia pudendi may become tumefied, without any fwelling of the lower extremities ; according as one or more points of the fharp ridges of the offa pubis have been preffed open by the fetal head during labour.

When Mr. White wrote the first part of his Inquiry, he had not known Phlegmatia alba dolens puerperarum to happen " to a woman more than once, though the has afterwards had more children," p. 11: But, in the fecond part, he mentions a lady who had the difeafe on one fide in her first labour ; and " in her fecond confinement the had it on the other fide," p. 87. Again, in the former part of his Inquiry, we find him afferting, that this difeafe " never comes to fuppuration," page 38: In the fecond part he relates a cafe, where an abcefs formed and burft; and endeavours to explain why it formed, and also fome other circumstances relative to it. See pages 112, &c. After these occurrences, I should not have expected to find Mr. White confidently afferting in the extract, upon which I am commenting, that the fame accident cannot happen a fecond time to the lymphatics, which pafs over the os pubis and defcend into the pelvis, and declaring in a former part of the work (page 49), that a cafe, which I faw and have related in my Eflay on Phlegmatia dolens, "had fymptoms which are not compatible with this diforder." Mr. White may, perhaps, very properly affirm, that he has not yet feen the difeafe occurring twice in the fame limb, and that he has not witneffed the fymptom or fymptoms, which he deems incompatible with the diforder : But I am convinced, that he is neither juffified in faying, that the fame limb cannot be twice affected; nor in affirming, that the cafe just alluded to, had fymptoms which are not compatible with this diforder. We fhould be cautious in declaring

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any fymptom incompatible with a difease which does not imply a contradiction; and may properly fay with Demea:

" Nunquam ita quifquam bene fubducta ratione ad vitam fuit, Quim res ætas, ufus, femper aliquid adportet novi, Aliquid moneat, ut illa, quæ te feire credas, nefeias: Et quæ tibi putaris prima, in experiundo repudies."

TERENT. ADELPH. A&. V. Sc. 4.

[To be continued.]*

To Dr. BATTY.

HE following account of the flate of Midwifery in modern Greece, conflituting a proof that Nature often defies the moft deftractive attempts of art, is translated from a new work of Sonnini, Voyage en Gréce & Turquie : If you think this contribution to the hiftory of the obfletric art deferving a place in your ufeful Publication, it is very much at your fervice. I am, &c.

Sobo Square, July 13, 1801.

SIR,

-C. KOENIG.

THE manner in which the children of the modern Greeks make their first entrance into the world is, indeed, too remarkable to be left unnoticed here. It is furprising, that of the multiplicity of travellers to the Levant, and particularly to the lfles of the Archipelago, none should have had the least idea of the method these people have adopted in affisting at the labours of their women. Having myself had an opportunity of being present at the delivery of a lady of that country, and being the first who has treated upon this subject, so interesting for the history of men, I shall not hesitate to enter into the particulars of the manner of their proceedings.

The young woman, at whofe labour I was prefent, had juft completed her eighteenth year; fhe was tall, well made, of a healthy, vigorous conftitution, and poffeffed fuch a fhare of beauty, as might have excited the envy of even the antient female inhabitants of Greece. The forerunners of labour manifeffed themfelves juft when fhe was going to fupper; the young lady was, therefore, conducted to her bed-chamber, where I, having obtained permiffion, did not omit following her. The midwife, who was very old, and reckoned particularly fkilful in her profeffion, arrived foon after, accompanied

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by a female affiftant, who, though equal in age, was far inferior to her in respect to the expression of her features. A painter, withing to reprefent a Sybil, could not have felected a better model. Her apparel, and, indeed, the whole of her appearance, was forcerefs like; and the answers the gave to my queflions, as for their obscurity, might have paffed for fo many oracles. She alfo brought with her a kind of tripod, composed of two pieces of wood, joined at an acute angle, and having at the place of their union a flat piece of wood fit for fitting upon; the whole was bound with pieces of old linen, and supported by three low clumfy legs. The first attention of the midwife, before the began her operation, was directed to the locks; doors, trunks, drawers, and every other thing in the house, provided with such fafe guards, were carefully opened. This precaution, founded upon a very fingular analogy, is taken with a view to effect an eafy delivery; and from the fame ridiculous principle, matrons only are permitted to attend on these occasions, virgins being absolutely excluded. They likewife informed me, that if I chose to be prefent, I ought to remain in the chamber till the operation was entirely finished, this being a rule from which nobody was permitted to fwerve. The moment the labour begins, those who are in the apartment must not retire, nor are those without fuffered to enter; the former are even confidered as impure, and unfit for mixing with other people, until a prieft is called for, who, by beftowing his bleffing, cleanfes them from their fuppofed impurity.

In the mean time Nature began to act; the efforts which the uses for accelerating the birth of a new being became more frequent, and all the circumftances promifed an eafy labour and fuccefsful delivery. During the action of the infant upon the mother,* the latter was not fuffered to be at reft, for the was forced to walk continually in the apartment; and as often as want of spirits, or weaknefs, made her with for a moment's repole, the two old matrons would support her under her arms, and oblige her to continue, though really fhe did not appear to be much pleafed with this prom nade. When the pains came on, fhe was defired to bend her body forward, while the midwife, being placed behind at the bed, violently preffed the young lady's fides, which was perfevered in till the pains were over. After this a fresh walk commenced, and was continued till new pains afforded an opportunity to the midwife to reaffume her applications.

I am not fufficiently acquainted with the mechanism Nature employs

* I scarce need observe, that this is a miltaken idea of Sonnini.

employs in these cases, to decide whether the method just related be injurious or not; I can only fay, that it is univerfally practifed in the countries I describe, where difficult labour is fcarcely ever witneffed. I may add, that I myfelf beheld the good effects (at least apparently) of this operation; for the pains, though rapidly fucceeding one another, were of no long duration, and the young lady feemed little affected by them. A famous phyfician whom I confulted about this, very much difapproved of fuch violent measures. There is, however, perhaps, no country on the face of the globe where labour is lefs fevere than in Greece: This indulgence of Nature towards the Grecian ladies may be confidered not only as a reward for the fimplicity and regularity of their manner of living, but chiefly as the effect of the climate in which they live: A ferene fky, an atmosphere not condensed by severe frosts, but incessantly warmed by the breath of vernal zephyrs, and impregnated with effluvia's, exciting health and vigour, enable the women to overcome those dangers they feem to perpetually liable to.

Man-midwives are quite unknown in this country, and really if any fhould attempt to practife here, he would meet with no encouragement; for, without having read *Hacquet's* work, they think it the higheft degree of indecency for a woman to employ a man for her delivery: And really Nature in this country performs every requifite herfelf, while the midwives, on the other hand, ufe every means to counteract it. In cafes of fome difficulty, they will refort to fuperflitious remedies; (with them fcience does not extend farther than that) but fortunately, fuch cafes are ranked among things extraordinary.

During the time I fpent in the chamber of the young Grecian in labour, I afked the midwife feveral queftions concerning her practice; for inftance, I enquired what fhe ufed to do in cafes of an unnatural polition of the child? Such cafes, fhe replied, happened but very feldom; if they did, fhe would endeavour to bring the infant into due polition; and this proving fruitlefs, fhe would apply to the hufband, who, in the opinion of the women of this country, has it fully in his power to remove every obftacle to a fuccefsful delivery. This magic power, which, fhe affured me, would never fail, confifts in three raps, which the hufband applies with his fhoe upon the fhoulders of his wife, pronouncing at the fame time, with a loud voice, the following words: "'Tis I who have given you this burden; 'tis I who take it off,"

At laft the critical moment arriving, the young woman was placed upon the tripod; good nature and apprehension were depictured upon her face, and the placidity of her features ap-NUMB. XXX. X peared

peared not to be much altered by the pains fhe endured. The midwife placed herfelf before her, rather lower, and the affiftant fitting behind the patient upon a more clevated chair, flung her arms round the middle of her.

The infant foon made its appearance: When it was feparated from the placenta, the affiftant, with her vigorous arms, lifted the patient for feveral times, perpendicularly, over the tripod, upon which fhe again dropped her with great rudenefs. In this manner fhe was unpitifully handled till the delivery was entirely concluded, which fortunately took place very foon.

However folid the motives may be by which rational phyficians are prompted to exclaim againft fuch a rude method of haftening delivery, yet it would be a matter of great difficulty to abolifh it in a country where they do not experience any fatal confequences attending it. It was aftonifhing to me, that the patient herfelf did not at all complain of fuch a cruel procedure, but went to bed without any appearance of fatigue. A very fhort repole rendered her as eafy as fhe was before; her complexion, though (now) lefs brilliant, ftill retained its former frefhnefs: fhe received, without conftraint, a volley of congratulations, and anfwered them as if her fituation was the moft tranquil imaginable.

Directly after her delivery, the lady was closely wrapped from her bofom to the flanks in a broad linen bandage. Here again the European phylician will have an opportunity to cavil at the application of bandages : "Every mechanical compreffion of the abdomen of a delivered woman is highly pernicious; the weight of the infant, during nine months of pregnancy, the fucceffive contractions of the uterus, or the violent pains of labour, having co-operated to irritate the organs; every compression in this state cannot but be extremely injurious."* Though this reflection may be the refult of a rational theory, yet the ladies of Greece would confider it as merely chimerical; for, indeed, they fuffer the preffure of the bandage with the *fame impunity with which they defy* the dan-gers of the violent treatment in the first stage of labour. They even pretend to derive from this operation the advantage of preferving the beauty of their forms, by preventing the ufual concomitants of frequent labours, an exceffive fwelling, and the appearance of wrinkles on the abdomen.

During the first day after delivery, the midwife boils fresh petals of rofes in wine and honey, and afterwards uses the fame decoction

* From a letter written by Saccombe to Sonnini, on the danger attending the Grecian practice of midwifery.

Mr. Ring, on the Use of Campbor.

decoction from the dried leaves. After feveral lotions with the former, the ufe of the latter is continued till the next day, when the pudenda are fomented with cotton dipped in warm wine, after which, the powders of cinnamon or cloves, nutmeg or carraway feed, are applied alternately; one of thefe aromatic fubflances being only ufed at a time, and changed at each drefing.

Inftead of wine, which is only ufed for the above mentioned purpofe in cafes of great delicacy of the frame, they generally refort to brandy, the application of which is not without a great fhare of pain. Whatever be the flate of the delivered woman, the dreffing with the aromatic fubftances is continued for the fpace of eight days, morning and evening. The most fingular circumstance is, that the midwife, at each dreffing, afcends the bed at the fide opposite to the pillow, and having placed her legs between those of the patient, the takes hold of her hands, and putting one of her feet exactly upon the fuffering parts, the thocks them for three times with the greatest violence.

On the evening of the eighth day, an egg is boiled hard, which, after being deprived of its fhell, and firewed over with the powder of one of the mentioned fpices, is tied to those parts which had experienced the rude foot of the midwife, and left there for two or three hours. This operation, which, as the old matron gravely told me, is made with a view to remove the cold which the patient might have possibly caught, puts a final end to the treatment after the delivery, and the midwife is difmissed.

On the anodyne Virtue of Camphor; by Mr. RING, Member of the Royal College of Surgeons in London.

To the Editors of the MEDICAL and PHYSICAL JOURNAL.

GENTLEMEN,

HAVING read in your Journal an account of the peculiar efficacy of camphor in a large dofe, as an anodyne in cafes of painful mentruation, I tried it, and found it deferving of every encomium it had received.

Previous to the exhibition of this medicine, the patient, who is a fervant, fuffered at every return of the catamenia the most excruciating tortures; infomuch, that fhe was not only obliged to go to bed, but fhe used to beat herfelf, and was quite fran

tic, from the dreadful agony fhe endured, for above four hours. —I directed ten grains of camphor, rubbed with an equal quantity of fugar, to be taken in water on the accession of the pain; and it acted like a charm, for in a quarter of an hour the pain was almost entirely removed.

She now takes it regularly at every monthly period, and with fimilar advantage; fo that fhe is able, at those times, to follow her usual occupation without inconvenience.

I am, &c.

New Street, Hanover Square, July 17, 1801.

JOHN RING.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

As a further elucidation of the benefits arifing from the ufe of ftrips of adhefive plafter in the cure of old and ill-conditioned Ulcers, I beg leave to publifh, through the channel of your valuable Journal, the following cafe.

