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To Dr. ADAMS.

DEAR SIR,

IN compliance with your wishes, I have used all diligence in collecting facts concerning the horses that died, or were killed, after being bitten by a supposed rabid dog. You will, perhaps, think me tediously minute in some parts; but as all that is related has been collected with the most scrupulous exactness, it appeared that your record would be more valuable in proportion as every part should be supported by collateral evidence.

I am, &c.

J. SURR.

Clerkenwell, 13 *Dec.* 1809.

THE horses ascertained to have been bitten were five; whether the number was greater, is not certain, rumour speaking of one or more in the Borough. Those under consideration were all attacked between Shoreditch church and the bank of England. The dog which bit the whole was a sheep dog, of the long haired breed; as all were bitten in the nose or lips, the habits of the dog may perhaps account for the uniformity of his attack.

The first notice which the writer could obtain of him, was his biting a dog belonging to Mr. Harper, butcher, near Shoreditch church, on Saturday, October 21, about seven in the morning. From the dog he flew on a horse belonging to Mess. Risdon and Townsend, Curtain Road, standing within a few yards, in the shafts of a cart. He displayed much pertinacity in his design, making a third leap after two unsuccessful ones, by which he caught hold of the nose, and remained suspended nearly a minute. After detaching himself, he ran up one of the roads, seized and shook a bitch by the side of a cart. In a little while he returned by Old Street Road, thence to Shore-

ditch, and proceeded into Bishopsgate Street, where he seized a horse belonging to Mr. Ashenden, Cumberland Street, Curtain Road. By the Vine Inn he bit a horse belonging to Mr. Gray, the Royston carrier. In Wormwood Street he bit one belonging to Mr. Teanby, Old Street; displaying the same pertinacity in retaining his hold, the horse being compelled to strike him off with his fore feet. Lastly, he ran into Threadneedle Street, seized by the upper lip a mare in a cart belonging to Mr. Crow, butcher, and standing across the street. His furious manner excited the attention of the shopmen, who sallied out after him, towards the Bank, opposite which, by the aid of one of the labourers at the Auction Mart, he was killed. He was taken to Mr. Crow's yard, and remained there some time after the death of his mare; but before the writer could call for information, had been removed; a circumstance to be regretted, as the comparison of any morbid appearances with those in the horses, might havepointed to a similarity or dissimilarity as to the nature and seat of the disease. Mr. Harper caused his dog to be drowned as speedily as possible; but of the bitch no account has been obtained. It has not been ascertained that he attacked any human subject.

Let us now attend to all the circumstances in the order they occurred; first, with respect to Messrs. Risdon and Townsend's horse.

Mr. Harper the butcher being a spectator, and persuaded as to the madness of the dog, immediately sent the horse home; so that in about three quarters of an hour the bitten parts were freely cut out by Mr. Jones, veterinary surgeon in the Curtain Road; the wound healed without trouble, and to appearance soundly; a well closed seam only remaining, and comparatively without any cicatrizing hardness.

The horse was a black gelding about seven years old; of a disposition so gentle and docile, that he would follow the ordinary stable attendants, when bid to do so.

His owner, Mr. Townsend, aware of the circumstances, had kept his eye over him, and found that after a fortnight he fell off from his food, though he continued to eat more or less. He continued his work also till the evening of Saturday the twenty-first day after being bitten, but fell down suddenly whilst shooting the last load. This caused him to be attended to with care, and placed in a stall slightly separated from the other horses, but in the same stable.

On

On Sunday morning, Mr. Townsend found him very ill; offered him some water, which he seemed desirous of drinking; filled his mouth several times with it, but suffered it to escape; was chiefly intent on rubbing his nose against the pail and manger, displaying signs of uneasiness and impatience, such as pawing, restlessness, &c. He was from this day to the last, drenched in a profuse perspiration.

On Monday morning, about four o'clock, he was found on his back in the stall, much agitated, and pushing his legs to and fro with spasmodic vehemence. From this time till about two on Tuesday afternoon, there was no variation in symptoms, except that all progressively increased in violence.

On Tuesday, the twenty-fourth day from the bite, about twelve o'clock, he was seen by the writer. The symptoms, by account of the horse-keeper and others, were intense restlessness and agitation; that he had been secured in the stall by two halters, but during the forenoon had thrown himself backward, so as to induce the horse-keeper to liberate him lest he should strangle himself. Thus set at liberty, and having the range of a large stable to himself, he was perpetually desirous of changing his place or posture, and even galloped its whole length; he had, however, so far the command of himself, as to be kept in one end of the stable, by the sight of the cart-whip, except when exacerbations of the symptoms caused him to break all bounds. Such was the account given about Tuesday noon as above-mentioned; it was then not deemed prudent to go near him, the keeper having reported a disposition to run at those who placed themselves before him, or in his way; of this, however, I saw no appearance.—The stable was tolerably light.

The general restlessness and irritability were intense, causing him perpetually to change his situation, lying down, rising on his feet, rolling on his back from side to side; careless of his positions and actions in such a manner, as to cause an idea, that he must mean to hurt himself, and this in every change of posture. The perspiration had never ceased from Sunday preceding.

When on his feet, he was perpetually attempting to rub the hind part of the thighs against the manger, a symptom attending him from the beginning. When on the ground, his rollings appeared to have reference to the loins, his back being bent so as to throw his weight thereon; after each turn, the penis, though a castrated horse, was pro-

pelled out of the sheath, at least four or five inches, and ejected a few ounces, perhaps half a pint, of urine with all the vehemence of a squirt; this action, evidently a painful one, and causing great tension for the moment, was observable from the beginning.

Whether on his feet or reclined, he rubbed his nose incessantly against the manger, or amongst the litter, and in the latter case seemed desirous of retaining his nose immersed in it: this was a prominent symptom. After rubbing a while, jerking his head forward with great violence. It was said he had been observed to bite at the manger, but I was at that time out of the stable.

The eyes had a dull glazed appearance, and seemed so devoid of lustre, as to give an idea of his being blind, but that was not the case: he readily understood the motions of the whip.

He laboured under great difficulty of breathing, and frequent cough, both of which appeared to have occasional exacerbations. At these times, his actions broke all control, and became violently extravagant.

A frothy or semi-mucous saliva was observed about the mouth, from which it occasionally dropped without coughing: the cough commonly forced some away.—The breathing resembled the whizzing, without the sonorousness, of croup; the cough was facilitated in its passage by a particular attitude of the body and bend of the neck, so as to give an appearance as if he were desirous it should pass along the windpipe, without scouring it. All these symptoms increased greatly during the above-mentioned exacerbations.

When disposed to lie down, he threw himself at least half the way, as if from impatience, but apparently with difficulty from rigidity of the limbs, or from some internal sensation, or both.

During every exacerbation, the limbs were spasmodically affected; the stricture of the throat was more apparent, the breathing loud, or resembling that of a horse pinched on the windpipe to ascertain the soundness of his lungs. A pail of water being put before him in this state, he presently approached it, put his nose into it, and filled his mouth, without, however, swallowing any; then put his foot into it, and threw it over. There was irritation enough in his appearance to lead one to expect intense thirst. The symptom then, which has been held as of almost exclusive importance in Hydrophobia, was not prominent here, though it obtained in a degree from the beginning.

Though

Though disposed to actions so extravagant, they appeared rather to resemble such as might arise from intolerable suffering, than the result of madness guided by the will. But his threatening appearance to those who stood before him, and his subjection to the cart-whip, had less the appearance of delirium. His actions on the whole, however, might easily lead an ordinary bystander to give his disease the name of madness, i. e. of furious derangement.

The urgency of the symptoms, the increasing ungovernableness of his actions, the necessity of having the stable cleaned before evening, and the conjectured impossibility of recovery, induced his owner to have him shot, about two in the afternoon, on Tuesday, the twenty-fourth day after he was bitten.

The carcase was examined about twenty-four hours after death, in the presence of Dr. Adams, Mr. Taunton, two of Mr. Taunton's pupils, Mr. Jones, and Mr. Charles Newport, veterinary surgeons, and the writer. Though we had the opinions of the two last named gentlemen, the diseased parts were compared with similar ones taken from two or more other horses, one of which was killed, the other had died of some disease. The opinions of the horse-slaughterers were also attended to, where they could be of use.

The following were the appearances.

The abdomen had become distended with air; the skin still shewing marks of the profuse perspiration.

The blood had hardly coagulated, excepting in the heart, where a firm coagulum was found. It was remarkably black and thin, fluid even to the smaller vessels; and little having been drawn off when he was shot under great muscular exertion, every part exhibited marks of high injection. When exposed to the air it speedily reddened.

Inflammation was found in the mucous membranes of the stomach, windpipe, œsophagus or weasand, bladder, urethra, and back part of the mouth.

No inflammation was discovered in any serous membrane; all were exposed.

The brain healthy, veins on its surface injected; the dura mater of a natural appearance except slightly injected, without inflammation.

The membrane lining the upper part of the mouth, nearest the larynx, highly injected, though but slightly inflamed; and that inflammation seated in the finer capillary vessels prominent on its surface. This inflammation was

continued, in the same degree, down the œsophagus to its entrance into the stomach, and down the windpipe, to within about six or more inches of its ramifications into the lungs; the œsophagus the least inflamed.

The greater part of the inner surface of the stomach affected with inflammation in various stages of forwardness: from the simple injected, to gangrene—of various colour, from blush red to livid and black, and in one or two points exhibiting incipient sphacelation; in the worst case not affecting the subjacent or muscular coat; no coating of coagulable lymph; the outer surface, as well as that of all the intestines, shewing no marks of disease, except six or seven dark coloured spots in their whole length. The veins, on their surface, injected with blood; on the side of each vein a track of reddened blood, about one-tenth of an inch wide.

The wind-pipe, as before remarked, was but slightly affected with inflammation, but about six inches from its ramifications into the lungs, it became extreme, the appearance being livid and blackish, but no raised or incipient sphacelating points, no coat of coagulating lymph. Two patches of mucus, similar to that which dropped from his mouth, or was coughed up, whilst living, found on its surface.

The kidneys were highly injected, but not inflamed, except that what usually resembles a pale coloured mucus was changed to a straw colour.

The mucous membrane of the bladder inflamed, rather than injected; the natural mucus increased in quantity; its outer surface not affected. The membrane lining the urethra, several inches from the bladder, in a high state of inflammation, but short of gangrene, rather high coloured than livid, not extending to the subjacent muscular coat.

The lungs natural, but high coloured.

The heart sound, injected, but flabby. The blood disposed to coagulate in the cavities; in one, as before remarked, a firm coagulum, the only one found.

The mucous membrane of the nose was not sufficiently affected to excite notice.

The colon and intestinal canal were unaffected on their inner surfaces.

One of the parts on the upper lip, which had been bitten, cut out, and had healed, as before stated, was now cut through in two directions; it exhibited no thickening to the eye, no hardness to the touch, and had the completest

completest appearance of having healed by the first intention. During the disease, and to the last moment of his life, he had rubbed it against one thing or other with persevering eagerness, particularly during the exacerbations. This symptom had induced his owner, Mr. Townsend, to examine on Saturday evening the inside of his mouth, to discover whether there were any sore or hardness. He found none.

No inflammation of substance, or of the phlegmonous kind, was discovered; every diseased appearance was found in mucous membranes; and of those, except in the intestinal canal and nose, none of the larger ones had escaped; in no case, however, had the inflammation reached or attacked the subjacent coat.

The inflammation was most violent in the stomach, next in the wind-pipe, next in the urethra, next in the bladder. The strictured breathing might be imitated by compressing the throat externally by the hand; the violent inflammation, however, was many inches from the upper end of the neck.

During this examination, we were informed of a horse belonging to Mr. Teanby, builder, Old Street, supposed to be rabid from having been bitten by a dog. On inquiry, it was ascertained that he was bitten in Wormwood Street, probably by the same dog. He had completed twenty-two days, and part of twenty-three, since that time, before he had been much noticed; but the last mentioned day his work was suspended. It was now recollected that his appetite had failed since the twenty-first day. He was seen by the gentlemen above-mentioned about three in the afternoon of the twenty-fifth day.

On viewing him, little was found in his external appearance to notice, except a slight apparent uneasiness; a considerable degree of watchfulness as to surrounding objects, and apparently a disposition to stale frequently; whilst under examination, he voided to the amount of half a pint of urine at one time.

His usual temper was reported to be suspicious and churlish, so that the two former symptoms might be less unnatural to him than would be the case in a gentle horse. He bore the approach of his keeper quietly; suffered water to be splashed into his face without any apparent sensation beyond an ordinary start, and heard it poured from pail to pail without emotion; made attempts to drink without swallowing, or seeming to dread the water, and made many fu-

tile attempts to eat his hay; his desisting from eating, appeared rather the result of indifference, than of disgust.

The symptoms, compared with those of Mr. Townsend's horse, were so mild, that the writer was in no haste to see him in the early part of the following day. On calling about three in the afternoon he learnt, that in the morning he had become furious and ungovernable, biting the halter and the manger with vehemence, so that his owner had caused him to be shot for fear of farther mischief. He was already sent out of town to be buried, so that there was no opportunity of inspecting the carcase.

It has been already mentioned, that a horse belonging to Mr. Ashenden, was bit on the stand by Bishopsgate church. In about three-quarters of an hour, the bitten part was cut out by Mr. Waugh, farrier, Green Dragon Yard, Hog-lane, Curtain Road, from whom the following account was obtained: The bite was in the inside of the upper lip; it healed sound, without hardness or callus. The horse was low in condition, but whether of a gentle disposition is not ascertained; the symptoms were all mild; he was disposed to lie much; was rather stupid and quiet, and never snatched at any thing. He began to be ill on Tuesday, the 24th day from being bitten; he was then sent from work, weakly, and was recollected to have been off his appetite from Sunday the 22d day. From Wednesday the 24th, his desire to rub his lip was incessant; from the same time or earlier, showed a wish to drink, but never swallowed; breathed moderately; his flanks pinched to his back bone; no frothing at the mouth; no cough; drenched in perspiration from the beginning. He was killed on Saturday morning the 28th day, by repeated strokes on the head with a hammer.

Through the kindness of Mr. Jones, the writer proceeded to see him opened; but from some mistake, the parts were disposed of before he arrived. The wind-pipe and head alone were found, the former of a perfectly natural appearance throughout. The head exhibited marks of injury on the under jaws, as if he had bruised himself, but it is not ascertained that he had done so; the extravasated blood disposed to coagulate, and of a florid red.

The mare belonging to Mr. Crow was sent to the same farrier, Mr. Waugh, on account of an accidental lameness; she was with him when the symptoms first made their appearance. From him, up to Thursday evening, the twenty-sixth day from being bitten, the following account of the

the symptoms was received. From that time to Saturday morning, the twenty-eighth, from Mr. Crow.

On finding her bitten, Mr. Crow instantly washed the place, one of the nostrils; it bled freely. The mare was, within an hour, dispatched to Mr. Waugh, who finding only a scratch, forthwith applied vitriolic acid as a caustic. On the morning of the twenty-sixth day he observed her unwell, but not greatly so. By request of her owner he gave her the Ormskirk medicine, which she had not had three hours before she began to paw and be uneasy.—She now began to breathe high; had no frothing at the mouth; staled freely previous to that day; afterwards, nothing farther could be learned in that respect; pinched in the flanks; perspired freely; and these symptoms continued to the last.

The eyes glassy, fiery, and red; the vessels considerably injected; began to bite at any thing in her way.

Though she had manifested a disposition so furious, yet she suffered herself to be led quietly to her master's stable on Thursday evening. The ensuing morning she became entirely ungovernable, and continued so as long as she was seen alive; indeed, in such a degree as to prevent all practibility of approach for accurate examination.

She was seen on Friday by Mr. Newington, surgeon, near Spital Square, through a fan-light over the door, and through which he introduced his hand, when she made a spring towards it, but failed, as she commonly did in such attempts, from apparent weakness of the back; shot forth her tongue and champed her teeth incessantly. She sprang forward with fury as often as any one came in sight; but being now, by the efforts of Mr. Crow's assistants, confined in a corner, they were able to offer her water as late as Friday morning and afternoon; she drank a gallon each time. In the afternoon, after drinking, she pawed over the rest with her foot. Eat nearly a peck of oats on Thursday night, and also some hay; a quantity of both were found in the stomach.

It should have been mentioned, that besides being confined in a corner by a gate, she had also a beast rope put round her neck, but without a slip noose. She was known to be alive on Saturday, the twenty-eighth morning, at half past six or seven o'clock: but she made so much noise, that those present were deterred from entering the stable till it was light. At eight she was found dead; but it could not be ascertained whether she might or might not have strangled herself. A slight extension of the inflammation from the internal to the external surface, as hereafter mentioned,

tioned, of the trachea, might arise from this rope: but that can only be a conjecture.

The carease was taken to an intelligent slaughterman in Whitechapel the same evening, where, for the alleged reason of preventing or retarding putrefaction, an incision had been made into the abdomen, and its contents drawn through it, were exposed to the air. The weather was frosty, which had apparently produced some effect on the viscera.

The examination was conducted under the inspection of Dr. Adams, Mr. Pettigrew, two other medical gentlemen, and the writer. The stomach was first subjected to inspection, and in it the most obvious appearance was, its inner surface adhering, from the frost or some other cause, to the masticated food, of which a large quantity was found. On turning this out, it stripped off about one half of its inner coat, leaving on the remainder, bounded by a jagged line of demarcation. The stripped surface looked red, but whether the muscular coat was exposed was not ascertained. The anatomy of the horse is not sufficiently known to the writer to enable him to say whether there be a cause for such a jagged line, and partial stripping of its coat, in the natural texture of the stomach; but he recollects an appearance precisely similar in the stomach of a horse which had died suddenly in pasture during the latter end of the year, and which was supposed to have died in consequence thereof; though the examination was not sufficiently accurate or minute to decide whether any other cause were discoverable.

The small intestines were affected in one place, but in no extensive degree, with inflammation of substance, including the peritonæal coat; this was the only inflammation of a serous membrane found, except such portions of the pleura as covered the inflamed bronchial tubes.

No other serous membranes, (and all were exposed to view) exhibited any preternatural appearance. The bladder was inflamed on its inner coat, as near as the writer could judge, in precisely the same way and degree as in Mr. Townsend's horse. The mucous membranes of the urethra inflamed through its length. In the bladder was found a small quantity of a jelly-like fluid. The uterus natural, perhaps flabby in its texture; the vagina natural; the brain healthy, as to its membranes and substance.

The chief seat of the disease was found to be the mucous membrane of the nose, trachea, and bronchia. The inflammation extended from the nasal surface of the cribriforme bone, completely enveloping the septum and turbinate

binate bones, along the trachea, into every considerable bronchial ramification. The general colour of the inflammation on the interior surfaces or mucous membranes, was green, rather than livid, but partaking of both; and even such portions of the lungs and pleura as had taken it on, along with the subjacent and included bronchial tubes, were of the same colour; the lungs which had not been seized, were of a remarkably healthy appearance. The green livid inflammation of the substance of the lungs, had probably become injected in degree with coagulable lymph, being elastic, and rather firm on pressure; whereas, the healthy lungs were soft, yielding, and spongy as usual.

The injected vessels on the septum narium exhibited an interesting appearance, their larger ramifications being visible and numerous.

In one place, about midway down the trachea, the inflammation had attacked its cartilaginous and external surface; it did not appear to creep through the substance of the cartilage, but to have found its way by the connecting cellular membrane. Whether this might be caused by the halter, is not known; it might run from without, inwards.

The œsophagus was uninflamed, its lining of a pale and dingy colour, which we were informed was natural; the kidneys high coloured. The ureters not examined in this or the other horse.

No one being present to give information as to the situation of the bite, no particular notice was taken of the bitten part, it not being obvious on slight examination of the nose, where it was afterwards known to be. Mr. Jones, however, who saw the parts afterwards, says, the bitten part was thickened. It should have been mentioned, that in Mr. Ashenden's horse, the bitten part was thickened; his disposition to rub his nose incessant.

The last subject to be noticed was the horse belonging to Mr. Gray, the Royston carrier. Respecting him, only the following particulars could be ascertained. On his return homeward, the day on which he was bitten, he took the Puckeridge medicine, being met on the road with it at Hoddesdon.

He made his regular journeys to town, till Saturday, the 28th day, when he was found to be unwell. He, however, proceeded on his way to Hoddesdon, where it was judged prudent to leave him. He was said (for none of those of whom inquiries were made saw him) to be languid, dull, and affected with stupor and pinching-in of the flanks. He drank nearly a pail of water about three or four hours before

before he died, and was said not to have staled during the complaint. He was suffered to die, which happened on Monday, the thirtieth from the bite, about eleven in the forenoon.

The only striking similarity in these cases, it would seem, is the seat of the disease, viz. the mucous membranes. The individual membranes affected, were not in both the same. In the horse, that of the stomach had suffered inflammation even to gangrene; in the mare no such appearance was found. The former neither eat nor drank, the latter did both; the œsophagus of the former slightly inflamed, of the latter not at all.

The appearances in the mucous membranes of the bladder of both were precisely similar. The necessary difference of structure in their respective urethras, prevented fair comparison; but as an opinion, the inflammation was the most considerable in that of the horse. He was known to suffer violent irritation in micturition; of the mare, no good account could be obtained in that respect.

In the mare, the whole of the mucous membrane from the cribriforme bone to the ends of the larger bronchial ramifications was highly inflamed; in the horse only five or six inches at the bronchial end, and that scarcely entering the ramifications.

The trachea shewn as that of Mr. Ashenden's horse, was perfectly sound its whole length; he was quiet during his complaint; Mr. Townsend's horse was nearly ungovernable, but the mare was furious. Will the comparative violence of the inflammation in their respective tracheas account for the difference?

No serous membrane was affected with inflammation, except where it had passed through; it did not appear, as to itself, to be a seat of the disease.

The incessant rubbing of the bitten parts would appear to demonstrate some connection of the uneasiness there, with the other symptoms; perspiration was so profuse in two of the horses and the mare, as to render it impossible to be overlooked. The brains of both healthy; the liver and spleen of both sound.

It may not be amiss to add a few other remarks to some of the writers of the present day. The coincidence of circumstances is sufficient to prove that the horses were all bitten by the same dog; and the variety of symptoms, as well as of the seat of the disease, in an animal that could not be governed by the imagination, may teach us to account for some varieties which have appeared in the human

man subject; they at least place the question of the existence of such a disease beyond the sphere of fair scepticism. Inflammation of the mucous membranes is all that has been discovered. This affords but a glimmering towards accounting for the high nervous irritation which always precedes, and seems connected with, the cause of death.

Lastly, the number of subjects, the large scale of the various organs, the opportunity of comparing those which were diseased with similar parts in other animals of the same species, the medium period at which the symptoms appeared in each, and the attention with which every examination was conducted, will, it is hoped, justify the Writer in expressing a wish, that in every future examination, the membranes, mentioned in the account, will not be overlooked, whatever may have been the symptoms during life.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

AMONGST the vast variety of obstetrical cases that fall to the lot of some Practitioners, it is a happy circumstance, that but comparatively few are of the *dangerous* kind; and, whenever these occur, it scarcely need be observed, that every effort with which an accurate knowledge of the science furnishes the Practitioner, should be early and invariably adopted, in order to rescue the patient from the impending danger.

Of all the dangerous labors, none, perhaps, requires a more prompt and decisive treatment, than those which are preceded by alarming hæmorrhages; occasioned either by a partial separation of the placenta from the uterus, or by its attachment over the os uteri.

In other cases of difficulty (if not danger), such as arise from unfavorable presentations of the fœtus, or mal-conformation of the pelvis, &c. the Practitioner has leisure to deliberate on the best mode of relieving his patient, without risking any consequences; but, in the *former*, it is generally found that "delays are dangerous;" and the sooner, without perturbation or confusion, an attempt is made to deliver, the greater probability there will be of saving our patient.

It

It has been thought by some, after knowing the nature of the presentation, that if the os uteri was not at all, or but little dilated, the hæmorrhage not considerable, and the pulse good, that by waiting a longer period, the dilatation would gradually increase; and the hand, consequently, be introduced with more facility into the uterus. This has been known to be attended with serious consequences; for it ought to be recollected, that *should* the os uteri be disposed to dilate, with each dilatation a certain quantity of the vital fluid is lost, and thereby the patient so much the more endangered.

It will be readily granted, that an early attempt to dilate, in *some* cases, will be attended with manifest discouragement. The unyielding disposition of the os uteri, after the most patient perseverance on the part of the Practitioner, promises but little success. But what is to be done? The case is urgent, and without delivery, fatal. If but the smallest ground is gained in the attempt by gradually persevering, the delivery, in due time, will be accomplished; and, if undertaken in due time, the patient, for the most part, rescued from danger.

In some few cases it has been said, that the os uteri has been incapable of *any* dilatation whatever; and, that after a proper attempt having been made, it were useless to proceed, as in such a state it *never would* yield.

A deplorable case this, especially when it happens to be of the forementioned description! But, as nothing of this kind ever occurred in *my* practice (and I hope never will), I mention it as the sentiment of a celebrated Teacher in Midwifery, that others may judge of it as they think proper *.

If these cautionary hints may prove useful to the *junior* Practitioners in Midwifery, and tend, in any measure, to the welfare of such patients as are committed to their care, the end of their insertion in your useful Journal will be fully answered.

I am, &c.

H. DAVIES.

Piccadilly, 1809.

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* The Editors know, from the best authority, that cases have occurred of placenta presentations, in which the *os uteri* did not become dilatable in time to save the life of the mother; and they think it the duty of every teacher of Midwifery, to apprise his pupils of the fact.

Obser-

Observations upon Tetanus; by Mr. J. Howship, *Surgeon.*
In Continuation.

It has been already observed, that in certain points of character, the spasm of tetanus, and that of an epileptic attack, may be considered to bear some resemblance to each other. At the same time it has been pointed out, that in essential circumstances, apparent enough at the commencement, as well as upon the establishment of each of these diseases, they are very distinct in their nature. If this distinction is to be made out in the early progress of these diseases, it will be found to be still more evident and clear, in considering the modes of termination, which are peculiar to each of these complaints.

The epileptic disease, in its first attack, is most usually of very short duration; although, for the period of its continuance, the senses are abolished, the convulsions are generally less intense, than in the subsequent attacks of this complaint.

The recovery from the fit takes place readily, and the mental powers are at once fully re-established; very little, if any, soreness in the muscular parts of the body and limbs is felt; and, during the period of the interval, the various powers, relating both to the corporeal and mental constitution, seem to remain completely unimpaired.

The disease, however, continues to exist, and the fits return after a greater or a less distant period of time has elapsed. A particularly severe fit shall be longer than usual in duration; the convulsive actions of the limbs more violent and unmanageable than common; and, after the cessation of this attack, the patient will be observed to recover his mental powers more slowly than he formerly did. He opens his eyes, and looks about him with a sort of wild curiosity; very expressive of the truth, that he does not recollect either where or who he is, nor in what circumstances he is placed: thus it will, sometimes, be many hours before the memory is perfectly recovered.