Margaret Allen, wife of one of the boatfwain's mates, made application to me foon after my appointment to the Royal Oak, for the cure of an ulcer of the above description, on the fuperior part of the malleolus internus of the right leg, about the fize of a fixpenny piece, and of a fhape inclining to an oval, with hard and callous edges. On queftioning her about its former treatment, fhe faid it had been dreffed very regularly with cerate or bafilicon, and was occafionally touched with cuprum vitriolatum; and notwithstanding all the care and attention which had been bestowed upon it, for the space of five months, it became more and more painful, and obstinately refifted the plans that had been devifed for its cure; and began to increase in fize, which greatly added to the poor woman's uneafinefs and apprehenfions for the fafety of her ankle joint, supposing, from the pain the constantly experienced, that the bone was difeafed. After applying the flicking plafters, first longitudinally, endeavouring to contract the face of the fore, and then transversly, by way of retaining the longitudinal ftrips, and making more perfect preffure, I retained the dreffings by means of a foft compress of tow and an elastic flannel bandage, applied alternately round the arch of the foot and ankle; after which, in the courfe of two or three dreffings, the whole of the callofity difappeared, and the fore difcharged a laudable pus, and was completely cicatrized in lefs than three weeks.

Mr. Reece, on an Instrument for extracting Teeth. 157

The beneficial effects of this mode of treatment are fo immediate and ftrikingly obvious as to excite both pleafure and admiration, calling into action that defire which medical men muft ever feel to account for the modus operandi of every thing within the fphere of their profession, which I think may be explained in the following manner.

After an ulcer has remained long open, I conceive a great deal of atony exifts in the part, which may have been produced by various caufes; fuch as irritation from fubftances applied to it, or probably from too great admiffion of air, or the debilitating effects of unctuous matters, &c. all of which caufes are perfectly obviated by proper and equable preffure from the flicking plafter and roller, effecting a deftruction of the old atonized irritable parts, and giving birth to new veffels, vigorous, and fit for healthy granulation.

Whether the above account is fatisfactory, I leave to the decifion of my readers, or those whose experience is greater than my own; however, this I may with truth affirm, that those medical gentlemen who chuse to divest themselves of prejudice for old established rules, will find their most fanguine expectations fully gratified by a strict adherence to this improved mode of dreffing; and I think there will be no vanity in afferting that the community will be confiderably benefited by it, for I myself have experienced its happy effects, long before either reading or hearing of them in the treatment of my patients on board of strict of war; but for want of that extenfive practice which falls to the lot of my brethren in hospitals, I never thought fo feriously of its merits, as to give that decided preference it fo justly deferves, through diffidence in appearing before the public.

His Majesty's Ship Royal Oak, Portsmouth Harbour, July 17, 1801. I am, &c. RALPH CUMING.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

HROUGH the medium of your very ufeful Publication I beg leave to recommend to the attention of the medical world an inftrument for the extraction of teeth, invented by Mr. WHITFORD, Surgeon's Inftrument Maker at St. Bartholomew's Hofpital. Its fuperiority to those in common use confists in its elevating the tooth in nearly a perpendicular direction;

tion; and from the heel of the inftrument being applied to the tooth, exactly opposite the point of the claw, much injury to the gum and alveolar process, as well as great pain to the patient, is avoided. I have repeatedly made use of it with great fatisfaction to myself, and my patients have uniformly expressed their surprize at the slight pain they experienced in the operation. In justice to the ingenuity and industry of the inventor, I am induced to folicit the favour of you to infert this concise account of it in the next number of your Journal.

Craven Street, July 16, 1801. I am, &c.

R. REECE, Surgeon.

Remarks on the History and Nature of the Dolor Faciei; by the late Prof. SIEBOLD, of Wurzburg.*

HIS dreadful difeafe, which is commonly flyled the Dolor Faciei of FOTHERGILL, on account of its being supposed to have been first mentioned by that great practitioner, was before known, in the year 1756, to Mr. ANDREE, furgeon at Paris, who accurately defcribed it under the name of tic, and explained it with feveral obfervations. + Mr. SIEBOLD, however, traced the hiftory of this diforder farther back, finding, that in the year 1724, it had been treated by JOHN HART-MANN DEGENER, practitioner at Nimmegen, whole excellent observation and description of that affection is communicated in the first volume of the Acta Natura Curiofor. (de dolore quodam perraro acerboque maxillæ sinistræ partes occupante et per paroxysmos recurrente, p. 347.) This practitioner even fupposes, that LAWRENCE BAUSCH, phylician at Schweinfurth, in Franconia, prefident and founder of the Societas Naturæ Curiesorum, died of this disorder in the year 1665, according to the annals of that fociety. The patient felt for four years a very excruciating pain in the right maxilla, fometimes growing lefs,

^{*} Doloris Faciei, morbi rarioris atque atrocis obfervationibus illuftrati, adumbratio Diatribe I. qua exercitationes clinicas in nofocomio julizo habendas indicit G. Ch. Siebold, Dr. Med. Prof. Wirceburgi, 1795, pp. 22 in 4to.—Diatribe II. qua pro capeffendo in illuftri inclyta et ornatifima facultate medica loco et dignitate ad orationem die XXIX Jul. 1797, publice celebrandam invitat. pp. 23 in 4to.

 + Observations Practiques sur les Maladies de l'urethre et sur les plufieurs faits convulsifs, à Paris 1756, pp. 318, &c.
 ‡ Mücellanea Nat. Curios. Dec. 1. Ann. II.

lefs, and then ceafing; but, at laft, it increafed to fuch a degree, that he became unable to fpeak or to fwallow, and notwithftanding all poffible remedies, died emaciated, and with a palfy of the left fide. There exift alfo, Obfervations on this difeafe by Dr. DANIEL LUDWIG, in the year 1673.*

The Dolor Faciei may be called analogically, (like otalgy, odontalgy, &c.) profopalgy, as it undoubtedly belongs to the topical pains without fever; and this name feems, befides, to be congruous with respect to the feat as well as to the origin and kind of pain. The feat of the difeafe has been thought to originate in the teeth, but even drawing of them proved to be of no effect. It is observed by Dr. FOTHERGILL, that the difeafe generally appears about the fortieth or fiftieth year of age, a period in which people are not much fubject to toothach; and though feveral patients fuffered tooth-ach at the fame time, yet others were quite exempt. The antrum Highmori is equally affigned as the feat of the difeafe, but without any probability, as it feems impoffible a pain fo fevere, and lafting for fo long a time, fhould take place here, without producing fome change, inflammation, and fuppuration, which never was the cafe in all the inftances of that painful affection, according to what we find recorded in the annals of medicine: teeth were drawn out, and an opening made into the antrum, without ever perceiving any matter to iffue thence. The pain generally extends itself to the jaws, a circumstance which is to be afcribed to the diffribution of nerves. The difeafe, luckily, occurs fo feldom, that even phyficians of the most extensive practice never had an opportunity of observing it: We find it, however, mentioned by practitioners of all nations, except the Italians. Dr. FOTHERGILL met with fixteen inftances of it; Dr. THILENIUS, a German physician, faw it but twice during a most extensive practice of twenty years; Dr. AEPLI, a Swifs phyfician, only once in twenty-feven years. The following exhibits the literature of different nations on the above disease.

DUTCHMEN.—Degener, loc. citat.—Van Wy in Verhandelingen uitgegeven door het Zeeuwsch Genootschap der Wetenschappen te Vlissingen, Dec. VII. 1782; i. e. Transactions of the Society at Vlissingen. Vol. VII.

FRENCHMEN.—André, loc, citat.—SAUVAGES; Nofologia Methodica, under the name of Trismus Dolorificus, Clafs IV. Ord. 1, Gen. 2, Spec. 14.—Bonnard; Journal de Medicine, 1778,

* Miscell. Nat. Car. Dec. I. Ann. III, Observ. 252, de dolore superciliari acerbissimo.

1778, month, July.—Lavagan; ibidem.—Thouret; Memoires de la Societé Royale de Medicine, à Paris, T. 1, 1776, T. 3, 1779, T. 5, 1782 and 83. Journal Encyclopedique, m. April, 1777. Gazette Salutaire, No. 73. confer. RICHTER'S Chirurgical Library, Vol. II. in German.—Andry; Mem. de la Soc. Roy. de Medicine, T. I. 1776, T. V. 1782 and 83. Louis; Gazette Salutaire, A. 1776, No. 36.—Guerin; Maladies des Yeux.—Pujot; Treatife on that difeafe of the face, which is named the Tic Douloureux, translated from the French into German, by Dr. Schreger, 1788.—Spielmann; Gazette Salutaire, 1791.—Petit and Laugier; Journal de Medicine, in July 1793.—Waton; ibid. 1793, March, No. I.

ENGLISHMEN. — Fothergill; Observations on the use of Hemlock, in Medical Observ. and Inquiries, Vol. III. &c. or in Fothergill's Medical and Philosophical Works; ed. J. Elliot, London, 1781, p. 315; of a painful affection of the face, ibid. p. 427; and Medical Observations and Inquiries, Vol. V. —Davidson; in Duncan's Medical Commentaries, Vol. V. 1792.—Blunt; Med. Observ. and Inq. Vol. V.

SWIZZERS.—Rahn; Museum der Heilkunde; i. e. Museum of Medicine, Vol. I.—Aepli; ibid, p. 302.—Sauter; ibid. also Tisst and Pohlen.—Richts; in Sabatier Traité Compl. d'Anatomie, T. III. p. 452.

GERMANS.—Lentin; first in Blumenbach's Medicinische Bibfiotheck; i.e. Medical Library, Vol. I. (a periodical work, that is now difcontinued) in his Contributions to Practical Medicine, (in German) Vol. I. 1797, p. 382-398. Vol. II, 1798, p. 92, feq. Hufeland's Practical Journal, Vol. IX, No. I. conf. Medical and Phylical Journal, Vol. III. p. 575. —Selle; in Neue Beitrage, &c. i.e. New Contributions to Natural and Medical Science, Vol. I. p. 27, &c.—Vogler; Blumenbach's Medical Library, Vol. II. p. 506.—Thilenius; Medicinifche und Chirurgifche Bemerkungen; i.e. Medical and Surgical Obfervations: Franckfort, 1789, p. 283.—Bohmer; in Blumenbach's Medical Journal, Vol. III. p. 315-336—Baldinger; in his Medical Journal, Vol. II. p. 7.—Leidenfroft and Gunter; in J. G. Forftmann Differtatio de Dolore Faciei Fothergilli; Duifburg, 1794, 4to. extracted in Tede's Medical Journal, (in German) No. III. Vol. I.—Richter in his Surgical Library, Vol. XI. p. 135. (in German.)

FOTHERGILL observed, that this diforder mostly attacks women, but DEGENER and others faw it in men. Mr. SIE-BOLD met with three instances in the female fex, and one in a man: It feems, however, to occur more frequently in women than in men, and the proportion is about five to four. It is remarkable, that the subjects of the difease in England were mostly

mostly women, in the proportion of 1 to 14; and in Germany mostly men, in the proportion of 21 to 13. On reviewing the cafes mentioned by different authors, we observe, that they were for the most part confined to the period of age between the thirtieth and eightieth year; and inftances of the diforder being met with at an earlier period of life have but rarely occurred. The German translator of Dr. Fothergill's works relates a cafe of a young lady, nineteen years of age; and alfo Dr. Leidenfrost a similar instance, (Dissert. supra citat.) Dr. RAHN, Prof. WEIDMANN, of Mentz, and Prof. SIEBOLD, of Wurzbourg, are the only perfons who have observed this diforder in pregnant women. The patient of Prof. WEIDMANN was attacked by the pain a month before her delivery: evacuants were fruitlefily employed, but the was cured by opium and bark. Dr. SIEBOLD's cafe is very remarkable, on account of the pain ceafing entirely during pregnancy, a circumstance that feems to prove the great power which the body enjoys in this state, of resisting several diseases, a remark already made by HIPPOCRATES, (de internis affectionibus, cap. 53, ed. chart. t. viii. p. 677) who tells us, that a dolor ischiadicus difappeared during the period of pregnancy, which, however, recurred twenty days after the delivery. Dr. SAUTER faw this painful affection disappear during a putrid fever, and Dr. SELLE in an intermittent fever, in both which cafes it returned after the fevers were cured. It seems not improbable, but that this diforder may be endemical, and even epidemical; at least the difease has not been more frequently observed than at Clausthal, the capital of the Hercynian mountains; and in the mountainous country of Salzbourg it is not at all rare. Mr. ANDRE remarks, that in a very fhort time he met with eight or ten cafes of this diforder, whereas he had not a fingle one afterwards during a period of twenty-feven years.