Towards the close of the disease, the visible influence produced by the complaint upon the intellect, becomes daily more and more severe. The memory is more frequently suspended, until finally it is abolished; the judgment becomes weakened, and at last this also sinks altogether.

Very rarely it happens that a most violent fit of convulsion is suddenly followed by the fatal event; much more fre-

frequently the severity of the attack produces extravasation from some of the small vessels, either within the substance of the brain, or upon some part of its membranes. In the latter case, the convulsion gradually subsides into a state of coma, an apoplectic sleep from which the patient does not recover.

From the above it is sufficiently manifest, that although at the commencement of epilepsy the mental powers may be very perfect and clear, yet, for some time preceding the unfortunate termination of this disease, they are in almost every instance totally abolished.

The progress of tetanus, although a disease equally fatal with epilepsy, is yet unattended with that abolition or confused state of intellect, which is uniformly produced by those disorders consequent to a compressed state of the brain.

In tetanus the spasms, from being at first slight, become afterward more severe; and the attacks more permanent, as well as more universal, than they were before. The disease seems to influence progressively the whole of the nervous system; and unless a something, that has been supposed to be a radical strength, exists in the constitution, the complaint eventually proves fatal; for it latterly reaches the organs of respiration and circulation, inducing a state of spasm in the ventricles of the heart. The intellectual powers, however, constantly remain clear throughout; and up to the very moment of the fatal event, reason is still perfect.

The respective lines of distinction that exist between one disease and another, are of the highest importance in practice. Not that there is much probability of epilepsy being mistaken for tetanus; but the important fact is this, that upon a just estimation of the true nature of the symptoms, the treatment and management must depend.

Even the best conclusions, those drawn from practice, are sometimes deceptive. A case of epilepsy has, in some rare instances, when the disease has reached its latter stage, taken on, in some measure, the form and appearances of tetanus, the body and limbs having been variously distorted with a rigid spasm; and these cases of very rare occurrence seem to have introduced an opinion, that the two diseases are, in fact, the same; and that the various forms of tetanus are only so many different species of a particular epileptic paroxysm, the same mode of treatment being necessary and proper in both complaints.

The dangerous and even destructive tendency of such a con-

conclusion as the above in practice, must be sufficiently clear. How many instances are upon record, of the epileptic fit having brought on one or other variety of paralysis, from which the patient has never recovered? Such an event has never been observed to take place in an attack of tetanus. It may perhaps be objected, that tetanus cannot exhibit the same phenomena with epilepsy, from the wide difference in the length of period assigned to each complaint; although the two diseases may be still very nearly the same. It is unquestionably true, that tetanus always runs a rapid course, when compared with epilepsy; but notwithstanding this, seeing that the symptoms denoting a turgid state of the vessels within the head, or a compressed state of the brain, are so numerous and so well known, can it be supposed that such state can ever subsist in the living body, without in some shape being discerned by an attentive Practitioner, more particularly while the patient has the power of expressing whatever he feels of pain or inconvenience?

In the treatment of the epileptic disease, where the brain has manifestly sustained an injury, either from the formation of disease, or from the effusion of some portion of the circulating fluids within the cavity of the skull, the only useful principle of action suggests the immediate removal of a part of the fluid contents of the head; this first intention being assisted by the adoption of such measures, as may still further be conducive to the same end, by the producing a state of excitement in the absorbents of the brain.

What would such a practice be in a case of tetanus? Would it not be both useless and hurtful? There is some reason to believe, that in the treatment of tetanus, the most flattering prospect of recovery might, in general, be afforded, by the early and free exhibition of opium, assisted by wine and bark. Would such a plan of treatment fail to destroy in any case, in which the brain had already suffered under the oppressive influence of the epileptic disease?

In a case of questionable character, where the epileptic paroxysm might be succeeded by the appearances and spasms peculiar to tetanus, it would certainly be proper to consider and weigh very carefully the prevailing circumstances of the disease; in order that an accurate estimate may be made, and the treatment conducted upon the best principles. In such a case, the plan of cure should be governed by the prevailing disposition of the malady;

which would certainly incline very manifestly either towards the epileptic character, or to that of tetanus.

Should the case have been originally an epilepsy, and the circumstances of the history such, as to leave no ground for presuming the existence of any organic derangement of structure about the brain, there would be, comparatively, little objection to the adoption of such a system of treatment, as might probably succeed in removing any complaint, approaching closely in its characters to the spasm of tetanus.

The cases that would, with probable safety, admit the adoption of a plan of cure that might succeed, where the spasm is considered to assume the aspect of tetanus, are mostly those in which the epileptic fit has usually given some description of warning of its approach; either by a sensation of giddiness, or peculiar affection of the head, or a creeping or numbness felt upon some part of the surface in the immediate neighbourhood of the head.

The most favorable case, however, for such treatment, would appear to be one, in which the fit has been preceded by that very curious sensation, the aura epileptica. A very singular affection, generally commencing in the extreme point of some one nerve, and slowly proceeding thence towards the head, generally depriving that particular nerve of its proper energy, and therefore producing a sense of numbness, or torpor, extending along its course, till the impression has reached the brain, when the fit immediately comes on; and after this the irritation is not again felt, until the next following attack of convulsion is about to take place.

There is something in the nature of such an impression as the above, that is, in particular instances, highly curious, and indeed very much involved in mystery. The epilepsy from it springing from the aura epileptica, fairly admits of being considered as a parallel case with tetanus, arising from a wound in an extremity, in which the occasional startings and uneasiness in the part wounded, forewarns the patient of what he is about to suffer. The consequent spasms by which the body is agonised in such a case, admits of probable explanation, upon the presumption that a remote irritation existing in a part of the body, the impression is conveyed to the sensorium, and the convulsions that follow, only prove the intimate dependence that subsists in every living body, between those structures that are themselves endowed with the power of motion,

motion, and those others, in which is resident the active principle, by the agency of which motion is produced.

In confirmation of the idea, that an epileptic aura always proceeds from some derangement in the organisation of the part in which it is perceived to arise, it has very generally been detected springing from a situation, in which either wound or bruise has been received: nay, the conviction that it must arise from some material alteration in structure, has been so strong, that it has even urged the Surgeon to plunge his knife through sound integuments, and the thick mass of muscle posterior to the tibia; where, directed by the uniform sensations of the patient, he has found a small hard cartilaginous body, that lay in contact with, and pressed upon, one of the nerves of the leg; the removal of which tumor, by the division of the nerve, was the efficient means of curing the complaint.

It frequently, however, appears, that a close attention to diseases, is apt to unsettle opinions that have very long been received. The aura epileptica, not unfrequently, is found to arise in a part where no visible complaint can be traced, or ever existed. No tenderness to the touch, no indurations, nor change of colour; but even then it might be a probable conjecture, that some derangement in the condition had taken place, although confined to the more secret and minute organization, and therefore, not capable of being detected by the senses. But if these cases are of doubtful explanation, what shall be said to one in which the aura existing in the extremity of a limb, has, without the agency of any visible cause, suddenly shifted its seat, springing the very next day, with equal effect, from a distant and distinct point from that in which it was first perceived?—So curious a phenomenon can, perhaps, only be referred to some cause existing primarily in the very source or centre of the nervous system, some peculiar condition of the brain.

The similarity that may be traced between a case of epilepsy arising from a remote irritation, and a case of tetanus produced by a wound, very naturally suggested the probability, that a certain mode of treatment, that experience had proved to be useful in the one case, might also be adopted with advantage in the other.

The experiment was made, and the result was so far fortunate as to render the case deserving of notice.

In the following case was also ascertained, how far a moderate degree of pressure is capable of restraining the progress of the morbid influence of a diseased impression,

when passing upwards from the extremity of a nerve towards the brain.

Case of Epilepsy, in which the Recurrence of the Paroxysm was prevented by the Use of Cold Affusion.

Samuel Montgomery, aged 23 years, private in the 9th Regiment of Light Dragoons, when about 19, was first attacked by the disease. He had taken very violent exercise, and was in a profuse perspiration when he sat down to rest himself. When cooled, he felt himself becoming heart-sick and heavy. He went, however, and got into bed, slept very well, and the next morning felt, for the first time, a very singular sensation in the right thumb, "starting, jumping and leaping," the impression from which in a very short time reached the brain, when he became insensible.

In this state he remained some time, and when he came to himself, he found his body and limbs altogether very stiff and sore, as if they had been bruised.

During that day he had as many as nine fits: but afterward the paroxysms became less frequent. For the removal of his complaint, he about this time took some medicines, that produced very free discharges by perspiration. The fits soon after left him, and he had none for three months. The next fit seized him while on the road to a market; this also was preceded by the sensation which he had formerly observed in his right thumb. His companions carried him into a house, and the next morning he applied himself to a priest that lived in the village. The priest forbid his eating meat, and desired him never to enter a church.

For three years after this he was free from the complaint, when he was again attacked while sitting drinking in a canteen, which custom he believed to have been the means of bringing back the disorder. It then commenced as before in the thumb of the right hand, passing gradually upwards, and producing convulsive startings, first in the muscles of the thumb, and then in progression; bringing on precisely the same action in those upon the fore-arm, arm, and shoulder. After this time it returned on the average every three weeks or a month.

While passing the island of Madeira, on his passage to South America, this man was attacked by his old complaint, and had several severe fits. He had generally had his grog regularly since he had been at sea, but on the day he was attacked he had taken none. He had two fits the same afternoon. He had taken the precaution once suggested

gested to him, of having a tight ligature made round the arm on the affected side, this he had produced by a twisted pocket handkerchief, and he said; he believed that it did in some degree retard the progress of the impression upwards from the thumb, but he never was able to prevent its reaching the head at last, so never escaped a fit by that degree of ligature which he had it in his power to make.

In Porta Praya, upon the island of St. Tiego, one of the Cape de Verds, he felt the same sensation that formerly had been confined to his right thumb, now arising in his left, although only the day before he had had a fit, when the aura commenced from its old point.

Directions had been given that the moment the attendants were apprized of an approaching fit, he should be brought quickly as possible upon deck, to the forecastle of the ship, for the purpose of ascertaining the effect of the cold affusion. He said to his companions that he now felt exactly the same sort of starting and jumping in the thumb of the left hand, that before used to take place on the right side, and that of course he knew he should very quickly have a fit. Upon this intimation he was immediately taken up, his clothes were stript off by some, while others assisted by collecting buckets of salt water from along side, and in this way he had several pails of water dashed over his head and body, before the impression from the nerve in the thumb had reached the head. The promptness and force of the application was such, that it several times deprived him almost of the power of recovering his breath. Between twelve and eighteen full buckets were thrown over him, and the effect was decidedly satisfactory. The impression not only was prevented from reaching the brain, but it was felt no more, and although he had for more than a month before, had a fit almost daily, the complaint did not return upon him for the time that he was upon the passage southward, in the tropical latitudes, nor for the rest of the voyage had he any attack.

His expression, with regard to the effect of the experiment was, that the cold water "startled him" very much; he also observed that he was very much "surprised" by it.

Mill Street, Hanover Square,
December 15, 1809.

(To be continued.)

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

SOME ideas lately occurring to me, on certain parts of the Economy of the Thoracic Viscera, I offer them to your notice, in the most hasty manner; for I know not that I had ever less leisure for preparing a paper of correct and cautious utterance.

It is well known, that the contents of the cranium swell gently under expiration, when the blood has not the most free and open passage through the lungs; that they are diminished under inspiration. While this regular alternation of pressure and its removal, may keep up a gentle and regular intestine motion throughout the sensorium, necessary for supporting its inconceivably exquisite functions, which a mere circulation of fluid could not effect; the whole mass of blood, in passing through the lungs, where it has to undergo important changes, may also be affected to the furtherance of these changes, by the alternation of elongation and shrinking, which all its conducting vessels are subjected to from respiration.

If the changes were, principally, as they are generally considered, only chemical, might not I, in support of the conjecture, just observe how instantaneously a crystallization sometimes takes place, in the laboratory, on the vessel where it is expected getting a trifling shake. Perhaps, however, while the origin of animal heat is, with so much ingenuity, referred chiefly to chemical agency, it may, in fact, principally have its source in that law of physiology, which requires inflammation in the reparation of parts. The reparation of parts is an incessant process throughout the whole animal system.

But to return from the digression.—If functions in the animal economy are accelerated by alternation of extra pressure and its removal on the blood vessels, which may possibly be the case, then, with what inconceivable rapidity must the change which the blood undergoes in its passage through the coronary vessels be effected; must the supplies of nourishment be laid hold of, through all its fibres, by this incessantly acting vital muscle!

Cheselden says, in his Anatomy, "Over the entrance of the auricles, in each ventricle, are placed valves to hinder a return of blood while the heart contracts. Those in the right ventricle are named, Tricuspides; those in the left, Mitrales. One of these last seems to do further service,

vice, by covering the mouth of the aorta, while the ventricle fills; which suffering none of the blood to pass out of this ventricle into the aorta before the ventricle acts, it will be able to give greater force to the blood than it otherwise might have done, because a greater quantity of blood more fully distending the ventricle, and making the greater resistance, it will be capable of receiving the greater impelled force from the ventricle; and if the blood is no way hindered in the right ventricle from getting into the pulmonary artery, while the ventricle dilates, as it is in the left, the left then must be somewhat bigger than the right, if they both empty themselves in every systole."

The blood also, being impelled with less force into the lungs, at the time of systole, it may be said that they are hereby guarded from too great a continually iterated force, while, from the smallness of the pulmonary system of veins, they are guarded from being charged with too heavy a load.