This affection feems not to be peculiar to a particular temper and habit of body, but attacks people of very different conflitutions fuddenly and unexpectedly: Its duration is extremely long, as it may laft for many years without doing any evident harm to the whole conflitution, or without terminating fatally in an immediate manner. A woman fuffered this painful affection from her nineteenth year to her eightieth, and got rid of it but fhortly before fhe died. In other cafes, however, the diforder emacjates and deftroys the body, particularly for want of reft: The difeafed fide of the face is frequently disfigured, and perfons fubject to this affection receive, as it were, a double profile, of which Prof. BALDIN-GER relates a curious inftance. (See his Medical Journal, Vol, II. No. 7.)

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Although many fymptoms of this diforder are of the spafmod'e kind, yet we have more reason to think it to belong to the class of convulsive diforders, and it is therefore erroneously called trifmus dolorificus, after SAUVAGE and PUGOL, becaufe the vehement contortions do not occur in every patient, and may, moreover, be rather confidered as conamina naturæ medicatricis, and efforts by which the patients endeavour to relieve themfelves from the pain, for which purpofe they likewife rub the part with much vehemence. A difficulty of speech and of fwallowing are observed in some cases, probably from the diffortions of the mulcular fibres that are fublervient to this purpole. A confiderable falivation came on in another inftance, where the patient became almost hectic; but Mr. SIEBOLD attended a patient whole falival excretion was entirely furpreffed; another subject of that diforder had a very much fwollen glandula Warthoni, from which a foetid and purulent matter iffued. The eyes remain fometimes dry, and it is not always that the pain forces out tears; fometimes they become red and humid. In fome patients a rednefs and heat of the affected part precedes the paroxyfm of pain, of which phenomenon a curious inftance is related by Dr. RAHN, where the heat was fo intenfe, that it could be felt at some distance. Other fymptoms frequently to be remarked in patients of this kind are, an intumescence of the belly, a torpor of the intestinal canal, and an obstinate coffiveness, which are probably owing to a spalm of the nervous sympatheticus magnus, that is intimately connected by anaftomofis with the fifth pair, an opinion which agrees alfo fomewhat with analogy, as we do not rarely obferve, that if the cheeks, or the cheek-bones, are any way affected, the liver is alfo difeafed: Those fymptoms ought, therefore, to be rather confidered as merely fecondary, and arifing per consensum, than as the caufa primaria of the difeafe. It has been observed in one case by Dr. LENTIN, that when the belly began to fwell, the pain foon after difappeared; and in another cafe it was greatly diminished by it, which symptom feems to prove, that the morbid matter is deposited on the intestines : it deferves, however, to be afcertained by farther obfervations. It is remarkable, that in a cafe of Dr. SIEBOLD, the patient had a particular relish for fweet things, which that gentleman is inclined to aferibe to a depravation of tafte, occationed by the affection of the neighbouring nerves, or to an obltruction of the liver, in which this fymptom fometimes occurs. The pulfe was often full, flow, and foft, during the paroxyfm, and at other times it decreafed ten beats at every return of the pain.

The feat of the pain has been obferved,

1. In some single part of the face, viz. at the inner canthus of the eye, FOTHERGILL; in the orbita, the same; at the supercilia of the right eye, PUGOL; in the jaw-bone, FOTHER-GILL; in the joint of the jaws, SELLE, PUGOL; in the maxilla inferior, at the paffage of the nervus inframaxillaris, LEN-TIN; in the ossa temporum, FOTHERGILL; in the nervus infraorbitalis, Albinus and Van Wy; in the ala nasi, VOGLER, THOURET; at the margin of the tongue, LENTIN.

2. In one half of the face, FOTHERGILL.

3. In both cheeks, PUGOL.

4. In both sides of the maxilla inferior, at the exit of the nerve.

5. In the whole head and face, LENTIN.

6. In one foot, LENTIN. (See Medical and Phyfical Journal, vol. iii. 575.)

The head and face are particularly exposed to this painful affection, on account of the quantity of nervous fibres that are every where (pread over the furface of the head. The pain effentially differs from any other that occurs in the various parts of the human body, though it may, in fome measure, be compared with the *dolor ischiadicus* of COTUNNI. Dr. LENTIN derives its origin from the *medulla oblongata*; and Prof. SIE-BOLD likewife thinks it may originate in a part remote from the affected place, in the *ganglion Gasseri*; others have derived it from the bones; but we ftill want anatomical obfervations for afcertaining the proper fource of the pain.

Remote causes, caus prædisponentes, of the diforder appear to be, 1. Violent blows and contufions of the above parts, ANDRE. 2. Cicatrices, LENTIN. 3. Preceding tooth-ach. 4. Too great tendernefs of the fkin; but the diforder occurred in perfons, whofe fkin was by no means to be called tender or foft. 5. Congeftions towards the head.

Internal causes. I. Cancerous acrimony. Dr. FOTHER-GILL first proposed this opinion, whence it has been called by fome authors, the cancerous rheumatism. The cancerous nature of the difease feems to be confirmed by the following arguments. 1. There is no other caufe to be difcovered, but that it is owing to a cancerous poifon. 2. It most frequently occurs in women, who are particularly disposed to cancers. 3. It generally appeared at the period of the ceafing menstruation, or when they were past the time of menstruation, 4. The where a particular tendency to cancers take place. kind is extremely fimilar to that occasioned by a cancer. 5. Both diforders have much analogy in their preceding fymptoms. 6. Four women fuffering this affection had the scirrbus mammarum previoufly. 7. The effect of hemlock in this dileafe, which is likewife much praifed in cancers.

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Adverse arguments. I. The difease is not at all uncommon in men, where cancerous acrimony could not be traced as well as in many women. 2. Menstruation did not always cease in fome patients, but they became even pregnant during the difeafe. 3. The cancerous poilon eafily attacks glandular parts ; but we feldom find them altered, indurated; or painful in the neighbourhood of the pain. 4. There is no inftance of the Dolor Faciei having terminated in a cancer of the lips or of the cheek. If it did however arife from a cancerous acrimony, it fhould be more frequently observed in men than women, because the cancer labiorum is oftener observed in the male, fex. 5. The parts difpoled to cancers have been frequently irritated by the perfons who had the Dolor Faciei, without ever producing fuch an affection. 6. It is not probable that the cancerous acrimony should remain fo long at a place fo fensible; without manifesting itself in the general way.

These arguments are indeed of fome weight, to make us believe that a cancerous poifon is by no means the only caufe of that affection, nay, that it is not even to be confidered as a chief caufe of it.

2. Arthritic matter: Almost all the authors who have treated on this fubject, agree in affigning this as the proximate caufe of that diforder, but particularly Dr. LEIDENFROST. Dr. DEGENER is likewife of this opinion, having observed at the affected place a tumour fimilar to that in the joints of gouty people. Dr. SIEBOLD faw in a patient fuffering the most violent pains at the supercilia, a node perfectly like that of arthritic limbs; and Dr. LUDWIG fairly tells us, that the patients fuffering this diforder became gouty foon after. The difeafe feems to have an arthritic origin in the cafes related by Dr. BOEHMER and LAVAGAN, who faw the pain difappear when the ufual arthritic paroxyfms returned.

[To be concluded in our next.]

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

Have been filently preparing to bring the too long depending queftion concerning acids in Syphilis to a decifion, according to the terms of my challenge to Mr. Pearfon. I am impatient that it fhould be known to the whole public, whether carclefs management, with foul play and an infufficient range of Dr. Beddoes's Plan for trying Acids.

of powers, occafioned the lofs of many lives, and the deftruction of many conftitutions, which acids would have faved.

I requeft you to infert the enclofed paper, or a fufficient abftract of it, in your valuable Journal. I have only to add, that I am ready to communicate with any members of the medical profeffion, on the regulations to be adopted with regard to patients, and their reception at the Pneumatic Inftitution.

I am, &c.

July 18, 1801:

T. BEDDOES.

Plan of a Public Scrutiny of certain Medicines, lately proposed as anti-venereal, at the Pneumatic Institution near Bristol.

THE idea of a public trial of acids in the venereal difeafe feems to have been generally approved; and I have now the fatisfaction of making it known, that the means of fetting the fcheme on foot are in my pofferfion.

In favour of the measure itself many reasons might be adduced. I shall trust to the three following as decisive; —the desirableness of a new anti-venereal remedy; the difficulty of satisfying the public mind by individual testimony; and the little disposition manifested by the profession at large, to take the trouble necessary to decide the question.

I. A greater benefit could fearcely be conferred on human fociety than the discovery of a new remedy for the venereal difeafe. This is acknowledged by all parties. But however ftrongly men, experienced in medicine, may feel the urgency of the existing necessity, no general terms can convey an idea of it to others. The relation of particular facts would far exceed the bounds of a prospectus, or do the subject the greatest injustice. Where the constitution, from early mismanagement, becomes thoroughly impregnated with the venereal poilon, mercury not unfrequently fails, or, by the use of this severe mea dicine, the patient dearly earns a fhort respite from his daily and nightly tortures. This is more commonly the lot of the ignorant and the poor, of whom, after they have in vain tried hospital practice and advertised medicines, it remains untold in what corner they hide themfelves to be preyed upon by their unrelenting diforder. But mercury (which must still be allowed a station in the foremost rank among the articles of the Materia Medica) proves also the occasional fcourge of the wealthy and the knowing. In particular inftances, however skilfully managed, it is ineffectual, or it aggravates the complaint. When it answers the immediate end, it gives rife to diforders that either foon arrive at a fatal termination, or blaft the

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the fpring of life, induce premature decay, and afflict advancing years with evils not their own. The transmission of the proper venereal difease is disputed. But what concerns society full as much is indisputable; namely, the transmission of morbid tendencies, engendered by its reputed sole specific. Hence the spectacle of parents, condemned to witness their youthful imprudencies, visited upon their children, too often occurs to those to whom the interior condition of human beings is laid open without disguise.

In corroboration of this ftatement I may appeal to our cities, our universities, the army and the navy. Wherever youth feels and indulges its ordinary propensities, there mercury lays the foundation of evils, the contemplation of which ought furely to produce fomething beyond barren horror or commisferation.

II. Could the mafs of teffimony either for or against the acids be annihilated, that on the other fide muft, from its multiplicity and ftrength, decide the public opinion. What therefore can be expected from fresh accessions of private teffimony? If success is announced, how easy to suppose a mistake in regard to the disease, or to find fome other method of explaining away the fact! Failure may be equally imputed to mission again the fact of the patient, but without effect on the disease. The dispute therefore will be left as it stands. Nor will the negligent, the luke-warm, the biassed, and the envious be at a loss for unfuccessful reports, till they shall feel the controul of general opinion, established upon experiments beyond the reach of cavil.

III. It has been furmifed that the mafs of atteffations, lately collected, and the accumulated proofs of a proper falivating power in acids, would fet innumerable enquirers at work. A confiderable time has however elapfed, and there are tokens enough of a communicative difpolition among the Faculty; yet no fingle fymptom of the predicted ardour of inveftigation has transpired.

Further reafons will hardly be required. Otherwife I might go on to explain what a blow empirical impofture would receive from the afcertainment of antivenereal power in new fubftances; and how much our medical logic would be improved. For it is hardly conceivable to what a degree the exclusive opinion, commonly entertained, narrows our views of organic fufceptibility. As if it were possible that any confiderable proportion of the medicinal treasures of Nature could be known, when, in the course of ages, no enterprise of discovery worth mentioning has been undertaken !

Dr. Beddoes's Plan for trying Acids, &c.

It remains that the Inquiry be unexceptionably conducted; fo that Europe may be no longer defrauded of that benefit from acids which India is unanimoufly attefted to enjoy. All doubt as to the nature of the cafes muft be obviated. Hence it fhould be a rule, to receive no patient without a flatement figned by at leaft three phyficians or furgeons. And every patient muft be infpected, on his reception and during the treatment, by practitioners on the fpot.