Boerhaave, in his Institutiones Medicæ, says of the coronary vessels. "*Hæ arteriæ sunt in diastole, dum reliquæ corporis arteriæ in systole constituuntur.*"—"*Hæ venæ inaniuntur, dum reliquæ corporis venæ implentur.*

Perhaps it is necessary, that the coronary artery conveying blood into the substance of the heart, should be guarded against the great impetus of its left ventricle.

"From under two of the semilunar valves of the aorta, which is, ere it leaves the heart, arise two branches (sometimes but one) which are bestowed on the heart, and are called Coronariæ Cordis."—*Cheselden's Anatomy.*

By the systole of the heart, the semilunar valves of the aorta are thrown open. They close up the orifice of the coronary artery, and help to prevent regurgitation from it, while the blood throughout the whole system of vessels, forming principally the substance of the heart, is under excessive pressure. The arterial systole commences at the heart. The valves are thrown down. The ventricles in a state of constriction, permit not the arterial systole to impel blood into their proper arteries; have thrown out the blood, by their constriction, from the coronary veins with rapidity; are holding their arterial blood under such pressure, as (with rapidity) to make it give up whatever nutriment it can afford them, to charge it with what is to be carried off through the right side of the heart to the lungs for removal. The ventricles slowly relaxing, the coronary artery opens, invites, and in a gentle current, receives from

the never, during life, wholly exhausted aorta, the necessary quantity of blood to cause its own contraction; first at its orifice, then, progressively through its ramifications and into the coronary veins, to be again rapidly squeezed out, on the next systole, to the right auricle of the heart.

Respectfully,

J. W.

Salisbury Court, 21, *xij*, 1809.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

I Have always been in the habit of considering Medical Practitioners as men of benevolent minds, and acting in general upon liberal principles, worthy of their erudition and science; but, if I mistake not, there is *one* exception to this sentiment to be observed, which I beg leave, thro' the medium of your useful Miscellany, to point out.

It is well understood that most physicians are in the habit of prescribing for patients at their own houses, as well as visiting others abroad. And, whether their patients are engaged with a family apothecary or not, they are sometimes instructed to carry the prescription to a certain druggist's shop (for there are physicians who have their favourite houses) in order to be prepared. It is not for me here to hazard an opinion as to their motives for so doing; but surely, it is not out of place to point out the propriety of inquiring first, if there is a medical man who is employed in the family, and if so, to intrust their prescriptions to his care, in preference to the hackneyed custom of sending them to a common druggist.

Further, in case the patients attended to, are *not* provided with a family attendant, it is very well known to the physicians who constitute the Royal College, that there are apothecaries, residing in various parts of the metropolis, who are furnished with medicines from the first house in the kingdom (Apothecaries' Hall), the genuineness and purity of which are universally acknowledged; yet, strange to tell! an illiterate druggist, who has not erudition enough to construe the prescriptions sent him, nor the medicines in sufficient purity (in the estimation of some) to be confided in, as it respects critical cases, is employed to prepare them.

Nor

Nor is this the conduct of the higher branches of the profsesion only, for surgeons, also of late years, are become home physicians, and some of them adopt the same plan. How far they infringe on the province of the regular physician in this, I presume not to say; it is enough for me to observe, that many of them have their favourite compounding shops, and the prescriptions must be carried thither, whether they have any previous connection with a medical practitioner or not.

Does not this way of preceeding deviate somewhat from the *liberality* which in general characterizes the medical profession? And, does it not place the druggist in a department not exactly his *own*, when he is employed minutely to prepare medical prescriptions, instead of vending wholesale and retail the articles peculiar to his station? I will only further add, that, if accuracy of judgement, *genuineness* of medicines, &c. be judged of any importance in the preparation of medical prescription, it scarcely needs be mentioned where they are most likely to be combined.

I am, &c.

OBSERVATOR.

Nov. 24, 1809.

To the Editors of the Medical and Phyfical Journal.

GENTLEMEN,

IN No. 129, there is a paper on Hydrocephalus; the writer hints that every man has a theory, and every man has a system. It would be fortunate if every man's theory and system were of the right kind. There are many theories, almost as many as there are practitioners, as well among what the writer contemptuously calls "Old Women Practitioners," as among the young, fashionable, consequential, affectedly cognoscent practitioners, who pretend to know a great deal more beyond their "bow and ridiculously affected grimace." It does not appear that the writer is more free of theory and system than his brethren. He considers all the diseases of children to be hydrocephalus, and uses much "torturing and twisting to persuade his readers that he has cured many, labouring under that (I believe always) fatal disease." He forms his diagnostic chiefly from the child passing black fæces, and considers every such child to have water in the head. If he had considered the circumstances with more attention, he might have been undeceived. The black stools have no more

no more connection with water in the head than they have with water in the heel. Such black stools may be seen frequently from infancy to old age, where the liver has been in a state of chronic inflammation, obstruction, or congestion. In such cases, after a week or ten days course of an alterative medicine, such as is commonly given when the disease is discovered; the first symptom of recovery is the appearance of brown or black fæces, and of an unnatural smell. These are what an eminent physician calls "foul bowels," and another distinguishes by the name of "Hydrocephalic stools;" meaning, I suppose, that they are the effects of water contained in the brain! Such stools were brought down by the active purgatives of calomel and jalap; but all the purgatives he gave were incapable of extracting water out of the ventricles of the brain. The bowels were torpid from the deficiency of healthy bile, in consequence of the obstructed state of the biliary system, which was distinctly pointed out, when the black fæces made their appearance.

The writer complains, that the "cap blistering plasters" did not raise vesicles to his satisfaction. Where a blistering plaster is not wanted the vesicles are raised very slowly, but where there is any inflammatory action to be subdued, they rise very soon and give relief. This was probably the case where they raised vesicles slowly; it is possible they were not wanted.

I cannot harbour the idea that the writer means to impose on the credulity of his friends, by persuading them that every child who passes black fæces has water in the head; if he does, he will with the same facility persuade them, if the child recovers, that he has cured hydrocephalus, which, for reasons I will not trouble you with, I am afraid he never did, nor never will do.

Having made these few remarks, I will conclude with examining the result of the writers success in his practice

Case. No.		
1.	No black stools -	died.
2.	Black stools - -	recovered.
3.	Fœtid stools - -	recovered
4.	Fœtid green stools	recovered.
5.	No black stools -	died.
6.	Black stools - -	recovered.
7.	Dark coloured stools	died, head not opened.
8.	Dark brown stools	recovered.
9.	No account of stools	died, head not opened.
10.	No account of stools	died, head contained water and bloody water.

Brown

Brown Stools, black Fæces.

11.	Jan. 22. Addomen sore to the touch,	Recovered.
	23. Fœtid hard black stools,	
	25. Several black stools fœtid,	
	26. Stools natural,	

There seems an impropriety in calling these black fæces "Hydrocephalic Stools." As in the above eleven cases, all such as had no black stools died, and all such as passed black fæces recovered, except No. 7, which case is of no use, as the head was not examined, consequently no proof of its being hydrocephalus.

I am, &c.

A. FOGO.

Newcastle, Dec. 12, 1809.

Arguments against interfering with Small-Pox Inoculation, from Dr. ADAMS's "Inquiry into the Laws of Epidemics."*

FIRST it is shown, that before Small-pox Inoculation was known, the Faculty considered the disease inevitable once in a person's life.

"The opinion that the small-pox would necessarily occur to every one once during life, is as old as the Arabian physicians. Those who wish to learn the theories of the earliest writers, may find them collected by Diemerbroeck from Avicenna to Willis. I shall content myself with citing the last.

"It is evident that Sydenham, who seems to have fallen into the same error, had been warped by these writers in his theories of fermentation and dispumation.

"Willis's words are, — 'Convenit enim homini, *omni, soli, et semel* variolis, aut morbills, affici: si forte quispiam in tota vita immunis degerit, aut alius in hos affectus sæpius inciderit, sunt hæc rara et inusitata naturæ eventa quæ communi observationi minime derogant: quin omnino rarum sit, quod nimirum *cuncti et soli* homines sint variolis

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† This work being the production of one of the Editors, no impartial means of bringing it before the Public occurred but by these and the former extracts.

variolis et morbillis obnoxii, atque *unica plaga* iis absolvi soleant."

He afterwards assigns as the cause of this universal prædisposition to the disease, certain impurities of the blood, *inter prima fœtus rudimenta in utero concepta;* quæ [particulæ] diu delitescunt; postea a *causa evidenti* commotæ, cum sanguine fermentescunt; ipsique *ebullitionem* ac deinde *coagulationem* inducunt; è quibus plurima hujus morbi symptomata oriuntur.'

" *Causa evidens,* quæ hæc semina fermentativa commovet, et sæpissime in actum deducit, triplex assignatur: scilicet *contagium* aliunde susceptum, *dispositio aëris,* ac immodica *sanguinis et humorum perturbatio.*'

" Gentilis and Mercurialis differed from this opinion of the cause of impurities, but still consider small-pox as morbum hæreditarium atque hinc nullum fere hominem ab iis immunem esse posse quid omnes nascuntur ex parentibus hoc vitio contaminatis.

" Fernelius derives the disease à causa quadam cœlesti et occulta cui cum infantes et pueri minus resistant quam adulti, hinc fieri quod illi frequentiores variolis laborent quam hi.

" Sennertus differs from these last writers, without assigning any better cause than the humidity of spring and autumn with vitiated particles of the blood.

" Diemerbroeck shows the folly of this notion of impurities, by inquiring how any person could escape from such an effect, when all must be subjected to the cause. He instances a great number of his relations who had lived to a very advanced age, without suffering the disease; and, lastly, himself, who, on the verge of seventy, after attending thousands without any caution, had escaped. — But this would rather make in favour of Willis's theory, who expressly says, that if perchance an individual should escape during life, or another should fall into the disease more than once, such uncommon events do not invalidate a general law of Nature. Now it is plain, that Diemerbroeck did not ascribe his security to a want of exposure, it could therefore only be accounted for by that peculiarity of constitution which Willis has remarked, as not inconsistent with his theory. This want of susceptibility of small-pox is, I am persuaded, much more rare than is generally suspected. Among the infants inoculated at the hospital, the number is too small to ascribe to any other cause than some temporary affection, which occupies the constitution at the time. Among adults, the

number

number is greater; and here we generally find that the subject has remained with his brothers and sisters or playmates, whilst under small-pox. Under these circumstances, it is probable, an accidental inoculation has taken place, and the disease has passed off so mildly, that the attention to the greater sufferers has absorbed the whole anxiety of the family. But I seem to have forgotten that my only intention was to show, how much the opinion of the necessary universality of the disease was encouraged by the profession. Diemerbroeck, we may see, though he discourages the opinion, does not consider exposure to the contagion, as necessary to induce the disease. It however does him credit, that he professes himself unable to assign any cause whatever. 'Quis enim (he concludes) tantæ rei se veram et perceptibilem rationem daturum promittet? Hæc quippe sunt ex illis arcanis quorum causas nos exacte scirenoluit altissimus Conditor.'—Diemerbroeck de Variolis, p. 275. I do not recollect any writer, before the introduction of inoculation, who proposes any means of escape which human prudence can advise in a populous town."

Secondly, the Author shows, that the disease has not, as is generally urged, increased in fatality since the introduction of that practice.

"The only plausible argument that remains against permitting small-pox inoculation in the metropolis, is, that the number of deaths by that disease has increased since the practice was introduced. Even if this were true, we have shown that the increase has been much more considerable in the other contagions; and Dr. Heberden remarks, that the number of sudden deaths have doubled during the last century. It will easily be seen, that if more children are reared, which the same authority admits; and if fewer die of the diseases of poverty, more must be exposed to those causes of fatality from which no improvement in life can secure us, or which, like apoplexy, are more common in the advanced stages of life. From this we might expect that the number of victims to small-pox would have been in a ratio equal to its greater fatality above the measles; and such would probably have been the case had not inoculation been introduced. Those who estimate the probable number of deaths from small-pox by the probable number who may be exposed to the disease, must be erroneous as far as relates to the metropolis, where all are exposed; and, if we may believe Sydenham, all are infected during an epidemic. The only calculation

calculation we can make, is by estimating the number residing in the metropolis, that are susceptible of the disease. In this manner we find Dr. Willan accounting for the progress of the disease in the years 1796, 1797, and 1798. During the first of these years happened the severest epidemic small-pox recorded since 1757. During the second, the number was reduced to 522, which is fewer than at any period since, and for several years before; during the third, the numbers were again high. On this occasion that accurate writer remarks, 'The new subjects for this increased mortality must have been produced by the births within the two years, and by the influx of adult persons from the country, who never had the small-pox, to the amount of several hundreds every year.'

"This last circumstance would be sufficient to account for the increase of deaths by small-pox since inoculation, had such really taken place; because, since the rich have lost their terrors by inoculation, they have been too inattentive in receiving domestics who have not passed thro' the disease. There appears also an inaccuracy. The estimate has usually been made by *the proportion of deaths from all diseases*, without sufficiently reflecting that the numbers who formerly died in early infancy, swelled the total of burials, without adding to the real population.—Dr. Heberden, willing to view the question in every light, has given what he calls a coarse statement from an average of about ten years, at the beginning, middle, and end of the 18th century, selecting such years in which the whole number of deaths was nearly the same, viz. about 21,000. By this mode of calculating, he finds the increased mortality by small-pox to be from 1600 in the beginning to 2000 in the middle and end of the century.—This mode is objectionable, because certain years of particular epidemics may produce extraordinary mortality, and may supersede small-pox as an epidemic. Hence, in the succeeding years, a greater number will remain susceptible of small-pox, yet the general mortality may be less. Thus the decade from 41 to 50 inclusive, was the most fatal in fever, yet the number of deaths by small-pox was particularly low. It appears, therefore, that to make a fair statement where we cannot suppose the population lessened, we ought to take the whole numbers as they are, without regarding the greater or less mortality of particular years, excepting what are called the plague years, none of which happily have occurred during the last century. In distributing the century into three parts,

I shall

I shall for convenience, select the last 90 years, being more easily divided into three thirties. The first decad is omitted, not only on account of the order which it enables us to maintain, but because the mortality by fevers as well as small-pox and measles was so low, for that early period, as can only be accounted for by a less population.