But the public muft be fatisfied that the medicines alleged are administered, and no others. A perfon, worthy of confidence, muft therefore be engaged to fuperintend the treatment. And although this perfon, in common with others, may exercife his judgment upon the cafes, nothing will reft on his fingle opinion.

The author of this paper having actually tried many varieties of acid medicines, and formed other combinations in his mind, propofes to direst the treatment. But he will hold no communication with any patient but in the prefence of the fuperintendant.—To him, in his fituation, celebrity in any other common diforder would be far more lucrative. But as the confignment to his care of the papers, relative to a practice that was originally promoted by his crude fpeculations, first engaged him in the question, fo a fense of its importance now induces him to fubmit to exertions in bringing it to an islue. He is convinced that many more difficult investigations may be proposed in medicine, but not one more immediately useful.

He still abides by the opinion expressed in his letter to Mr. Pearson, "that the patients must be persons of regular conduct, and concerning whom we may be able to procure information at a considerable distance of time." (Communications, p. lxi.)

It will be neceffary perhaps to take fome pledge for the perfeverance of the patient, to whom it fhould be previoufly explained that he is to be treated on a plan fuppoled on fuch and fuch grounds efficacious, and lefs trying to the conftitution than the mercurial. As foon as it fhould be deemed improper to continue the new plan, the old one will be adopted.

Patients with the proper certificate would be admitted to the number of twelve; and though little ftrefs would be laid on out-patients, yet any number of thefe would be treated.

One day in the week, at certain hours, the houfe would be open to all vifitors whatfoever. The practitioners who choofe to obferve and atteft these experiments must have the necessary access to the patients.

The first object in view is to fatisfy the public if certain fubstances not mercurial, are or are not remedies for the confirmed firmed venereal difeafe. But I could also with to continue the trials till fome judgment can be formed whether, if they be antivenereals, they equal mercurial preparations in virtue.

With the neceffary co-operation on the part of the profeffion to fupply patients and obferve the treatment, I truft that with what I may afford from my own purfe, added to the remainder of the fubfcriptions to the Pneumatic Inflitution (which the committee is willing to have expended in this manner) and to fome contributions for this express purpose, I shall be able to folve the first question.

Whether I shall have ability or funds to folve the fecond, will depend upon the opulent part of the public. That they will feel how deeply they are interested in the subject, I cannot forese. But, for helping to render this enquiry more full and fatisfactory, those among their sons, who are liable to have their confficutions impaired or destroyed by the operation of mercury, would owe them greater obligations than for a large patrimony. And (if on such a subject one may speak the truth in defiance of falle delicacy) they will not less effentially ferve their daughters by faving their future husbands from the ravages of the fame remedy.

Those who may incline to support this scheme, are desired to forward their subscriptions to Messrs. Couts and Co. Bankers, Strand, London; or to Messrs. Savery and Pugb, Bankers, Bristol.

Case of Oedema Fugax. Communicated by Dr. YEL-LOLY, Phylician to the General Difpenfary.

To the EDITORS of the MEDICAL and PHYSICAL JOURNAL.

Gentlemen,

IN your Journal of laft month, particulars are mentioned, by Dr. Crichton, of a difeafe which has not hitherto been deferibed by practical or nofological writers, to which he gives the name of Oedema Fugax. A cafe of a limilar kind occurred to a medical friend in the city a fhort time ago; and as I was induced, in confequence of that related by Dr. Crichton, to make more particular enquiries concerning it, both from my friend and the patient himfelf, the refult may not, perhaps,

Dr. Yelloly's Case of Oedema Fugax.

haps, be unworthy of infertion in the Medical Journal, as an additional inftance of a rare and obfcure difeafe.

Mr. C. of Gower Street, a married man, under thirty, went to bed on the 12th of June last in perfect health. He awoke a three or four in the morning, and was furprifed to find himfelf affected with a confiderable fwelling in the fcrotum, unattended with pain. This fingular and unexpected occur- " rence made him uneafy, and prevented him from fleeping: Soon afterwards he felt the penis begin to fwell, and the fcrotum to decreafe; and on rifing in the morning, the penis was fwelled to an enormous fize, fo as to alarm him very much, while the fwelling of the fcrotum could fcarcely be obferved. My friend faw him in the course of the morning, at which time the fwelling feemed to be at its height. It was free from pain, heat, or rednefs, with no perceptible pitting on preffure, or fenfe of fullnefs: The fkin was transparent, and particularly diftended at the frænum, which formed the end of the fwelling : The prepuce could not be retracted. In other respects he was in perfect health. A purgative medicine and faturnine lotion were ordered, and in the evening the penis was confiderably reduced in fize, but a flight fwelling was obferved over the right eye. This was very perceptible in the morning, but had not increafed, and the penis was still more diminished. In the course of the day the swelling of the eye difappeared, and in the following morning the penis was nearly in its natural state.

About a week from that time, after riding fome miles on horfeback, he observed in the evening a fwelling, attended with flight pain and rednefs, in the upper and fore part of the left arm, not completely encircling it. In the following morning the left arm was unchanged, but the right was affected down to the hand, with confiderable fwelling and fenfe of fullnefs. This was next day much better, but the fwelling near the fhoulder in the left arm continued; and another appeared below the elbow, which fpread to, and affected the hand, and was attended with flight pain, itching, and fenfe of fullnefs, particularly on moving the arm. The elevation was uniform through the whole of the affected part, and in none of them was there any perceptible pitting on preffure. The tumour in the left fore arm was fomewhat variegated in colour, and its increase was so rapid as to be clearly difcernible on viewing it, after withdrawing the eye but for a very fhort time. This laft fwelling did not continue longer than those which preceded it, but before it entirely difappeared, he was affected with another under his chin, which was very large, hard, colourlefs, and without pain. It gradually advanced to the under lip, which \mathbf{z} NUME XXX.

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which it difforted, and, as he fays, diffended like a bladder, fo as to alarm him much. In the courfe of the night, on awaking, he found that the lower lip was much fallen, and the upper as much fwelled as the lower had been: By the evening of the following day, little of either of those remained.

During the time of his being affected in the way which I have defcribed, he occafionally had flight and transient fwellings of the knee, ancle, and foot; and when I faw him, which was on July 6, he had fome degree of fullnefs in the infide of the fingers, which had been more confiderable the day before. He had the advice of two very eminent practitioners foon after he was first attacked, and, at their defire, took faline medicines, and afterwards tonics, without much apparent advantage. His general health through the whole complaint remained perfectly unaffected.

It may appear, perhaps, unneceffary to have gone fo much into the detail of this cafe; I thought it better, however, to give it in the precife and diffinct mode in which it was related to me by my friend and the patient, (both of whom are men of fenfe and obfervation) than merely flate it to you in general terms.

It feems to have been analogous to that of Dr. Crichton's in every particular but the want of general indifpolition preceding and accompanying the appearance of the fwellings.

Bartlett's Buildings, Holborn, July 20, 1801.

in the

I am, &c.

J. YELLOLY.

CRITICAL RETROSPECT

OF

MEDICAL AND PHYSICAL LITERATURE.

System der Practisiehen Heilkunde; i. e. System of Practical Medicine, adapted for Lecturers and for Practical Use; by Dr. Chr. W. HUFELAND, Professor at Jena, (now Phylician to the King of Prufia at Berlin) Vol. I. General Therapeutic. 1800, pp. 515, in large Svo. Jena and Leipzic, Fromman.

The celebrated author of the prefent work, on the appearance of which the general attention has been for a long time fixed, intends to unite the various heads of Practical Medicine under the most possible fimple points of view, to reduce the phenomena of the difeated flate, as well as the remedies and their actions, to the laws of life and organization, as far as we have hitherto penetrated, and

Dr. Hufeland's System of Practical Medicine.

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and by that means to establish more confistency in the different parts of medicine and the methods of cure; to remove the contradictory points, to fill the wants and fupply the deficiences in the art of healing by pure experience and unprejudiced obfer-vation. The use of such a work is equal to the task and the difficulties which attend the execution of it, as not only a philofophic mind and acuteness of judgment, but an extensive knowledge of the different medical theories, and observation at the bed of the patient, are necessarily required of him who undertakes fo great and difficult a talk. It must be confessed, that these qualities are not united in any man to a higher degree than in Dr. HUFELAND, whole name fills fuch an honourable place in the annals of medical literature. Although the theories on which the work is grounded may not agree with the ideas of every reader, yet all must acknowledge the profound practical knowledge and ingenuity of the author, in fupporting his former opinions with ftrong arguments; recommend his love of truth and impartiality in adopting feveral doctrines of the new theory of excitement, of which he, otherwife, profess to be an antagonist; in doing justice to the merits of others, and in expressing himfelf with modesty and dignity on their respective theories. The work is likewise written with the fame elegance of ftyle, in which he furpaffes most of his colleagues, and by which his other works are equally diffinguished.

At the end of the Preface, the author adds a sketch of a Bibliotheca Practica, under the following heads. 1. General introduction to practice ; here he ranks, firft, " Frank's epitome de curandis hominum morbis," and concludes the lift with Brown's elementa medicinæ, and the remark, " caute incede, latet ignes fub cinere dolofo." Introduction ; fcope of the art of healing, Macrobiotic, Therapeutic in general. Part 1. General Therapeutic. To cure difeases is to change the anomalous flate of an organic body into a normal or found state. Ch. i. Therapeutic of nature. It must be allowed, that the organic body poffeffes the faculty of preferving not only itfelf and its life, but of removing any disturbances in the diseased state, and of reftoring the whole to equilibrium; or, in a word, it is in the power of nature to cure difeases by itself without medical affistance. The vires naturæ medicatrices are proved by the teft of experience and theory, as organism is endowed with the faculty of felf-prefervation and regeneration. The vires nature medicatrices originate properly in the vis vitalis of organic nature, which penetrates, preferves, and vivifies the whole body. In this point of view, a fanative power of nature may indeed be adopted, as the fame conditions which preferve life and its found flate, to act here for the reftoration of health. It feems, however, that health and the reftoration of health depend on the extraneous impreffions upon the organic body, and on the manner and poffibility of their action on it; on which account phyficians ought not always to rely on the fanative power of nature, and still lefs ought it to be adopted as a proper power of organism.

Dr. HUFELAND proposes, 1. The laws of incitation, accord-Z 2 ing

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ing to which the therapeutic of nature feems to proceed; he farther confiders, 2. The sympathy of the fingle parts; 3. Antagonifmus. It is a known fact, that a diminished or suppressed action in any organ is replaced by that of another, and in this way the cure of many difeases is effected. Thus a suppressed febrile action in an intermittent fever may produce exanthemata, diarrhœas, &c. whereby any harm is prevented, that could refult from that fuppreffion: suppreffed or retrograde exanthemata often occasion confumption, which is fometimes cured by their being again reftored. These phenomena, however, admit a different explanation, according to the new theory of excitement, as in all the cafes brought forward by Dr. HUFELAND in support of his opinion, the effential character of the difease remains always the same, degree and form being only changed. In intermittent fevers, for inftance, the effential character is debility; when the degree of debility becomes fill lefs, another fymptom of afthenic affection supervenes, as an exanthema; if now the body continues to be debilitated, the eruption perhaps disappears, and a third form of asthenia succeeds, as dropfy, &c. It cannot, however, hence be concluded, that the cure of the fever is to be afcribed to the eruption, or this to the dropfy, &c. Which way of explaining is more adequate to nature, we leave our readers to judge. 4. Secretion, as a principle of the fanative power of nature. 5. Pathological change of matter. 6. Instinct. Some objections may be raifed against adopting this as a principle on which a cure, performed by nature alone, is to be founded; and though there are cafes, where the patients have a particular longing for things that are proper and falutary, or a difguft for fuch things that may do harm, yet it quite as often happens, that they long for things which would injure them. In feveral cafes the averfion for any thing may be as eafily explained by a topical af-fection in the organs: Thus a patient in a high degree of typhus will have a difgust for all folid food, which he is at this time unable to digest, the organs of digestion being diseased, and not feeling the fenfation of hunger as a natural confequence of their morbid state. 7. Habit and custom, as a principle of the fanative virtue of nature .- Ch. ii. General theory of cure. This chapter contains a number of interesting and ingenious ideas, which are at the fame time of practical use; but the nature of the whole admits of no extract. Every cure confifts in changing the anomalous flate of the body into a normal one, or in an alteration that is purposely produced in the body, for removing the difeafed state. The author has adopted feveral ideas of the theory of excitement, but with fome restrictione, a circumstance which characterises him as an unprejudiced thinker and a lover of truth. - Ch. iii. Remedies, their action, and manner of employing them. After having difcuffed with much ingenuity the manner in which remedies act on matter and on the humcurs of the body, Dr. HUFELAND diffinguishes the actions of remedies into those which act on excitability and into the actions on the organic mixture of matter, that is to fay, remedies-act partly by causing a change in the external condition of life or of the ftimuli,