"According to the proposed division, then, we shall find that there died of small-pox in the thirty years,

From 1711 to 1740 inclusive - 65383
From 1741 to 1770 ditto - - 63308
From 1771 to 1800 ditto - - 57268;

making the number of deaths by small-pox greater in the first thirty years by 2075, than in the second thirty years, during which inoculation had acquired some stability, and greater by 8115 than in the last thirty years, during which inoculation was the established practice of most prudent families.

"At the same time, the mortality by measles has taken a quite different course, the number of deaths in the second period of the same ninety years being greater than in the first by 1781, and the number in the last thirty years exceeding the first by 2018.

"By taking the estimate of these two diseases, we save the necessity of any estimate concerning an increased population, which is very uncertain. For how much soever the population of the town may have increased, we are not able to ascertain how much of this increase is confined to Mary-le-bone and Pancras, which are not included in the bills, nor whether the depopulation by the improvement of London, withiu the walls, may not equal the increase of the other parishes included within the bills.

"Imperfect as these bills are, whilst we have no other records, it is justifiable to refer to them, and, as Dr. Heberden remarks, taken on a large scale, they are not likely to deceive us much. But it is truly painful to see men, whose intentions are honest, led astray by the artful quotation of single years. In 1804, we are told that vaccination had so far reduced the number of deaths by small-pox, that they amounted to only 622. It might easily be answered, that in 1797, they amounted to only 522. What was the cause of each? That there were fewer inhabitants in London susceptible of the disease in 97, in consequence of a previous epidemic; and in 1804, in consequence

consequence of the zeal for vaccination. All this is highly in favour of vaccination, but makes nothing towards the extermination of small-pox, which can only be kept under by inoculation or vaccination.

" In the year 1805, it is added by these honest zealots, the number of deaths by small-pox increased from 622 to 1685, in consequence of the difficulties thrown in the way of vaccination. But it is notorious that those difficulties increased during the years 1806, 7, and 8, yet the average number of deaths in those three years has been only 1280, which is less than in any three successive years that can be produced within the last ninety years of the preceding century, or than any single year, not preceded or followed by an epidemic small-pox. During the two first and part of the last of these years, small-pox inoculation increased to such a degree, as to alarm many well intentioned people. Yet part of the previous exemption might be imputed to inoculation, as the deaths by small-pox have increased since that practice was discontined at the hospital. At the same time, I conceive vaccination has had a very great share in decreasing the deaths by small-pox; not so much by what has been done in London, but because during the early zeal in the country, so many were vaccinated who, by this time, have resorted to the metropolis, and if they had not been prevailed on to vaccinate, would probably have arrived susceptible of small-pox."

These passages are selected as the most detached, being thrown into Notes at the end and into the Appendix. They serve as additional proofs of what is advanced in the text; namely, that before inoculation was known, the disease was considered inevitable in the larger towns; and that since the introduction of that practice, the number of victims has lessened in London.

Memoir

Memoir on the Contagious Disease which visited the Communes of Duhort, Buanes, Bahus, &c. last Year; with a Sketch of that which prevailed in the Hospitals attached to the Grand Army in Spain; and on the Treatment and preservative Regimen most proper to be pursued. By M. DUPIN, M. D. Chief Physician to the Military Hospital of St. Sever; and Government Physician for Epidemic Diseases.*

Aliquid semper ad communem utilitatem afferendum.

I Am about to offer an account of the contagious disease which prevailed last year in the communes adjoining my residence, and which generally ended in the death of the persons attacked. I shall add an account of the contagion, which lately broke out in the military hospitals in Spain, and among the inhabitants of the country, which, last, was extremely analogous to the disease in the army. My only wish is to be correct, as to facts, keeping constantly in view the sentiment of the philosopher and physician. "If truth is only a point of honour with the bulk of mankind; with the physician it ought to be peculiarly sacred and inviolable." Finally, I shall succinctly trace from actual observation, and not from hypothesis, the proximate as well as the remote causes of the disease. It may be thought as the epidemic has ceased to exercise its ravages in the communes where I witnessed it, that this memoir is now superfluous. There would be some weight in this objection, if experience had not demonstrated that epidemics, like the above, are apt to return, particularly to us who are in the vicinity of a large army, in which it prevails with more or less severity, and from which we are likely to receive infected individuals. Above all, I wish it to be understood, that I do not write for the sake of my brethren physicians, who are not likely to go wrong, but country surgeons are generally the first called in to patients of the above description, and on the first treatment of the disease the issue frequently depends.

The contagious fever first alluded to in the title of this memoir, chiefly prevailed in the communes of Duhort, Buanes, Bahus, &c.; and admitting that there was a difference in some of the symptoms, as they manifested themselves in the various communes, we ought, nevertheless,

* Journal de Medicine.

to class the disease, according to the general characteristics it bears; for a treatment which suits one epidemic, is certainly applicable (under certain modifications dictated by circumstances) to all epidemics, bearing the same character in their leading symptoms.

The terror and alarm which never fail to accompany the ravages of epidemic diseases, are among the primary causes of their propagation. The blind prejudice which seizes the vulgar, perverts their understanding, and proves the predisposing cause of the disorder.

It would be very important to show that these diseases have no contagious character, and that it is only terror, prejudice, or negligence, which renders them so fatal. In the country, there exist no precise ideas respecting contagious diseases, which are most frequently complicated, and sometimes disguised under symptoms apparently foreign to them. A long experience in the armies, and in this part of the country, has convinced me that anomalous fevers, commonly called malignant epidemics, as well as almost all acute diseases, generally become unmanageable when we neglect to attack them in their commencement; the only period at which we can effectually restrain their violence, and mitigate their symptoms.

The disease, of which I am to give the history, exhibited in the course of its different stages, singularities and phenomena, which excited my particular attention. I shall confine myself to what I saw and observed in a single family, all the members of which were successively attacked with the most distressing symptoms. Let me previously state what occurred before I was sent for. The wife of Labarthe, called Ann Boueilles, in the commune of Bahus, 55 years of age, went to Buanes in the beginning of January 1808, to attend the husband of her sister, who laboured under the disease then raging in the commune. The brother in law was cured, but his wife, sister to Ann Boueilles, died. Labarthe's wife returned to her family, having absorbed the deleterious poison, was confined to her bed, and communicated the disease previous to her death, which soon happened, to her husband, who was upwards of 60 years old; to her son Peter, aged 30; to her daughter in law, Jane; to her son John, aged 25; to a nephew, who was in the house; and to a shepherd boy, aged between 12 and 13. M. Durrieu, receiver of the taxes at St. Sever, and proprietor of the farm occupied by this unfortunate family, four individuals of which had already received the last sacrament, requested me to visit them.

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He described them as abandoned by their relatives and friends, and condemned to inevitable death. I instantly proceeded to the scene of distress, accompanied by M. Latour, the officer of Health at Mont Gaillard, who being convinced of the desperate nature of the disease, considered my visit as superfluous.

Having entered the house, I made a large fire: my attention was then directed to the apartments and beds of the patients. I opened all their curtains to admit the fresh air, inundated them with fumes of vinegar, and ordered fomentations of vinegar and water, for the upper and lower extremities, every two hours.

Not having a great stock of pharmaceutical preparations at my command, I prepared a remedy chiefly composed of theriaca and good wine. The father of the family in particular was in the last agonies. I administered the same mixture to all of them, and having called in the neighbours, assured them there was no danger. M. Durieu, on my application, sent me an abundant supply of vinegar and good wine, with some additional attendance; in short, by assiduity night and day, and by administering large quantities of the above medicine for upwards of a month, the whole of the family was restored to health; the confidence of their neighbours returned, their fears were banished, and the commune was preserved from the further ravages of this alarming pestilential malady.

The disease which forms the subject of this memoir, and which has been described by the appellation of the jail fever by Pringle, the malignant putrid fever by Huxham, the malignant catarrhal fever by Eller, and which has been so successfully elucidated by Lind, Monro, and Sydenham, and now generally known by the name of *ataxic fever*, seemed to me to be true acute nervous fever, rarely verminous, and still more rarely complicated with inflammatory diathesis. The primary symptoms, as well as those of the subsequent stages of the disease, exhibit this character in a very decided manner.

Diseases which attack a great number of patients at the same time, and in the same country, and consequently bear the character of epidemics, must depend on an universal and common agent, but accidentally introduced to the inhabitants of this or that district. Now we only find this universal and common agent in our food, or in the air we breathe, two things common and necessary to all mankind. In the present instance, the disease seems to have been in a great measure excited by the physical qualities of the

air. After a very damp autumn, the succeeding winter renders all the actions of nature torpid; while the piercing cold that prevailed with so much constancy, must have prevented a free perspiration. Experience proves that cold northern blasts become hurtful, when they exceed certain limits. Fear and other mental affections contributed, in addition to material causes, in the developement of the disease. It does not appear that any universally endemic cause existed; diarrhœa did not precede the disease, as we find it does, at this moment, in the hospitals attached to the army of Spain, and among such of the inhabitants as are infected with the same contagion.

Hitherto, a blind empiricism has been the only guide of medical men, in the treatment of a species of disease which has been branded with a malignant character, not on account of the formidable effects it produced, but because these effects were ascribed to certain deleterious principles, the origin and nature of which they never attempted to discover.

Dissections of a great number of dead bodies, and the most profound observations, at length, concurred to throw some light on the inextricable labyrinth of symptoms which attend this species of disease; a method of treatment established on the most solid foundations, has been constantly attended with success, in the hands of all who have resorted to it. Nature must be followed step by step; when we are once acquainted with the chain of facts which occur in practice, they must be compared with each other, and considered with regard to the age and sex; the temperaments of the patients, as well as the climate.

Although the disease varies much in its degrees of intensity, and the rapidity of its periods; although in children and adults of a feeble constitution, these periods were less rapid, and less mortal, than in persons of plethoric habits; although we have seen individuals suddenly attacked through the medium of contagion, and without any apparent prodromus,—we have nevertheless, in general, ascertained three very distinct degrees in this disease.

The first was announced by spontaneous lassitudes; by head-ache, which was the most constant symptom, and generally very violent, but sometimes confined to a painful sensation of heaviness or stupor, with no fixed seat, being sometimes in the lower and at other times in the back or upper part of the head; by want of sleep, or laborious and oppressive slumbers; numbness of the limbs; changes from heat to cold; pulse small, somewhat hard,

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and unequal; tongue white, dry, and furred; frequently also there were retchings without any sign of swelling or tension of the abdomen; the eyes in some patients were brilliant and fixed, in others dull. The second degree was marked by a continual delirium, mostly of a tranquil kind, but sometimes furious; and by spasmodic twitches, &c. The third degree exhibited subsultus tendinum, as the characteristic symptom; deafness; drowsiness; an extraordinary prostration of strength; small pulse; hiccough; colliquative sweats; petechiæ; tongue black and dry; and lastly, a lengthening of the countenance, which is always a sign of extreme danger, while a contrary appearance is the most certain sign of convalescence; marks of putridity were also present in the third degree.

The general duration of the disease was twenty-one days; after this period the most alarming symptoms ceased. Convalescence was tedious, however, and relapses were frequent. In the highest degree of the fever, two exacerbations were uniformly remarked during the day; one began in the morning, and was at its height at noon; the other began towards evening, and was at its height about midnight; the urine was slimy during the whole of the disease; it was thicker in proportion as the disease was more dangerous; the danger was imminent when in the highest stage of the fever, the urine *suddenly* became clear and limpid; whereas the most unerring sign of an approaching recovery was, when the urine became gradually clearer, and deposited less sediment.

My treatment of the disease chiefly consisted in keeping up and restoring the strength by the general application, in suitable proportion, of volatile stimulants, such as camphor, musk, ether, valerian, Virginian snake root, ammonia, quinquina, and above all, good wine and theriaca; it being requisite, in order to obtain a complete cure, not only to recruit the physical strength, but also to combat the deleterious cause of the disease.

If we consult the most eminent writers on contagious diseases, such as Sydenham, Huxham, Pringle, Lind, and Monro, we find that they considered them under the two following aspects: viz. as depending on miasmata, which floats about in the stomach or cellular texture, or as fixed in these parts, having induced some deep seated putrid injury. It is in the first state of the disease that we have seen the antimonial tartrite of potash used with the greatest efficacy; this remedy seems to us to act less in evacuating the stomach, than in producing an uninterrupted and salu-

tary perspiration; not only has it the advantage of expelling the injurious matter contained in the stomach, and thus occasionally combating the cause of contagion; but it also rouses the vital energies as a consequence of the action impressed on the whole nervous system. We have also, on the present occasion, in imitation of Sydenham, subjected the patients to a sudorific and antispasmodic treatment. I have seen perspirations, whether caused by nature or by artificial means, bring the diseases to a close at this period. Another remedy, of evident success in the same case, was a blister applied between the shoulders; the delirium, head-ache, and flying pains, which resisted the effects of a vomit, yielded to this application.

In the second state, and when the contagious miasmata had decidedly effected a septic injury, or produced a paroxysm, we have successfully combined antispasmodics with anti-septics. The mixture which succeeded best was the bark, in combination with camphor, serpentaria, valerian, &c. But the remedy which most decidedly completed the cure of these cases, as well as in others, attended by my colleague M. Dufour in the communes of Buanes, Bahus, &c. was topical bleeding by means of leeches; a practice which combines the double advantage of evacuating the part immediately diseased, and relieving the interior of the head, whilst it weakens the patient less than general bleeding. This last method of evacuation, in consequence of the total prostration it occasioned, we found as injurious and dangerous as purgatives, which must be cautiously avoided. With the same view, we applied fomentations of warm water, vinegar, and muriate of soda to the lower extremities, renewing them every two hours until the head was relieved. We did not neglect the use of glisters to keep the belly open.

The cleanliness of the patients, and every thing about them, constantly occupied our attention; the bed curtains were continually open to admit fresh air, and the fumigations prescribed by Guyton de Morveau, were carefully performed.

One of the symptoms, which particularly manifested itself among the military in Spain and the inhabitants who contracted the contagion, was, and still continues to be, a serous diarrhœa, which, when it has become moderate, and seems to have diminished the disease, ought not to be stopped; but when it is too abundant, and visibly weakens the patient, I have successfully administered boluses made

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of two parts of ipecacuanha and one of opium; the arnica montana in decoction or powder, blisters applied only as rubefacients, without destroying the epidermis. I have also administered wine in large doses at this period, as a strengthener and antiseptic: we know how advantageous this practice was when resorted to by Sir John Pringle. Asclepiades says, that wine in its effects on these diseases disputes pre-eminence with the power of the gods.

In the more advanced stages of the disease, i. e. in the third degree, I increased the dose of the internal remedies; varying and combining them according to circumstances. I employed spirituous aromatic lotions, and had recourse to external stimulants in their greatest possible energy, applying them to almost every part of the body to recall the fleeting spark of life. With a view to diminish the interior heat, I applied vesicatories of cantharides, much more rarely than sinapisms, because the former acting more slowly, often produced bad conditioned ulcers, chiefly when applied to the legs. The old man, who was the husband of Madame Labarthe, presented a striking example of this fact; the wounds in his legs, from the effects of vesicatories applied before I was consulted, became gangrenous and lost all sensation, giving out a fœtid and cadaverous sanies. I ordered scarifications, more or less deep, according to the extent of the gangrene, bathing the wounds with camphorated water; and in proportion as the disease was subdued by the medicines taken internally, the wounds assumed a better appearance, and at length they were cicatrized, attended, however, with a great loss of substance.

My friend, M. Dufour, witnessed a case of this kind, which deserves to be mentioned. A woman, of the name of Anne Phillippe, whom he visited at Duhort, by desire of the sub-prefect, lost all the muscles and cartilages of her nose, which was ulcerated, became gangrenous, and fell off in sphaceli, leaving all the nasal bones exposed. The patient, notwithstanding this unfortunate event, recovered by M. Dufour's skill.

The warm bath is, in my opinion, salutary beyond measure; no application operated so speedily in restoring the strength of the patient, diminishing the rapidity, and re-establishing the equality of the pulse; in allaying spasms, convulsions, delirium, and pains in the lower belly; and, lastly, in assisting a good perspiration, and regularly developing the other secretions. These baths would be still more efficacious, if they were rendered aromatic by the

addition of camomile flowers, rosemary, lavender, thyme, and sweet marjorum, two ounces of each at a time; the heat of the bath should never exceed 27° or 28° of Reaumur, and the patients ought not to remain in it longer than eight minutes. I have also applied with success a bag of aromatics, boiled in wine, to the region of the stomach.

Let us now attend to the means of preservation. But first let us remark with Hippocrates, that it is very difficult to resist the action of the deleterious causes with which we are surrounded. *Plerumque hominis natura universi potestatem non superat.* Man, like all other organised beings, is under the controul of external objects, with which he is compelled, by his nature, to keep up a connection; he is subject to all the alterations which the elements can effect; as long as he breathes, he is exposed to the influence of the atmosphere.

We may, however, offer a word on the most proper regimen, and on the state of mind best adapted to resist contagion; and afterwards speak of the means to be employed to preserve us from infection.

All sudden and abrupt changes are prejudicial, when an epidemic or contagious disease prevails. We would not advise those, whose only nourishment is milk, suddenly to change it for animal food and spirituous liquors. The discharge of wind upward and downward, which the patients continually void, and the worms which sometimes render the disease more complicated, seem to forbid the use of vegetables. We would wish, therefore, that fruits, such as apples, pears, figs, &c. should be prohibited. The farinæ seem also improper, particularly for children. The tetradynamic plants, and the alliaceæ, such as radishes, water-cresses, turnips, carrots, onions, asparagus, garlic, &c. with a moderate use of animal food and wine, form the most proper nourishment. While this regimen is pursued, all excesses must be avoided, particularly of cold or humidity, which materially predispose the constitution for the disease. The mind ought to be kept calm and tranquil; fear, discontent, and all the enervating passions, ought to be dismissed by all possible means; and particularly by proper amusements, or a moderate use of good wine, &c.

In order to prevent the propagation of the disease, all communication ought to be interdicted between the infected and the healthy; the hospitals should be removed from the central part of the town, and guards stationed to

prevent

prevent the patients from leaving the hospitals until they are completely well, and until their linen and persons have been fumigated. The sick ought to be kept very clean, and their bed-clothes frequently changed. We have always found the disease more serious, when the patients were deprived of the use of fire. Wagler and Rœderer made a similar observation at Göttingen, and Lind in Haslar Hospital. The stools of the patients must be quickly removed: it would be even prudent to bury them under ground. The linen ought to be soaked for some time in cold water, and afterwards passed through a lye: without this precaution, the evaporation of the water might carry up the contagious miasmata, and thus propagate the disease. The air of the apartment should be frequently renewed; and not satisfying ourselves with the introduction of fresh air, we should diffuse the vapours of oxy-muriatic gas, or any similar substance, in the sick room, taking care not to incommode the breathing of the patient. The furniture and clothes in the apartment ought also to undergo similar fumigations.

[The following report of a work, with the aannexed title, has been presented to the French Institute. It is drawn up by Etienne Sainte Marie, M. D.]

Essay on the Tetanus Rabiensis; or, Enquiry into the Causes of the Accidents which sometimes ensue from the Bites of Animals, said to be Rabid; with some Hints respecting the best Method of preventing or curing these Affections. By M. G. Girard, M. D. of Lyons.

THE author of the work in question endeavours to prove, that the morbid affection commonly called rabies, or hydrophobia, is imperfectly designated by these terms; that hydrophobia is not a disease in itself, but merely a symptom of disease; that this opinion was probably entertained by Hippocrates, who does not in any of his works speak of hydrophobia, although he was perfectly well acquainted, as various passages amply prove, with all the symptoms attributed to the disease so called at present; that the saliva of a rabid animal, when deposited by a bite on the body of another animal, is not the cause of the

the affections which the latter experiences some time afterwards; that these affections rather belong to the bite itself, which, by disorganising the skin and the subjacent parts, disturbs the circulation of the fluids, causes congestions, and determines irritation in the nerves, spasms, &c.: finally, that rabies, called the hydrophobia, communicated by infection, is frequently nothing else than a traumatic maxillary tetanus; or, to speak a language intelligible to all the world, a spasm of the jaws, produced as the consequence of a wound.

Every fact which can possibly favour these opinions, is cited in the course of the work; the materials being partly collected from the best medical works, and partly furnished by the author from his own practice. Two celebrated physicians of the present day, Dr. Percival, of London [Manchester], and Dr. Rush, of Philadelphia, have declared hydrophobia to be a tetanus. These gentlemen published their opinions nearly at the same period, without being acquainted with the sentiments of each other. With respect to M. Girard, his ideas on the subject were ready for the press, when chance brought in his way a periodical work, in which a mere notice was given of the opinions of Drs. Percival and Rush.

We frequently observe that men, who have been bitten by rabid animals, do not contract hydrophobia; while others are seized with it, when bitten by animals in a healthy state. There is no one who cannot adduce facts in support of the former of these hypotheses. If those in support of the latter are fewer in number, we find several in medical works; and M. Pinel, in his Nosographie Philosophique, has given a very strong one. A man, who was a prey to domestic misfortunes, was bitten by his horse. He was seized with hydrophobia; but the horse, which was carefully watched, did not become rabid. M. Girard cites, in the first place, similar examples, in order to prove that there exists in the disease, called hydrophobia, something which we have not as yet been able to discover. He afterwards enumerates the symptoms peculiar to hydrophobia and to tetanus; demonstrates their analogy, and concludes that the two diseases are completely identical. In both cases, in fact, we observe between the period of the bite and the first developement of the symptoms, a longer or shorter interval; a dull pain in the flesh, and sometimes a swelling in the cicatrix, on the approach of the crisis; a spasmodic irradiation, extending from the wounded part to the neck; spasms in the

jaws

jaws and pharynx; and difficulty, or even absolute incapacity, to swallow: a repugnance to drink, carried, in some instances, to horror; a copious flow of thick saliva; a grinding of the teeth; general or partial convulsions, coming on in paroxysms, agitation, &c.

I shall not follow the author into his train of argument in support of his theory, but content myself with quoting such of his experiments as seem to be the most conclusive and ingenious.

He attempted to inoculate the rabies on a dog, with a lancet impregnated with saliva, furnished by a girl labouring under hydrophobia: the animal received several punctures in the thigh, and yet continued to enjoy good health. Similar experiments, made by M. Huzard, professor in the veterinary school at Alfort, and M. Gibaud, surgeon to the Hotel Dieu of Paris, gave similar results.

M. Gerard next wounded dogs with the bites of cats and other animals; he made in different parts of their bodies deep and irregular wounds, with variously shaped and pointed instruments; and he succeeded in producing grinding of the teeth, difficulty in swallowing, repugnance to food and drink, suffocation, an abundant flow of frothy saliva, i. e. most of the symptoms which are common to rabies and to tetanus.

Although the author establishes his opinion in a manner equally solid and ingenious, his proofs are still by no means satisfactory. It is very true, that rabies and tetanus resemble each other much. I will even go farther and say, that there may be a traumatic rabies; or, to preserve the technical and accurate expressions of the author, a *tetanus rabiensis;* such as is caused by the bites of animals merely in a furious or irritated state. But he must go farther, if he wishes to have a precise notion of true or essential rabies. This dreadful disease is a deprivation of sensibility: it consists in fits of furious mania, with or without delirium; the intervals being spent in profound melancholy. Now we find nothing similar in tetanus. Delirium is rare in this affection; and when it does occur, it is a confusion in the ideas, like what is observed in fevers. It is not, as in rabies, an error almost entirely confined to the taste, appetite, affections, or sentiments; in a word, to that order of movements, which are regulated by sensibility. In my opinion, rabies will be one day classed, in imitation of the ancient method, among cases of insanity; and it will be regarded as a variety of sentimental melancholic mania. M. Pinel, who, in the first

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edition of his Nosographie, had placed rabies among spasmodic diseases, has already, in his subsequent editions, restored it to the vesaniæ. The day will, perhaps, soon arrive, when a more perfect nosology will not, separately, classify rabies, mania without delirium, melancholia, low nervous fever, hypochondriasis, hysteria, nostalgia, spleen, or the English disease, &c.—all of them affections, in which it is likely that we shall discover the spinal marrow, the grand intercostal nerve, the solar plexus, and all the organs which obey these central points of sensibility, to be more or less implicated.

M. Girard concludes his work with some very judicious observations on the treatment of tetanus rabiensis: even in the use of the methods indicated as efficacious against rabies, he finds a support to his opinion, as to the nature of the disease. He proves, that if the treatment called local, be more advantageous than any other, it is because, by means of caustics, scarifications, and the methods used to produce an abundant suppuration, we produce a simple, instead of a deep, tortuous, and irregular wound.

The work deserves to be attentively read and considered; it is not one of the empty compilations of an hour; it is a succinct, original, and ingenious treatise on rabies; and, from the novelty of the views it presents, must excite the interest of every medical practitioner. It is composed in that philosophic spirit, which, although long displayed with success in other branches of science, has hitherto, from a deplorable fatality, shed but little of its influence on medical science.

The most important service we can render to the healing art, is to simplify the study of medicine, and to generalise more and more those actions, which may evince the laws of diseases.

M. Girard has attempted this, as far as rabies is concerned; he has cleared the history of this affection from all the absurd stories, which the love of the marvellous, popular belief, the credulity of medical men, or hasty conclusions, had introduced. He subtracts one from the number of our present diseases; but, in the order of spasmodic affections, he has given us an additional species, I fear, lest this system, specious as it is, should mutilate rather than simplify truth; and this doubt I have already ventured to suggest.

If it be clearly ascertained that the saliva of rabid animals cannot communicate rabies, which is perhaps the case, we shall approach hydrophobic patients with more con-

confidence. We can bestow on them more assiduous, intelligent, and affectionate attendance; we shall have no occasion to fear the effects of their bites; but it is rare that a human being, in this unhappy state, attempts to bite. It cannot be asserted, however, as has lately been said, that patients of this description never bite at all. I was witness to a contrary instance.

Upon the whole, I have no doubt that, in addition to the approbation bestowed on M. Girard's labours by the Institute, he will acquire the esteem and gratitude of every friend to humanity.

Moniteur, Nov. 21, 1809.