- Dr. Hufeland's System of Practical Medicine.

ftimuli, partly by caufing a change in the inner condition of life or in the organization and its mixture, on which the quality and quantity of vital action depend .- What the author flates of fpecific remedies is very true and of much practical ufe. Their action is either confined to a particular organ or proceeds in a particular manner. The specific action, however, does by no means exclude the general action that attends it. - Ch. iv. Method of cure and its difference, according to different purposes. The whole cure ought to be founded on the diagnofis of difeafes as a difeafe that we know is eafily to be cured, though the diagnofis itfelf is fubject to many difficulties. Dr. HUFELAND propofes here fome excellent practical rules concerning the diagnostic part of medicine. The fcope of cure is, 1. To remove the caules of difeases, and confequently to perform a radical cure. 2. To remove the effects of the difease, or the symptoms; palliative cure. 3. To preserve the life of the patient, not by removing the difeafe itfelf, but by using fuch remedies as have an immediate effect, cura vitalis; this cure is employed, 1. When any fymptom supervenes, which threatens a fudden danger to the operation of life. 2. When the difease has an advantageous influence for preferving life. 3. When the difeafe itself is incurable. The scope of medicine is farther, 4. To prevent future diseases, cura prophylactica, which is effected by removing a particular disposition of the body to any disease; for instance, a morbid sensibility by corroborative medicines, &c .--Ch. v. Pathogeny and account of the fundamental difeases, with re-Spect to therapeutic. Those difeases deserve the appellation of fundamental, or primitive diseases, which originate in a change of the operation of life and vital activity, according to the laws of organization. Amongst the proximate causes of them we observe, 1. A defective state of the internal conditions of life; i. e. of the chemical mixture, ftructure, and form of the organic matter; 2. A defective state of the external conditions of life, or of the stimuli; 3. A diffurbed equilibrium and harmony in the peculiar actions of the fingle organs that conftitute the whole organization. The changes arising in the vital activity are either quantitive, that is to fay, with respect to the degree, or to sthenie and asthenie, or qualitive; i. e. with regard to the modality of the effects and the quality of the products. Every organic body enjoys a peculiar or-ganization, to which its mode of acting bears exact proportion, whence, alfo, a peculiarity in its diseased state arises .- Ch. vi. The fundamental methods of medicine. - Ch. vii. The exciting method. To excite is to increase the vivacity and firength of the vital exertions. The author here enumerates the proper remedies, and proposes the best mode of applying them .-- Ch. viii. The corroborative method. To corroborate is to increase the quantity of life, or the fum of internal and external vital exertions, in fo much that they proceed with a certain degree of force, steadiness, and duration. Some excellent remarks on the use of strong acids are added here. -Ch. ix. The lenient method, by which we intend to mitigate the too vehement and anomalous vital exertions produced by the difeafe.

Journal of Medicine, Surgery, &c.

eafe, or, at leaft, to make them lefs perceptible to the patients: — Ch. x. The debilitating method.—Ch. xi. The fpecific method relates to a peculiar quality of the difeafed flate, requiring to be changed by remedies that have a peculiar action upon it. — Ch. xii. The antagonistic method. Any affection of a part may be removed by an opposite affection in another part; this is a law on which that method is founded.—Ch. xiii. The restorative method, by means of which fuch fubflances are imparted to organis as are fit for hecoming conflituent parts of the organic mixture.—Ch. xiv. The evacuant method.—Ch. xv. The method for changing and improving the mixture, properties, and proportion of the organic body.

Such are the contents of the first volume of this valuable work, which we may rank amongst the best literary productions on medicine that have lately appeared, and the continuation of which will be ardently expected by the medical world.

Journal de Medicine, Chirurgie, Pharmacie; i. e. Journal of Medicine, Surgery, and Pharmacy; conducted by the Citizens Cor-VISSART, LE ROUX, and BOYER, Profession of the School of Medicine. Paris, Mequignon, year 9, small 8vo.

THE phyficians of France have for a long time regretted the difcontinuance of the old Journal de Medicine, which was begun in the year 1754, by VANDERMOND, conducted afterwards by Mr. LE ROUX till 1776, continued by DUMANGER and RACHER to 1781, and by the latter till the year 2 of the republican era, when it ceased to appear. The wishes of the public are at last gratified by the Citizens CORVISSART, LE ROUX and BOYER, who have begun to publish the Journal of Medicine we are now announcing, of which a number of about 96 pages is to appear monthly, fix of which will form a volume of about 576 pages. This new Journal of Medicine, which may be confidered as a Continuation of the old Journal de Medicine, is to contain the following heads. 1. Observations, memoirs, differtations, &c. on all parts of the art of healing. 2. Extracts, notices, advertisements of all books on the different branches of that science, foreign as well as domestic, which are to appear, or which have been published fince the ceffation of the Journal de Medicine. 3. Accounts of the proceedings of the different medical focieties in France and of the National Inftitute, as far as they relate to medical fcience .- In the Introduction, the editors prefent the principles on which their plan is founded, and which feems likely to meet with approbation. In the two numbers which we have before us, we find, 1. An observation on a hydrops cyflicus of the liver by CORVISSART and LE Roux. 2. Refearches and observations on the same disorder, by Lassus. 3. Obfervations on an aneurism of the heart. 4. Obfervations on an anomalous tumour at the fore arm by Cit. BOYER. 5. An historical memoir on the cow-pock, by Cit. AUBERT. Two historical memoirs on the medical school at Paris. An observation on excrefcences placed at the orifice of the aorta; on the fcirrhofity of the heart, &c. by CORVISSART and LE ROUX. Observations on a new

Prof. Le Febure's, and Prof. Hildebrand's Books. 175

a new proceeding of Cit. BOYER in the confittitions of the cefophagus, by introducing elastic probes, by Cit. VARELIAUD. Meteorological obfervations made at Paris in the year 8. Medical conflitution of Paris during three months of the fame year. Literary news, extracts of books, &c. conclude each number.

Recherches et Decouvertes far la Nature du Fluide nervoux ; i.e. Refearches and Difcoveries on the Nature of the nervous Fluid, or vital fpirit, and on the manner of action, after new and exact experiments by Professor W. LE FEBURE. Paris, Koenig; and Frankfort, Fr. Eslinger; year 9.

THE author discusses in the first paragraphs some general notions, and relates in the feventh fection, in a few words, the ideas most generally adopted on the nervous fluid, into the nature of which he enquires in the following paragraphs. He describes the pneumato chemical apparatus, which he used for making different curious experiments on the nervous fluid, the refults of which are as follow. 1. That inflammable air exists in the brain and medulla oblongata, as well as in the nerves themfelves and in the fperma, the most elaborate secretion of organism, where it is mixed with the lymphatic humours, which ferve it as a vehicle, and with a portion of carbonic acid. 2. That these two gaffes are found in different animals. 3. That they are likewise observed in the medulla, nervous, and seminal parts of semales. 4. That the inflammable air has a different specific weight in the different animals, on which account its conflituent principles must be different. 5. The inflammable air which circulates in the nerves, is altered in the morbid flate of the body. After having thus flated thefe corollaries, the author proceeds to difcufs the following queftions. 1. The nervous fluid confifts of inflammable air; but how does this gas circulate in the nervous tubes? This cannot proceed in the fame manner as the blood circulates in the arteries and veins. How does this air give impulse to the animal body? How does it vivify it? What is its action and its effect ? 2. The nervous fluid is differently combined or modified in different animals; what is the nature of it? 3. The nervous fluid is altered in the difeafed flate, but in what manner? By what means does nature re-eftablish it to the natural flate? Such are the contents of this pamphlet; but whether we shall penetrate in this manner the abstrufe doctrine of the nervous principle, is a matter of farther enquiry, and, we fear, not quite exhausted by the author of this publication.

Taschenbuch fur die Gesundheit; i. e. Pocket Book for Health, for the year 1801; edited by FREDERIC HILDEBRAND, Professor at Erlangen, 250 pp. 12mo. Erlanger for Walther.

It is indeed a very useful undertaking to communicate medical notices and truths to the public at large; but it requires great care and precaution in choosing proper materials, and in proposing them in a proper manner. Mr. HILDEBRAND, whose merits in medical fcience

Dr. Thomson's Family Physician.

fcience are generally acknowledged, affords in the prefent publication both inftruction and amusement to his readers, as he unites a proper choice of materials with a pleafant manner of treating them, fo that this popular work may be confidered as one of the beft of the kind. The author premifes some general rules for the prefervation of health, in which he communicates fome remarks on what fick people ought to observe, &c. First section, Rules concerning the different actions to which men are exposed. Ch. i. of the air, in which he difcourfes on the conflituent parts of the atmosphere, their different actions, the pernicious effects of irrespirable vapours, &c. and at last he treats of the eudiometers. Ch. ii. on the hygrometer, and on the advantages of a dry and warm dwelling. Ch. iii. warmth and cold, on the effects of both, on floves, beds, on freezing to death. Ch. iv. on eating and drinking, whether the food and drink ought to be cold or warm ; this depends on cuftom, on the impurities of the primæ viæ; on food eafily and difficultly digestible; animal food, vegetable food; on fugar, milk : liquors and drinks; water, beer, wine, coffee, tea, &c. - on fruits, vinegar, spices, fnuff, tobacco. Ch. v. on the excretions, perspiration, excretio alvi, urinæ, feminis, &c. Ch. vi. on drefs. Ch. vii. on the gefture and fituation of the body. Ch. viii. on fleep. Ch. ix. on motion and reft. Ch. x. actions of the mind. Second Section, Rules with respect to the different parts of the body; for the eyes, teeth, breaft, belly, and fkin. The contents of this book are inftructive and pleafant.

The Family Physician; or Domestic Medical Friend: containing plain and practical Instructions for the Prevention and Cure of Diseases, according to the newest Improvements and Discoveries; with a Series of Chapters on collateral Subjects, comprising every thing relative to the Theory and Principles of the Medical Art, necessary to be known by the private Practitioner. The whole adapted to the Use of those Heads of Families who have not had a classical or medical Education. By AVEXANDER THOMSON, M. D. Author of a Treatife on Nervous Diforders; of Dialogues in a Library; and other Productions. 12mo. pp. 580, price 0s. in boards. London, 1801. Phillips.

THE work here offered to the public, the author obferves in his preface, "is fo intimately connected with human happinels, that little need be faid in favour of its general utility. To preferve the health of the body, and to care its difeafes, have ever been regarded as objects of great importance to maakind; and a knowledge of the means for promoting thefe falutary purpoles can never be too widely diffufed. The art, however, of preferving health is, in general, fo little cultivated, as well as imperfectly underftood, that more difeafes proceed from a violation of its precepts than from all other caufes whatever; and, with regard to the cure of them, an early obfervance of their approach, and a prompt application of medicine, are circumflances which, if unfortunately neglected,

neglected, no fubfequent skill or exertion may ever afterwards be able to retrieve.

"Another circumftance alfo contributes greatly to favour the progrefs of difeafes. People often, from various motives, are difinclined to call for the affiftance of a phyfician, until the diforder has fo far advanced, that neither the diftrefs of the patient, nor the apprehenfions of his friends, can admit of any longer procraftination. Whether the difeafe be chronic or acute, this difeafe proves equally pernicious. If chronic, the difeafe may become fo fixed in the habit as to refift the utmost efforts of medicine; and if acute, the rapidity of its progrefs may not only bid defiance to all reftraint, but utterly preclude every reafonable hope of recovery.

"Nothing, therefore, can fo effectually obviate thefe inconveniencies as a work of the prefent kind, which not only teaches to difcover a difeafe at an early period, but to apply the proper means, as well for preventing its increase as, if possible, for its total extinction.

"The author's principal care, he obferves, has been to defcribe the various difeafes with accuracy, and to recommend fuch a method of cure as is conformable to the lateft eftablished improvements in medical practice. In executing this plan, he has every-where endeavoured to be sparing in the use of technical expressions; but the total exclusion of them being incompatible with precision of fentiment, an explanation of all such terms is given in a Glossary."

In our perufal of this comprehensive work, we have been particularly ftruck with the concisents and perfpicuity with which the fymptoms of the various difeases are described; and the care every where taken to point out those marks or fymptoms which diffinguish one difease from another. This is indeed an effential requifite in a popular work of this kind; for if the difease be mistaken, the well intended means of relief may prove fatally pernicious.

In delivering the method of cure, the author has very properly accommodated his directions to the understandings of plain, unlettered parents, and guarded them against the confequences of using deleterious remedies without medical affistance; we think, however, that even the experienced practitioner will find many valuable hints and improvements not to be found in any other work.

Befides the fubjects ufually treated of in works on the fubject of domeffic medicine, Dr. T. has given the method of treating accidents; an account of the medicinal baths and fprings in this ifland with their ufes; an account of the fubfrances most commonly employed in medicine, more efpecially those found in Great Britain, with their virtues and ufes, together with rules for collecting and preparing them. There is also, what no good book should be without, a proper Index.

Upon the whole, if extensive refearch, important observation, and practical utility, can slamp a value on a popular medical production, we believe the present volume has such just pretensions to the approbation and favour of the public as cannot fail to ensure its success.

NUMB. XXX.

A Prastical

A Prastical Treatife on Diet, and on the most falutary and agreeable Means of fupporting Life and Health, by Aliment and Regimen; adapted to the various Circumstances of Age, Constitution, and Climate; and including the Application of modern Chemistry to the Culinary Preparation of Food. By WILLIAM NISBET, M. D. Fellow of the Royal College of Surgeons, Edinburgh, Author of the Clinical Guide, &c. 12mo. pp. 430. price 6s. boards. London, 1801, Phillips, &c.

WE cannot introduce the account of this work better than by an , extract from the preface and introduction.

"The fubject of diet is of the first importance to mankind. It has received, however, from the generality of physicians, a lefs share of attention than its importance demands, and the cure of actual difease is commonly more aimed at than its prevention, or the real prefervation of health.

"Compared with the other branches of the medical art, the works upon diet are few, and of thefe a very fmall number can be confidered as poffeffing practical utility. Hence they are little fitted to inftruct fociety at large. Thofe which do afford practical inffraction, confift generally of fmall detached works on particular fubjects; and thofe which affume a more complete form, are entirely of a profeffional and fcientific nature, and abound in hypothetical and conjectural matter.

"Among the ancient phyficians, diet was confidered as a fubject of the first confequence. Their remedies were fewer in number than those of the moderns, and they were confequently led to the regulation of diet, as a more fuccessful means of curing difease than the application of medicine. It would have been well for fociety at present, if the same opinion and practice were followed by modern physicians.

"Of the advantages attending a proper regulation of diet, most individuals can form a judgment from their own experience. It is at least this idea upon which the common maxim is founded, that every man, after the age of forty, is best fitted to be his own physician; a maxim which implies, in other words, that every man, in respect to what he eats and drinks, is enabled to diftinguish, by that period, the food which best agrees with him.

" In chronic difeafes, it is obvious that the chief means of cure confift in the proper regulation of diet alone. The origin of difeafes, it must be allowed, is more frequently to be traced to improprieties in diet, than to any other caufe; and the mode of relief must neceffarily be fought for in the reversing of that plan of living which gave rife to the difeafed state:

" In the following work it has been the leading object of the author to unite the knowledge of particular facts with general principles and reafonings; and to carry these reafonings no further than to connect facts and principles with practice.

"He has collected together a greater mais of matter than has appeared before in any fingle book, and, without affuming any merit merit to himfelf, his work must be useful entirely on that account. It might, indeed, have been extended to a much larger fize; but his chief labour was to condense his materials, that he might enable readers of all descriptions to acquaint themselves with a subject of such particular importance, and exhibit every fact, at the fame time, in the simplest and clearest point of view.

"Nothing, indeed, could tend to much to improve the fcience of medicine, as to endeavour to make man acquainted with himfelf. The principles of the animal æconomy rendered familiar and plain, and a knowledge conveyed of the action of fubftances upon it, is the only way to root out those falle maxims and prejudices which ignorance and education produce.

"How far the prefent attempt has fucceeded, must be left to the decision of the public. The endeavours of the author, he can at least affert, have been well intended for the benefit of mankind.

"When we confider that in the catalogue of difeafes, at leaft two-thirds are of a chronic nature, or the effect of our own irregularities; the importance of this part flands in a confpicuous view. By the very inftinct of felf-prefervation, we are more immediately excited to its investigation; and by a knowledge of it, feasonably applied, we shall often have it in our power to prevent difeafe-Even where difeafe has actually occurred, we shall be enabled by this knowledge to check its progrefs, and at the fame time to affift the efforts of medicine. But while the principles of the animal œconomy, being once rendered familiar and plain, is the only way to root out those false maxims and prejudices which education and ignorance introduce, there are certain limits beyond which this knowledge fhould not be carried. An acquaintance indeed with the subject of diet, cannot fail to be attended with the best consequences; but when this familiar or domestic kind of knowledge is extended to what is flyled frictly the province of medicine, its influence there is often of the most fatal tendency,-Medicine is a science complicated in its principles, and from the varying appearance of difease frequently uncertain. The man, therefore, who, confiding in this fuperficial knowledge, attempts to be his own physician, seldom is so to much purpose. He is liable to miftakes at every turn he takes, and the milchief is often irreparable before he is aware of the danger. Even the phyfician who prefcribes for himfeif is not unfrequently led into an error; and the remark made to the friend of one, on an occasion of this kind "He has a chance of getting well, for he no longer prefcribes for himfelf," contains much truth and just observation.

At the fame time, while a fuperficial acquaintance with the fcience is thus condemned, we are equally averfe that any myttery fhould hang over it, or that the veil which has been withdrawn from the other branches of knowledge fhould continue its obfcurity here. Let the principles of medicine be once fairly known, and let its precepts be directed by judgment and experience; it will be then of little confequence whether its aid is befowed by a professional hand, or by the zeal of humanity and friendship. A a 2 To

To affift in doing this is the object of the following Treatife, in which we shall confider as the extent of our subject the various means of supporting life, as applied—

Ift. To the furface or external part of the body.

zdly. To the lungs, or what we may term the intermediate furface: and,

3dly, To the internal parts, through the proper organ of the ftomach.

We fhall next examine the action of the body, as modifying the power of thefe means of fupport when introduced into the fyftem; then confider the influence of the mind as affecting the body in the fame way; after which we are naturally led to trace the paffage of the various alimentary matters from the body, in their different altered and affimilated flates, through the feveral evacuations; and laftly, we fhall be prepared to concentrate in one detail the various means for the prefervation of health, and to mark the circumflances to which the prolongation of life is chiefly to be attributed; concluding this fyftematic view of the fubject with an abfract of the general principles of chemiftry, as applied to this part of medicine, firft in the detection of the component parts of diet, and fecondly in their various preparation for the purpofes of nourifhment and the delicacy of the table.

Thus we shall be led to trace the human body as a wonderful fystem of parts:

By the lungs drawing life and heat from the furrounding atmosphere:

By means of the flomach fupplying itfelf with nourifhment from the various parts of creation, for the prefervation of its animalization and form :

Then removing, first, the useless part of this nourishment by the intestines:

Secondly, difcharging the accumulation of the animal principle derived from the fame nourifhment by the lungs : and,

Thirdly, giving outlet to the various faline products arifing from the operations of the economy, by the kidneys, the skin, and the other lesser excretions."

We are convinced that this compendious work, on the important fubject of Diet, will prove a valuable and acceptable prefent to the public.

Practical Observations on the Nature and Treatment of some exasperated Symptoms attending the Venereal Disease. By EDWARD GEOGHEGAN, Member of the Royal College of Surgeons; of the Royal Medical Society, Edinburgh; and Surgeon to the Dublin General Dispensary. 12mo. pp. 75, price 3s. London, 1801, Debrett, &c.

" I propofe," fays the author in his introduction, " to confider fome fymptoms attending the venereal difeafe, the nature and treatment of which, I think, are not well underftood; and I am the more

more defirous of entering into the invefligation, finding that the moft refpectable modern authorities are not only undecided in their opinions, but inculcate a practice, which appears to me highly injudicious, and from which I have witneffed the moft defiructive confequences. The variety of forms which this difeafe affumes, and the fymptoms of extraordinary malignity which occafionally occur, invole its treatment in confiderable difficulty: there is fcarcely a difeafe which it does not refemble in fome of its features, and there is no general plan of treatment which is not contraindicated, under fome particular circumftances; hence in invefligating its phenomena, an extensive field of refearch prefents itielf, and indeed we have to lament that in confidering the varieties in this difeafe, profeffional men calculate by fo very limited a fcale.

"Although almost every form which the venereal difease prefents, furnishes ample matter for observation, I shall confine myfelf to some aggravated symptoms, in which I have hadconfiderable experience.

"The lymptoms termed phymofis is that to which I particularly allude; and I know of no affection, the event of which is more intereffing; it frequently terminating in mortification, and the lois of a part or of the entire of the penis. The number of inflances of this kind, which occurred during the fummer, autumn, and winter of 1799, excited my aftonifhment, and on communicating with other practitioners, I found that they had met with fimilar cafes in a much greater number than at any former period: as to the nature and treatment of it, there were a variety of opinions, in general different from those I had formed.

⁴⁴ It was noticed by the public, that the venereal difeafe then raging appeared to be fingularly malignant; and I have heard even pr fellional men fay, that they thought there was an increafed de ree of virulence in the infection. The appearances which gave rife to thefe remarks, were violent tumefactions of the penis often terminating in gangrene, particularly when injudicioufly treated; other fymptoms were alfo obfervable, fingular for intenfity of degree. Although I was always decided in the opimion and practice I now maintain, yet the frequent inflances within fo limited a time, afforded opportunities for much obfervation, and led me to queftion the propriety of the practice generally purfued and recommended.

"When the ordinary fymptoms attending an infectious difeafe appear to be exafperated in an unufual degree, the queftion arifes, to what are we to attribute this increafed degree; whether to increafed acrimony in the poifon, or to any adventitious or phyfical caufes infenfibly operating? This is the pivot upon which the point of practice muft turn. If to the former, mercury is the remedy; if to the latter, a great variety of circumftances are to be taken into confideration, which are too frequently neglected. There is nothing fo common as to hear the furgeon declare in every cafe which does not yield to the ufual mercurial difcipline, that the conflitution is in fault, and his mode of rectifying it is, in general, the

the free use of bark and wine, opium, cicuta, decoctions of the woods, fea-bathing, and those means fometimes are conjoined, but generally follow mercury in a kind of routine, as if they had a specific operation in every difease connected with the venereal, or with its antidote. Before I proceed to enquire into those caufes, which, I conceive, are but little attended to in accounting for the varieties in this difeafe, I think it neceffary to notice the opinions of Mr. John Hunter on this part of the fubject; he fays; 'That when this tumefaction takes place, in confequence of a chancre, he fuspects there is an irritable disposition in the habit, for it is plain there is more than the specific action; the inflammation extending beyond the specific distance.' In his directions for the conflitutional treatment he feems a good deal puzzled - his words are, 'In those cases, where violent inflammation has attacked the feat of a chancre producing phymofis as before defcribed, and often fo as to threaten mortification, a question naturally arifes - Is mercury to be given freely to get rid of the first cause? Nothing but experience can determine this; I should incline to believe, that it is neceffary that mercury fhould be given, for I am afraid our powers to correct fuch a conflitution, whilf the first caufe fubfilts, are too weak; however, on the other hand, I believe the mercury should be given sparingly, for if it affists in disposing the constitution to fuch fymptoms, we are gaining nothing, but may lofe by its use; I therefore do suppose, that such medicines as may be thought neceffary for the conflitution, should be given liberally : as well as the specific, bark is the medicine that probably will be of most general use; opium, in most cases of this kind will also be of fingular fervice; the bark should be given in large quantities, and along with it mercury, whilft the virus is flill supposed to exift; or if the inflammation has arisen early in the disease, they may then be given together, fo as to counteract both difeafes, and not to allow the inflammation to come to fo great an height as it would otherwife do, if mercury was given at first alone. This inflammation may be fo great in many cafes, or be fo predominant, that mercury may increase the disposition, and therefore become hurtful. Where this may be fuppofed to be the cafe, bark must be given alone.'