On the Use of Carbonate of Potash in Diseases of the Urinary Organs. In a Letter from M. Guyton Morveau *to the Editors of the Annales de Chimie.*

I Have recently met with a Memoir, published in the eleventh volume of the Transactions of the Italian Society of Sciences, wherein M. Mascagni gives an account of an experiment he made on himself with a salt, which I never heard of having been administered internally, at least in such large doses as he mentions. I shall therefore present you with a translation of his paper, accompanied by such observations as have occurred to me.

"Some years previous to 1799, (as Mascagni informs us) I was subject to pains in the lumbar region, and voided from time to time small calculi of an ochry yellow or brick colour. Knowing that gaseous alkaline water had been used with some success, I took it several times, and found myself much better.

"It afterwards occurred to me, that I might obtain even better effects from carbonate of potash. In October 1798, I exposed a concentrated solution of potash to the action of carbonic acid, procured from grapes in a state of fermentation; and in this way I obtained a stock of carbonate of potash, well saturated and crystalized.

"In the months of August and September, 1799, having been compelled to lead a sedentary life, I was seized with violent pains in the kidnies, and I voided a considerable quantity of gravelly concretions, some of which, on account of their weight, might be considered as true calculi. They were reddish and crystalized, and were deposited

sited at the bottom of the vessel every time that I made water. The shining faces of these calculi could be distinguished through the liquid, which was a little turbid, but nevertheless transparent. I was also subject to a superabundance of acid in the stomach, which was perceived in the mouth.

"I examined my urine, and found a free acid, which declared itself by reddening turnsole paper. This induced me to suppose, that my gravel stones might have been formed by the lithic acid, which was in excess in my urine. These concretions, when well washed and dried on bibulous paper, then soaked in water and placed on turnsole paper, also reddened it. When subjected to the action of distilled water, there was a solution in the proportions known with respect to the lithic acid. When afterwards treated in any other manner, they gave the most unequivocal proofs of the presence of this acid."

Here I must observe, that what M. Mascagni calls lithic acid is the same with the uric acid of Fourcroy and Pearson. There is reason to regret, that M. Mascagni has not stated at greater length, the processes by which he ascertained the nature of this acid. It results, indeed, from the great work of Messrs. Fourcroy and Vauquelin, on human urine, that it contains uric acid, and that the red crystals deposited by it are thus formed. But they ascertained at the same time, that its peculiar acidity is not great, and must contribute but in a very small degree to give the urine its acid character. They have besides, confirmed the observations of Scheele, as to the presence of free phosphoric acid in the same acid. It would have been easy for M. Mascagni to put his conclusion beyond the reach of objection, were it only for the property which the last of these acids has of being fixed in a strong heat, while the former is speedily resolved into its elements.

"Having been thus convinced (continues M. Mascagni) of the nature of this acid, I resolved to make use of carbonate of potash, and to watch the results. The first day I took a whole drachm, one half before breakfast and the other half at bed-time; I had dined at one o'clock. This salt, dissolved in ten ounces of water, had very little taste; it did not cause the least alteration in the stomach nor intestines: but the instant the solution was introduced into the stomach, it occasioned an extrication of carbonic acid, which was felt in the mouth as coming from the œsophagus; a part afterwards passed off by the anus: a proof of the combination of potash with another acid, which must have driven off the carbonic acid.

"On

" On the second day I raised the dose to two drachms; on the third to three; and I continued this last dose for ten days, making the solution in 20 ounces of water."

We find from the above, that in the space of ten days M. Mascagni must have taken internally 29 grammes, or nearly three ounces of carbonate of potash.

" I had remarked, as I have before mentioned, that my urine reddened turnsole paper; I subjected to the same experiment what I now voided, and I perceived from the time I began to use the saline solution, a diminution in the intensity of the colour. On the second day the turnsole paper exhibited almost no change; on the third day there was none at all: a proof that the acid had been saturated. My pains also nearly went off on the third day, and I voided no more calculi with my urine. Afterwards the pains ceased entirely, my urine was less turbid, and I ascertained the presence of potash in excess from the red garnet colour assumed by paper died yellow by turmeric, as well as by other substances, which, when saturated by potash, formed neutral salts.

" I then gave up the use of carbonate of potash, and I was several months without voiding any calculi. Having been since attacked with this disease, I had recourse to the same remedy, and obtained the same effects. I repeated this medico-chemical experiment on every occasion that I felt the same inconvenience, and always with the like success. It is now two years since I voided any calculi, although I no longer make use of carbonate of potash.

" These experiments evidently prove, that potash is introduced into the urinary passages; that it saturates the lithic acid; and that on forming with it a more soluble neutral salt, it opposes the production of concretions, of which calculi like those I have described are formed. There may, without doubt, be concretions of another nature; and it remains to be proved if the same treatment will answer every description of calculi."

The above Memoir of M. Mascagni is terminated by observations on the action which the alkalies exercise in general on all animal concretions, and on the advantages which might result from their use in diseases of the lungs, and other analogous affections. He gives examples of the happy effects of this treatment, particularly in an epidemic disease which had made great ravages in the province of Vienna, and where he succeeded beyond all expectation.

February 27, 1809.

ON MEDICAL REFORM.

AS the word *Reform* implies some defect or degeneracy from original perfection, or else a degree of imperfection incompatible with the present state of human knowledge, it is regarded in the light of an accusation. Such an indication of hostility, or as it is considered, declaration of war, rouses suspicion, examination, and a dread of its tendency, in many who may become the objects of it. Abuse, negligence, incapacity, avarice, all take the alarm; and the outworks of opposition are inspected and put into a state of defence. This is perfectly natural, what always has and will happen. The artillery commonly directed against all reform, is either the sacredness of the subject, the venerable antiquity of the present order of things, the danger of all innovation; and very often we are told that the fabric is too ruinous to admit of repair. Miserable, indeed, would be the state of human affairs, if these obstacles were generally allowed to impede reform or improvement, which is nearly synonimous with it. We know that *religion*, the most sacred of all subjects, has been repeatedly reformed; and *the Reformation*, as it is emphatically called, is the boast of one-third of Europe and America. I might easily show that the constitution of states, the administration of justice, the discipline of navies and armies, with many other subjects of less importance, have often undergone salutary reform; and then proceed to combat the too common apathy about, or frequent opposition against it; but I have, perhaps, digressed too far already. My object is to submit a few observations on the subject of reform, respecting the evidence of the due qualification of persons allowed to practise upon the *health* of his Majesty's subjects.

A Correspondent, in the last number of your Journal, who signs himself "a *licensed physician*," produces very weighty authorities to prove, that the Royal College of Physicians of London has a competent jurisdiction over, or at least a power of licencing, all persons who assume the liberty of adding M. D. to their names. Granting this to be true in *theory*, which I am by no means disposed to dispute, we will consider hereafter, whether any *practical* good results, has resulted, or is ever likely to result, from this authority of the College. But, in this place, I wish to call the attention of your readers and correspondents to the *other* branches of the profession; and to ask, whether

whether the surgeon-apothecaries, and the chirurgo-obstetro-pharmacopolists, do not also require that some proof of ability and competence should be given, before they are allowed to practise in those respective branches?

I take it for granted that all your readers will confess, that the class of practitioners who arrange themselves under those denominations, are ten times, at least, as numerous as the *Doctors*; and, of course, the guarding his Majesty's subjects against their errors or ignorance, is of ten times greater importance than the regulation of the conduct of those called physicians. This conclusion does by no means rest on the mere *numbers* of that class of medical men, but much more on the circumstances under which they are called upon to decide. Few families, in the first instance, think it necessary to call in a physician; the family apothecary is deemed, and often with good reason, abundantly sufficient for a first decision. This first decision, however, is often of far more importance than all that can afterwards be suggested. The rash adoption, or the ignorant delay, of venesection, is well known to be very frequently fatal in acute diseases. But the most fatal effect of ignorance, arises from mistaking the nature and causes of a disease in the first instance; and the *difficulty*, in a majority of cases, of forming a correct decision in a first visit, is confessed by all writers and practitioners. How necessary, therefore, must it appear, that the persons on whom this diagnosis depends, should be duly qualified to form it? It has always appeared to me, that the most important part of medical reform should be directed to the lowest class of the Faculty; for I can hardly suppose that any person, who has obtained a diploma from a regular university, can be grossly ignorant of the distinctions of diseases. The present advocates for reform, appear to direct their chief attention to these inferior orders. The statutes, therefore, quoted by your correspondent, do only meet a small part of the question; and, consequently, cannot supersede the necessity of the proposed application to parliament.

Let us next consider whether the law, as it now stands, according to the statement of your correspondent, is of any practical utility in securing the due qualification, even of physicians, to whom alone it is applicable. It has hitherto remained a dead letter, because it contains no provision for enforcing its operation. If we had statutes which contained every desirable regulation for all the branches of the practice of medicine, but no practical

method of applying them, of what use would they be to the public? At present, it seems that any person may indite or inform against any one who practises as a physician, without having been examined and authorised by the president, and certain elects, of the Royal College of London. But who has hitherto been found willing to undertake so ungrateful an office? The name of informer, even when it is to bring acknowledged guilt to punishment, is so odious, that large rewards are hardly sufficient to procure them. In this case, the informer would subject himself to the imputation of envy or malevolence, without a motive to induce him; and hence it is, that none can be found to undertake the task.

This statute then of Henry the Eighth, quoted by your correspondent, is of no practical utility; and if it were, it applies only to a part of the profession, and the part least likely to injure the public through ignorance. For these reasons, therefore, I should approve of the intended application to parliament, if it were only for the means of enforcing the operation of the existing laws; but the object is far more extensive, as the bill will include every part of the profession, and will provide the means of securing its own operation. I can see no reason to conclude, with your correspondent, that by the passing of a comprehensive and operative bill, that "a very salutary existing law would be virtually abolished, and the public left at the mercy of any possessor of a purchased piece of parchment, called a diploma, without the possibility of redress." The new bill, on the contrary, instead of *repealing* any salutary existing law, will rouse it into activity from that sleep in which it has so long lain. I conclude, therefore, that instead of calling forth any "very formidable opposition to the bill from certain powerful public bodies," that those bodies will find "their ancient privileges maintained" and invigorated by it. I should, indeed, have very little expectation of any bill passing both Houses, that attempted to abolish the privileges of public bodies, which "they can *demonstrate to be of public utility.*"

That opposition, however, is to be expected, I cannot doubt; but from a very different quarter. The jealousy of some, the ignorance of others, and perhaps the avarice of a few, may excite opposition; but probably this will operate secretly, by applications and misrepresentations to individual members of parliament. If the bill be properly drawn, I cannot fear any formidable opposition from respectable public bodies.

If

If such a bill as that above supposed (for I am not a Member of the Lincolnshire Society), should be entertained, and sent to a Committee of the House of Commons, I believe it will be productive of good effects; because such instances of gross ignorance and incapacity will there be produced, as cannot fail to awaken public attention to the importance of the subject. A principle will be recognised, tending to show the great difference between trafficking in health and life, and the other articles of daily consumption. And if the whole object be not immediately attained, an important progress will, at least, be made towards it.

I am, &c.

AN EXTRA LICENTIATE.

Dec. 11, 1809.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

THE extensive circulation which your valuable Journal enjoys in this kingdom, and the universal avidity with which it is consulted, renders it the most proper channel for imparting any information to the medical practitioner, remotely resident from the metropolis. It is with this view I beg leave to communicate to you, a history of the beneficial effects of muriatic acid in fevers. I have profusely exhibited it in the hospital to which I am physician, and the result has been highly important and decisive.

The *antiseptic* and *febrifugous* effects of acids have been well known and acknowledged from the earliest period of medical history; the extent, however, of their powers, when copiously employed, seems to be but recently understood: and the superiority of *muriatic acid* over the rest of this class of medicines is a truth of still later discovery.

In fevers of the *typhoid* type, and in the varieties of *scarlatina*, this medicine appears to be most prominently beneficial; for whilst its antiseptic virtues correct and destroy that tendency to putrescency, so characteristic of these diseases, its tonic powers afford considerable support and vigor to the system; and in the *scarlatina anginosa*, the detergent quality of the acid renders it a remedy still more valuable.

The phenomena to which the copious exhibition of muriatic acid gives birth, are an immediate change in the strength and number of the arterial pulsations; the weak, frequent, and often intermittent beat, becomes stronger, slower, and more regular; the animal temperature sinks; the thirst is assuaged; the excretions become more regular and healthy, and the increased vigor of the system is indicated by the feelings expressed by the patient, and a character and air of liveliness, which the face and actions assume. In order, however, to insure results so beneficial and immediate, the muriatic acid must be exhibited in very large doses. I generally direct two drachms to be diluted with a quart of barley-water, and sweetened with honey, as the proper quantity for twenty-four hours: previous to its exhibition, the bowels should be always evacuated by a saline purge; for I think I have more than once observed, that where it was neglected, or only partially performed, the febrile symptoms have subsided with greater reluctance, and the *specific* powers of the acid have at first appeared equivocal. Its action on the bowels is dissimilar to that of other acids; it often represses diarrhœa by correcting the putrescent diathesis, which should be considered as the principal cause of *diarrhœa* in fevers.