"Thefe are his obfervations in full, on the conflicational treatment of phymofis; what is to be learnt from them, I am at a lofs to difcover; he puts a cafe of inflammation threatening mortification; after exprefing many doubts he advifes mercury, but that it fhould be given fparingly left it fhould do *barm*; in the next lines he recommends it accompanied with bark and opium, and concludes by telling us, it may become *burtful* in the very cafe in which he advifes it. It is evident from thefe equivocal and inconfittent opinions, that he had not come to any fixed or determined principle as to the nature of the difeafe, or mode of treatment; the furgeon who gives mercury, and he who does not, in this threatened mortification, are alike fanctioned by his authority; he alfo advifes in the local treatment, to inject mercurials, even corrofive

rofive fublimate in the proportion of one grain to an ounce of water, and other mercurials to remain in contact with the parts, but concludes, that he has his doubts as to the propriety of using any irritating applications in fuch cafes.

" With respect to the question, whether the increased acrimony of the poifon has any thare in producing those aggravated fymptoms? here, it is necessary to take a view of the effects which usually attend its application in the first instance. When applied to a non-fecreting furface, ulceration is generally the confequence, and although attended with fome degree of inflammation, yet it is rather circumferibed, and the ulcerative process goes on more rapidly than the inflammatory, and the latter is often totally wanting. Females having the flightest appearances, without even ulceration or any inflammatory symptom; indeed, ignorant of being infected, conftantly communicate the difeafe, and the perfons receiving it are varioufly affected; in one man it will exhibit the most trivial, in another the most dreadful appearances, and both infected by the fame woman, at nearly the fame time; taken into the flomach it produces no effect, and even proves harmless when applied to the furface of many perfons; it also remains in the constitution for years, without manifesting itself, or exciting the least disturbance. In the fmall-pox, we every day fee the mildeft and most malignant kind, and both produced from the fame infection. These facts eftablish the principle most unequivocally, that mild or violent fymptoms, whether attended with inflammation or ulceration, or in whatever form they appear, are not characteriftic of variety in the matter of infection; hence, we cannot account for aggraved fymptoms, from the nature of the poilon. We are led then to look for an explanation of the phænomenon (peculiarity of conflicution is the generally admitted caule) to fome other caule, and whilft I agree that it is the true fource, I cannot but express my aftonishment at the narrow view which is generally taken of this material point. One would think from the plans of cure laid down and ufually purfued, that bad conftitution meant fome fixed and definite thing, for which there was a decided rule of treatment; not that fluctuating state of the animal machine which is liable to vary with every breeze.

"Surely, in confidering the conflitution, the great variety of circumftances which influence it are are to be taken into the account. The conflitution of the air, place of refidence, difpoling to difeafes of different types, difpolition to particular difeafes, effects of the human paffions, intemperance, exercife, where reft is neceffary, habits of life, also neglect of the local fore, or general habit, and many other caufes of interrupting the general health, which it is impoffible to recount, and all of which have their fhare in exasperating difeafes, and changing their form. Many flates of confliction may arife during the treatment of the different flagges of the venereal difeafe, from fome of the caufes enumerated, in which mercury would be contraindicated, it is eafy to conceive, that inflammations of the penis may be superinduced, whether chancre

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cre exifts or not, as in gonorrhœa; and that chancres may fpread and put on the most malignant appearances, independant of the virus. When the penis becomes the feat of difeafe, its irritability is preternaturally increased. Should any additional cause of difease operate locally or generally, it is obvious that the part in a flate of morbid fensibility, will feel its effects in a greater degree than any other, and that new fymptoms will be produced quo ad injuriam. Was a perfon with a chancre to receive a hurt on his penis, and violent fymptoms to enfue, could any thing be more abfurd than to treat the cafe as venereal during the new fymptoms ? And might not the fame effects arife from an injury of the conflictution ? Do we not every day fee the most violent difeases come on suddenly from an acceffion of cold, and affecting those parts particularly which were previoully in a morbid ftate? Those who are subject to difeafes of the urinary organs, gout, rheumatism, ophthalmia, fore throat, &c. &c. expect a visit from their old complaints, at those feafons when the weather is remarkably variable, as in fpring and autumn. Hippocrates observes, " Mutationes temporum maxime pariunt morbos, et in ipfis temporibus, magnæ mutationes aut frigoris aut æstus aliaque congruentur rationi eodem modo."

"At those periods when catarrh is a frequent difeafe, and which is generally occafioned by an epidemic conflitution of the air, it is observed, that pre-existing difeafes are increased, and that the prevailing epidemic manifests itself in a variety of forms. Sydenham observes, that 'At the time of an epidemic, every other diforder, in fome measure, participates of the nature of the reigning epidemic.' All the accounts we have of difeases arising from the flate of the atmosphere, give inflances of the variety of forms in which they appear, although the prevailing difease was catarrh, eryfipelas often terminating in gangrene and death, palfies, convulsions, fudden deaths, mania, &c.

"That the principle contended for is admitted by every medical philosopher, there can be no queffion; and, I prefume, that its application in explaining the phenomena under confideration is obvious. I have already endeavoured to explain, how difeases in the penis may be aggravated; and the circumflances of the aggravated fymptoms occurring when the fores are nearly healed, and the fyftem fully under the influence of mercury, prove, that they are not caused by venereal irritation, and that the virus has no other fhare in the difease, only in as much as it predisposes the part to be acted on by the remote causes; a morbid condition of body also is induced by mercury, which renders it peculiarly liable to adventitious difeases. These observations apply to every fymptom attending the venereal difease, all which may be aggravated from fimilar causes."

We are convinced, as no doubt our readers are, that this Writer's Observations merit the ferious attention of practitioners.

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MEDICAL AND PHYSICAL INTELLIGENCE.

[FOREIGN AND DOMESTIC.]

Establishment for the Preparation of Artificial Mineral Waters at Paris .- There exists at prefent in Paris, an establishment for the preparation of mineral waters, which is certainly unique in its kind. It has been inflituted by Citizen Paul and Company under whole direction this manufactory of mineral waters is carried on with great fuccefs and profit. The Society of Medicine at Paris appointed a committee, confilting of the Citizens Chaussier, Delunel, Tourcy, Jossee, Pelletier, &c. in order to give an accurate account of that establishment to the fociety, and to examine the nature of an undertaking, which may prove very ufeful to the community, as by that means all the beneficial remedies which nature has placed at great distances are united in one place, and procured in a lefs expenfive way than is otherwife the cafe. According to the report given by those gentlemen, the preparation of these mineral waters is executed upon a large scale with the greatest exactness, and the machines invented by Citizen Paul, for the purpole of combining. the gaffes with the water, have the double perfection of being very fimple and perfectly calculated for the purpole. Particular attention has been employed for purifying the water that is to be mineralized by filtration, and to difengage it from all heterogenous particles. It paffes five cylinders of lead filled with fand, and placed in graduated heights, by which the water being reforbed, comes out again in the higheft degree of limpidnefs, which makes thefe waters more palatable than the natural ones. The chemical proceedings are extremely accurate. The gaffes which admit it, are purified by making them pais by degrees four veffels full of water before they come into the laft, which is hermetically thut, where the combination proceeds. The waters containing carbonic acid in their composition, are generally impregnated with a larger proportion of it than the waters that are produced by nature; but it must be confidered, that a great deal of it evaporates when the bottle is opened, and the water poured into the glafs to drink, and part of it is also discharged from the stomach. Citizen Paul, however, is able to charge his waters with any quantity of gas that may be thought proper, according to the prefcription of the phyfician. In order to make his mineral waters imitate the natural ones as nearly as poffible, Citizen Paul observes, most scrupulouly, the analyses of Bergman and others, who have adopted the accurate method of that great chemist. Those analyses which have not been thought to be made accurately enough, were repeated by that Bb NUMB. XXX.

that great operator, Citizen Vauquelin, for the fake of rendering the composition of these artificial mineral waters as natural as possible. The following table will inform the reader of the proportion of the conflituents in the different waters that are prepared. Each bottle of 20 ounces (6,13 hectogrammes), contains the following dolor

 Strong wattr of Seliz. Carbonic acid difengaged by effervescence, 5 times its volume. Magnefia 2 grains. Carbonat of foda 4 gr. Sweet wattr of Seliz. Carbonic acid difengaged by fire, 4 times its volume. The three falts in the fame proportion as in the former. Water of Spa. Carbonic acid, by effervescence, 5 times its volume. Water of Spa. Carbonic acid, by effervescence, 5 times its volume. Water of Spa. Carbonic acid, by effervescence, 5 times its volume. Muriat of foda 2 gr. Water of Sola 2 gr. Muriat of foda 1 gr. Garbonat of foda 2 gr. Muriat of foda 1 gr. Water of Sealizz. Carbonat of foda 2 gr. Muriat of foda 1 gr. Muriat of foda 2 gr. Muriat of foda 1 gr. Muriat of foda 2 gr. Muriat of forme 3 gr. Muriat of foda 1 gr. Muriat of foda 2 gr. Muriat of foda 1 gr. Muriat of foda 2 gr. Muriat of foda 1 gr. Muriat of foda 2 gr. Muriat of foda 1 gr. Muriat
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Carbonat of iron $\frac{1}{2}$ gr.

15. Strong

15. Strong Hydro-sulphur ated water Hydrogen gas, balf its volume. Hydrogen fulphurated gas $\frac{1}{4}$ its volume.

16. Oxygenated water. Oxygen gas, balf its volume.

Such is the composition of the different artificial mineral waters which are made here, and it has been found perfectly agreeing with the analysis that those gentlemen have undertaken. The ufe of those waters which are imitated from nature is fufficiently known, but it may not be improper to add fomething of the medical properties of those that are only produced by art, viz. of the alkaline gasous, bydrogenated waters, &c. The alkaline gasous water has been much recommended in the calculus and gravel of the bladder; and though it is not able to diffolve the calculus, as has been by fome afferted, yet it greatly diminifies the pains that attend those complaints. Three or four glasses of it, with a little milk, ought to be drank every morning within the space of fix hours. It is likewife of use in other affections of the bladder. The hydrogenated water acts as an antispafmodic and foporific. The bydrosulphurated water has a great fimilarity with the fulphurated waters of hot wells by its hepatic smell and tafte. It is diaphoretic and refolvent, and may be employed in obstructions of the viscera, tumours, &c.

Profestor Odier, at Geneva, relates several cases that were cured by this water, and among others, of a woman. who had for two years a painful tumour or fcirrhus in the break, which the furgeons intended to extirpate, and at the fame time an enormous wen (goitre), for the laft of which the began to take the hydrofulpurated water; and having continued it for above two months, the was cured at the fame time of her wen and the tumour in the breaft .- The ftrong hydro-fulphurated waters employed in baths and lotions are extremely ferviceable in all pforic difeafes and inveterate ulcers. The art of preparing the oxygenated water is entirely owing to Citizen Paul, a discovery which is very important, and may prove useful both to arts and medicine. The oxygen gas is not very intimately combined with the water, but eafily difengaged from it; however, a fufficient quantity is retained in it to produce sensible effects upon the animal æconomy, particularly if proper care be taken to prevent its evaporation. It increases and forces the appetite, and it has been found of great benefit in fpains of the ftomach, humid afthma, dropfy, periodic and nervous affections, which even refifted the bark and the most efficacious antispafmodics, in lingering convalescences, and, in short, in all cafes where it is required to increase the tone of the organs and to stimulate the circulation. It is given by glasses every two hours. Sometimes it produces dyfuries, on which account we should begin with finall quantities.

The fabrication of all these waters is established in a very large house, in which Citizen Paul has at the same time endeavoured to unite every convenience for those who defire to use the waters in B b 2 baths.

baths. In one wing of the building are feveral bathing rooms for men, and in another opposite to it, those for women, most of which are provided with a bed. Every fort of bath may be had here, fimple or mineral, warm or cold, &c. In the upper flory are feveral commodious apartments, to lodge any patient who might wifh, on account of health, to live near the baths. They are furnished with every necessary, and their refidence rendered as comfortable as possible. A meadow near the house is intended to feed cows, goats, and affes, for the use of those patients to whom milk might be neceffary. There belongs befides to the house, a garden communicating with the delightful garden of Tivoli, which affords to those who use the waters, a most pleasant walk.

Every kind of gas is likewife made by the fame company.

VAUQUELIN on the Gadolinit. It is about feven years ago fince Mr. GADOLIN discovered a new earth, in a fossil found near Ytterby in Saveden, which he therefore called Ittria. It was afterwards submitted to a new analysis by Mr. EKEBERG; according to whole experiments, this new earth is contained in the foffil, in proportion of 0,47 to 100. The foffil itfelf is of a black colour, and its powder a blackish grey; at the place where it is broke, it appears vitreous; its specific weight is, after Cit. HAUY, 4,049. Cit. VAUQUELIN has also analyfed this foffil, which he calls GADOLINITS, with acids and potash, and the proportion of its conflituents are the following :

- States and I.	Siliceous earth -	- 25.	5	
2.	Oxyd of iron -	- 25	2	
repair and an 3.	Oxyd of manganese	- 2		
1 . 4.	Lime	- 2	A. Caller	
	New earth or Yttria	- 35		
the to make it is in				and the second
- a 2 - 1 - 2	Lopia - Korne Sala M	89.	5	
new rear an Locate	I want to see a	ols, 10.		1
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The following are the properties of this new earth. 1. It is quite white, though it is with difficulty obtained in this flate, on account of the oxyd of manganese that adheres so closely to it. 2. It has neither tafte nor fmell. 3. It is not fufible by itfelf; borax, however, diffolves it, forming with it a white transparent glass, if too great a quantity be not added. 4. It is not perceptibly foluble in fixed cauftic alkalis, on which account it differs from argil and the glucine. 5. It is foluble in the carbonat of ammonia, but about 5 or 6 times greater quantity of it is required to diffolve the Yttria than the glucine. 6. It rapidly combines itfelf with fulphuric acid; and while this combination proceeds, the falt that is hereby formed, crystallizes in small granula, which are but little foluble in water. It has at first an astringent and afterwards a sweet tafte, and though it agrees in respect to this property with the glucine,

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glucine, it fufficiently differs in other characters. 7. Its combi-. nation with nitric acid crystallizes with difficulty, and its affinity to water fo great, that it is hardly poffible to dry it. Sulphuric acid forms, when poured to a folution of nitrat of Yttria, a precipitate, which is fulphat of Yttria. 8. Its combination with muriatic acid has nearly the fame properties as the nitrat of Yttria. 9. Ammonia precipitates the Yttria from the above three combinations, and likewife the lime and barytes. 10. Oxalic acid, and confequently the oxalate of ammonia, produce precipitates in appearance extremely like that of the muriatic of filver, whereas the glucine forms, with oxalic acid, a very foluble falt. 11. The pruffiat of potash crystallized and again diffolved in water, occasions in the folutions of this earth by acids, a white granulated fediment, which it does not produce in the folutions of glucine. 12. Phosphoric acid does not precipitate it from other acids, but the phosphate of foda separates it in form of white gelatinous floccula. 13. It seems to have a greater affinity with fome acids than the glucine. 14. An infusion of galls precipitates it from its folutions in form. of brown floccula.

Dr. Handel, of Menz, recommends the following remedy, as a very powerful fedative in tooth-ach, occafioned by corrupted or hollow teeth; upon the application of which, the excruciating pains almost instantly cease, R. Olei byosciam, dr. j. Opii thehaid drach. dimid. extract. belladon. camphoræ ana gran. vj. Olei cajeput, tincturæ cantharidum ana guit. vij. Redigantur in formam opiat.

On the Analysis of the Honey-stone by Cit. Vauquelin.—Our readers have been informed, through the medium of this Journal, of the different analyses that have been made of the honey-ftone, (Germ. Honigstein; Mellilithas) by Abich, Lampadius, and Klaproth, the laft of whom has difcovered, that it contained an acid of its own, named by him Mellilithic acid. This interefting mineral has been fince fubmitted to a new analysis by that great chemist, Citizen Vauquelin, whose particular skill in the chemical analysis is sufficiently known.

Two grammes * of this ftone being reduced to powder, were mixed with four parts of faturated carbonat of potafh, diffolved in a fufficient quantity of water, by which an efferve/cence was occalioned without the application of any external heat; but, in order to render the composition more perfect, the mixture was flightly heated in a fand bath. The liquor being filtrated, when cold, was of a brownish colour, and left on the paper a brown fubflance, which, after being dryed by the fun, weighed about 0,8 grammes. This calcined in a crucible, became white, weighing only about 0,33 grammes.

* A gramme is about 20 gr. or a fcruple, (gros in French.)

grammes. Being mixed with diluted fulphuric acid, a flight effervescence was produced, and the mixture was afterwards evaporated to drynefs. It was then put into water, in which however, only a fmall quantity diffolved, the reft remaining untouched as a white powder. The liquor was evaporated fo far, that only 3 or 4 gram-mes remained, to which one drop of fulphat of potafh being added, 0,1 gramme of argil, with a little fulphat of lime, was obtained after the evaporation. Citizen Vauquelin now proceeded to enquire into the nature of that white substance which did not diffolve in water. For this purpole it was boiled with a folution of carbonat of potash, filtered, washed, and examined in the following way :- 1. Muriatic acid, diluted with two parts of water, diffolved it with a flight effervescence, but the folution remained milky. 2. This liquor being filtered, gave with ammonia, a precipitate which much refembled that which argil affords in the fame way; but though it did not quite diffolve, yet the part foluble in potash was the greatest, having all the characteristics of aluminous earth, or argil. The liquor from which the ammonia had precipitated the argil, gave flight precipitates with the carbonat of potafh and the oxalate of ammonia, which proved its containing fome lime. The infoluble part of that fubftance weighed about 0,1 grammes, and feemed to be filiceous earth. Having in this manner become acquainted with the nature of the first refiduum, the liquor was examined, which ought to contain the acid of the honey-flone united with the potash. In hopes that it might yield its bafis to mineral acids, a few drops of nitric acid were added to the liquor, which producing a very flight effervescence, disengaged a small quantity of a brown flaky substance. Some hours after, the acid of the honeystone crystallized in form of fmall fhort prifms with brilliant facets. On finding that in this way the acid may be separated from the potash, the liq or was heated, and more nitric acid mixed with it, till it was perceived by its tafte to predominate. Being now filtered, about 1.34 grammes of the new acid were obtained by the two crystallizations; the properties it showed, were the following : 1. It is of a confiderable hardness, has a flight acid tafte, attended with a little bitternefs, which may be owing to the adherent bituminous particles .- 2. A portion of this acid exposed to the flame of the blow-pipe, puffed up after a previous flight detonation, leaving a fubftance that eafily penetrated the coal. - 3. Heated in a crucible of platinæ, it puffs up at first, but is afterwards reduced to a coal, without producing any oily fumes, and this coal is light, and in a great measure alkaline. This acid remains therefore united with a certain quantity of potalh, notwithstanding the superabundance of nitric acid that was added to its folution, a circumstance that also takes place in the tartarous. and oxalic acid, which come by that means into the flate of acidslated falts. 4. It is but little foluble. 5. Some grammes of it diffolved in water, were mixed with a folution of lime, by which instantly a white flaky precipitate was produced, that fell to the bottom; with a folution of fulphat of lime, a flight granulated crystallized precipitate was occasioned, which was increased, and became

became flaky by the addition of a drop of ammonia; with the folution of muriate of barytes, a number of needle-like cryftals were precipitated; with a folution of filver a white fining precipitate was caused, that fell down in the shape of a fine powder ; with a folution of lead in nitric acid, a heavy white powder was precipitated; with a folution of mercury, it gave a white precipitate, that was blackened by a drop of ammonia added to it .-The refult of these experiments is, that the acid of the honey flone has many properties analogous to those of the acid of forrel, and feems to differ only by the following diagnoffics. I. The precipitate which it occasions in the folution of fulphat of lime appears not fo foon, and is crystalline instead of being powdery, like that which is formed by the acidulated oxalat of potash. 2. It appears to be lefs acid to the tafte than the acidulated oxalat of potash, which, however, depends probably on the nitric acid being not fufficiently add d to its combination with potalh, in order to deprive it of a fufficient quantity of that alkali. 3. It puffs up a little sooner than the acidulated oxalat of potash .- The octaedrous form of the honey-ftone, feems likewife to have a fort of analogy with the oxalic acid. Citizen Vauquelin, however, had too fmall a quantity of the above acid to dispose of, to be able to fhow by farther experiments the identity of it with the oxalic acid, which he is much inclined to adopt; but if this be confirmed, we should have the oxalic acid in all three regna nature, viz. as acidulated oxalate of potath in feveral kinds of vegetables, in that of oxalate of lime in the calculus veficæ urinariæ, and at last in the fate of oxalat of argil in the honey-flone.

Dr. BOBBA, of Italy, has prefented to the Medical Society at Paris, fome ingenious remarks on the caufe of rickets. It is known that the bones owe their folidity to the phofphat of lime, and that confequently the caufe of rickets has been afcribed to a want of that fubstance. However plaufible this theory may be, there are cafes recorded by MORGAGNI, PORTAL and PINEL, where a mollification of the bones was observed to be complicated with the gout. Such a complication feems at first fight to be imposfible, as one difease originates in a want, and the other in a superabundance of the phosphat of lime. This contradiction, however, is but apparent; for, when the bones begin to mollify, we are not always entitled to conclude, that the phosphat of lime is entirely wanting in the fuftem, but it is fometimes probable, that on account of an inactivity in the veffels which carry this fubflance to the bones, it is directed to other parts, producing arthritic concretions, preternatural offications, &c. Frequently it is deposited in the urinary fystem, partly from being abfolutely superabundant. partly because any morbific cause prevents its being carried to the bones; and it is remarkable, that in almost all the diseases of the bones the urine deposits a calcareous fediment. There are befides, fome rare cafes, where this calcareous matter has deviated to the genitals and urethra, and gives rife most probably to that species of

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of blenorrhagy, called by SWEDIAUR arthritic. By a derivation; therefore, of the phofphat of lime from the bones to the joints, fymptoms of gout are produced, at the fame time a mollification of the bones, which complication is named arthritis rachitica. Dr. BOBBA terminates his paper with obferving, that a bad quality of the milk with which children are nourifhed, is likely to be a frequent remote caufe of the rickets, and that a tonic treatment of this difeafe would probably answer better than the alkaline treatment, which has been recommended by fome practitioners.

Professor Abildgaard, at Copenhagen, relates in a letter to Gitizen Huzard, the refults of his experiments for the purpose of alcertaining the quantity of carbon that is contained in the blood ; according to which, he has found it to exift in a greater proportion in the arterial than in the veinous blood. 1. 100 parts of the veinous blood of a horfe have afforded, when dryed at a moderate heat, 26 parts of a dry fubftance that could be pulverized, -2. 100 parts of arterial blood of the fame horfe gave 25 parts of a dry fubftance .- 3. For alkalizing after Kirwan's method, one ounce of nitre by detonation, 192 grains of veinous blood were required, and only 160 gr. of arterial blood. 4. One ounce of veinous blood gave after being dryed and decomposed in a close veffel, 115 1 gr. of coal .-- 5. The fame quantity of arterial blood gave only 87 1/2 gr. of coal .- 6. For decomposing 480 gr. of nitre, 145 gr. of coal of the veinous blood were required, whereas for this purpole only, 119 gr. of coal of arterial blood were employed. This experiment, however, is not very exact, as a part of the coal being extremely light, flies away like duft. The coal of arterial blood is lighter than that of veinous .- 7. The red part of the blood, fepaparated from the ferum and the fibrous part, as exactly as this is poffible in the common way, was, after having become dry, tried with nitre, and 130 grains of this red part were requifite for alkalizing the nitre .- 8. Of the fibrous part, well feparated from the ferum, 202 gr. have been required for alkalizing the nitre by detonation. This part of the blogd, however, detonates with greater vivacity than the reft.

Dr. GARNETT intends to deliver Lectures on the Theory and Practice of Medicine, and on the Animal Economy; he also propofes to deliver Lectures on Chemistry, and those Branches of Natural Philosophy particularly connected with Medicine. These different Courses will commence in October next, at his House, No. 51, Great Marlborough Street,

To CORRESPONDENTS.

Those Lecturers who wish their Autumnal Courses to be announced in the pext number, are desired to send their Notice by the 15th of August.