To illustrate the truth of these effects, I have subjoined a few cases:—

Case I. *Scarlatina Anginosa.*

Elizabeth Garret, æt. 29, was admitted an in-patient of the Westminster-Hospital, on the 13th of July: it was the 4th day of fever, and the scarlet eruption was extremely vivid. She complained of great prostration of strength, thirst, head-ache; her deglutition was painful and distressing; her tongue was greatly furred; the animal temperature preternaturally exalted; and the pulse 136, with a weak beat. I immediately ordered her a purging-draft, composed of an *infusion of senna*, with *tartrate of potash*; after which I directed the exhibition of *muriatic acid*, in the proportion and manner above described. On the morning of the 14th, I found the pain of her head much relieved, the tongue less loaded, the thirst assuaged, the deglutition easier, and the pulse reduced to 128. In the evening of this day, all the febrile symptoms had still farther subsided, and the pulse was only 112. On the 16th, her throat was perfectly well; and, on the 18th, I found her

her destitute of every febrile symptom, her pulse being 84. I then ordered a decoction of the bark, which, with the assistance of change of air, soon re-established her health.

Case II. *Scarlatina Anginosa.*

Maria Holloway, æt. 9, was admitted into the Westminster-Hospital, on the 16th of July: she was suffering with every symptom of "*scarlatina anginosa.*" Her pulse was intermittent, and too frequent to be counted. I immediately directed the exhibition of muriatic acid, having first prescribed a saline evacuant. Her throat, in six hours, became much cleaner; the pulse was full, regular, and 130. In the course of four days, the febrile symptoms had subsided; her pulse having fallen, by regular and successive gradations, from 130 to 86 beats.

Case III. *Typhus.*

Ann Thompson, æt. 36, had been laboring under the most aggravated symptoms of typhus fever, when I saw her in a wretched and filthy apartment, in the closest part of Westminster. The weather was extremely warm; and every collateral circumstance induced me to believe that the hand of Death could not be averted, even by the most judicious and powerful interposition of the medical art. Her pulse could be scarcely felt; a *low muttering* delirium, with cold extremities, all argued the dejected state to which the vital energy of the body was reduced. I directed the room to be well ventilated, and prescribed, as in the former cases, a saline purge; after which, a quart of diluted acid was prepared for her common beverage. In less than twenty-four hours, her pulse became more distinct; the delirium appeared less continued, and her feet grew warm. On the following day, I ordered a pint of port wine to be given, and insisted upon the steady use of the acid. In a few days her pulse was 120, much stronger and regular; her tongue was less black, and every febrile symptom had decreased. By a rigid adherence to the copious exhibition of the acid, the tongue became perfectly clean: I then administered the bark, and soon had the satisfaction of seeing my patient rapidly recovering from the debilitated state, in which so malignant a fever had necessarily left her.

Mr. Sutherland, to whom I acknowledge myself indebted for much practical information on this subject, has

cured some hundred patients of "*typhus*" and "*scarlatina*," in St. Margaret's workhouse, by means of a copious exhibition of muriatic acid, in which no wine was administered.

I remain, &c.

JOHN AYRTON PARIS.

Westminster, Dec. 7, 1809.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

LATE in the evening of the 31st of October, I was requested to visit Mr. A. of this city, who was seized with a violent pain in the region of his liver: the above was the message of the servant. This gentleman had been some time in a warm climate, and had suffered much from a liver complaint; and, since his return, very frequently endured severe cramp-like pains from that cause, which very naturally led him to believe, that the present pain was of the same nature with the past, and caused by the same means. In order to ease this uneasiness, he took liberally of brandy, as he always found it give him instantaneous relief: but, on this occasion, he was disappointed. As the pain increased, it alarmed his wife; and, in consequence, I was applied to. When I first saw him, he complained of a violent acute pain on the right side of his bowels, which increased and diminished by fits; but had left that side, he said, since he drank the brandy, and gone to the left; and, at times, the pain appeared to occupy the whole abdomen. I could gain no satisfactory information when his bowels were evacuated; but I knew they were generally constipated, which naturally arose from the imperfect action of the liver, and the bile getting access to the stomach, instead of finding its way into the intestines by its own common duct. His pulse was small, hard, and frequent, 120 in a minute. Considering that there was obstruction — though no particular evidence being present — calomel and cathartic extract were given, with the view of acting smartly on the bowels; and a considerable quantity of blood taken from the arm—warm fomentations to the whole abdomen. Notwithstanding this treatment, the pain increased with considerable

siderable tension, especially on that part corresponding with the sigmoid flexure of the colon. A cathartic injection was thrown per anum; and a cathartic mixture, composed of infus. sennæ ℥vß; tinct. sennæ ℥ß; magnes. sulphas ℥j. Two spoonfuls every hour were ordered, till evacuations should be produced; but these remedies only served to aggravate the disease. His strength began to fail, and profuse perspiration poured from every pore. In this state I felt satisfied he could not long remain alive, therefore further advice was called in; and Dr. Murray, an able physician of this city, did me the honour to say, that I had pursued every step that could be taken, which must be continued, till the desired end of removing the constipation was effected. All the means of resolution were persisted in with unabated zeal, but all to no purpose; as the disease baffled every endeavour which judgment or prudence could suggest; and we were witnesses to the defeat of all our projects, by the untimely fate of our patient, who was cut off in less than twenty-four hours from the first attack.

Appearances on Dissection.

After making an incision through the skin and cellular membrane, and clearing away the abdominal muscles, the first morbid appearance presenting itself was slight peritoneal inflammation, particularly on the left side, the seat of the pain. The peritoneum being divided, all present were struck with the brilliant appearance (if I may be allowed the expression) the whole surface of the intestines presented, of a fine crimson colour; but the transverse arch of the colon, the sigmoid flexure, and that portion of the ileum terminating in the caput coli, bore strong marks of violent inflammation; as they were most particularly red, and some of the vessels distended, and very large. A considerable quantity of coagulable lymph was thrown out upon these parts so highly inflamed, with here and there a few spots of extravasated blood; which was chiefly confined to about three inches of the sigmoid flexure of the colon. The inferior portion of the duodenum contained a considerable quantity of indurated matter; the rectum, also, was full of hard fæces; but no other part of the intestines. The cavity of the abdomen contained about three pints of a yellow limpid fluid; the liver bore evident marks of disease, being very dark, of a deep chocolate colour, firm in texture, and much enlarged.

The remaining abdominal viscera were all natural; the stomach empty, and externally exhibited no morbid appearance. The vesica fellis was distended with gall; and the urinary bladder, by some accident, was ruptured: consequently, had not an opportunity of examining it. As this gentleman had no thoracic complaint, we did not conceive it necessary to open the chest.

Remarks.

The objects most worthy notice were: 1. The sudden attack of pain, and the transition of that pain from the right to the left side. 2. The rapid progress and extent of inflammation; and, 3. The nature of the obstruction.

When I reflect that my patient considered himself as well as usual when at supper with his family, and in a moment to be seized with such sudden violent pain, and that pain to shift to the opposite side, and produce such active inflammation as to destroy life, at first sight appears strange; but when I reflect also, that this gentleman laboured under liver complaint, and suffered frequent attacks of violent pain, which he never failed to relieve with spirits, and that his bowels were always in a confined state, wonder ceases. I conceive the first pain that he felt was in the pylorus, probably caused by the increased pressure made by a distended stomach, upon the already distended and obstructed duodenum. This pain was relieved by the spirits which he took liberally; and caused the morbid action to be determined at a greater distance from the obstruction.

2. The rapid progress made by the inflammation, and its extensive influence, may, in a measure, be satisfactorily accounted for. I conceive the habit was saturated with inflammatory materials, and only wanted a principal agent, such as partial obstruction, &c. to commence the fatal work; in which I am more confirmed, by the appearance of the liver carrying its own evidence, of having been acted upon by the stimulus of ardent spirits.

3. The nature of the obstruction certainly was no more than a secondary cause of difficulty; this is sufficiently clear, I think, from the stomach not sympathising with the general inflammatory action, as it kept every thing upon it which was offered. I am of opinion, that the reason why none of the very active means employed, did not pass the alimentary canal, was, that the violence of the inflammatory action prevented the natural peristaltic motion

motion of the intestines. If we do not admit this, and if the obstruction in the duodenum was the cause of all the difficulty, would not my patient have felt constant pain in that part; and would not the stomach have sympathised with, and rejected every remedy offered to remove that obstruction: but we find the reverse of the above to have taken place. As the pain being relieved, which was very evidently about the situation of the obstruction, and that pain attacking the sigmoid flexure of the colon, a considerable distance from the duodenum, which explains why the stomach remained so quiet, even until death; which leaves no doubt on my mind, as to the nature of the disease and cause of dissolution, viz. violent and extensive inflammation, excited by the constant use of ardent spirits.

I am, &c.

G. F. EDWARDS,
Member of the Royal College of Surgeons, &c. London.

Bath, Dec. 1809.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

A Singular morbid appearance of the crystaline cornea falling under my care, induced me to make a drawing, which delineates the disease as accurately as the inflamed state of the eye would permit; shewing that it is possible, in a short time, for that part of the organ to be destroyed by ulceration, — I have herewith transmitted the same, with the history of the case, for insertion in your valuable Journal.

Mrs. F. whose occupation is that of nursing females after their accouchement, was seized with sensations like dust or other extraneous substances in her left eye, which were soon followed by considerable pain, heat, and inflammation, with a discharge of matter, but in no material quantity. These symptoms increased, till at length the eye became so painful, as to oblige her to quit the situation she then held, and return home. At the end of five days from the commencement of the attack, she experienced darting pains through the head and globe of the eye, with swelling, tension, and a sense of enlarged feel,

Every

Every thing prescribed by her friends and neighbours was tried without success, which determined her to get other advice. Unfortunately, she applied to a person whose knowledge of the eye and whose medical skill were not any ways superior to those already consulted. A quantity of medicines had been taken, but no remedy applied to the affected part, consequently the disease made rapid strides, and proved to this poor woman that she had been trifled with. As she found something escape from her eye like jelly, it alarmed her, and she applied to me.

On examination, the first object which caught my attention was the iris protruding through an aperture in the crystaline cornea, evidently caused by ulceration, produced in all probability by continued and neglected inflammation. The tunica sclerotica and conjunctiva were highly inflamed; and by reference to the drawing, blood-vessels may be seen running into the cornea, a triangular portion of which was quite opake, and bore marks of ulceration through its whole substance. The pupil was contracted towards this opacity, and was scarcely sensible to the glare of a strong light. The remaining portion of the cornea was in a state of inflammation, of a red brown colour. The aqueous humour had been discharged some days previous to the vitreous, evidently proving that as the ulceration proceeded, the opening in the cornea became larger; so large, as to permit the escape of a part of the vitreous humour; but I could not ascertain that the crystaline had been forced out by the action of the muscles, because if this had been the case, my patient could not have discovered light, and the membranes would have sunk to the bottom of the orbit, and no art could have restored them; but this glare was only such in proportion to the quantity of humours that had escaped; and I am of opinion, that only a small part of the vitreous humour had been forced out.

In this state I found the poor woman, enduring excruciating pains in her head, violent inflammation of the coat of the eye, loss of sleep, great heat and thirst, accompanied with a white dry tongue, and pulse 120 in a minute. Leeches were applied to the temple, and a few ounces of blood taken from the arm; warm fomentations of decoct. pap. alb. constantly applied; a cathartic purge, and small doses of opium after the bowels were evacuated. Some of the large turgid blood vessels I divided with scissars; and in two days this treatment was the means of giving very considerable relief: the inflammation abated,

the

the discharge lessened, the pain in a great measure ceased, sleep returned, and fever diminished. The same plan was persisted in, and a collyrium, composed of Aq. ammon. a. ʒij. aq. rosæ ʒjß. extr. Saturni gtt. ij. tinct. opii vin. gtt. xv. was applied to the inflamed surface by means of a tea spoon. This collyrium induced the vessels to contract to their natural size, and by its anodyne and cooling properties gave very considerable relief, so much so, that she wished to apply it oftener than necessary. In a few days the above was changed for the subsequent. R. Aq. zinci. vit. e camph. ʒij. aq. flor. samb. ℥ij. misce; and by steadily pursuing it with all the other plans of depletion, I am happy to say that my patient has regained more than reasonably might have been expected.

I am aware that it may be advanced by some, that the cornea burst from over distention, effected by effused matter within the cavity of the eye, or by some other disease, such as hydrophthalmia, staphyloma, &c. This I shall deny as being the fact, because evident marks of ulceration acting externally are now visible; and for this obvious reason, viz. that the aqueous humour escaped some days previous to the vitreous, through one or more perforations made by the matter of ulcer. It appears from the whole, that inflammation was the first cause, which was rapidly succeeded by ulceration and destruction of a portion of the cornea. The inflammatory action effected, no doubt, the whole of the membranes, and destroyed the sensibility of the retina, which was one cause of the contraction of the pupil.*

I am, &c.

G. F. EDWARDS,

Member of the Royal College of Surgeons, London.

Bath, Dec. 12, 1809.

Account of a diseased Testicle, successfully removed at an advanced Stage; by Mr. JOHN TAUNTON, Surgeon to the City and Finsbury Dispensaries, &c.

S. S. æt. 35, applied to me for advice June 9, 1809. He had perceived a small swelling at the bottom of the scrotum about twenty months previous to my seeing him; this

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* A coloured engraving of this case will be given in a future Number of this Volume.

this increased gradually, but was not attended with pain till last winter, when the cold affected it considerably. The tumour was of a pyriform figure, having a smooth surface, elastic, and appearing to contain a fluid. The spermatic cord, where it entered the ring, was perfectly free from disease, but the integuments covering the tumour were much inflamed and very painful. He was of a spare habit of body. A fomentation of poppies was directed, with internal remedies varied according to circumstances.

June 10. I proposed puncturing the tumour with a view to ascertain the state of the testicle, but under the full impression that castration would be necessary. On introducing the trocar, only about half a table spoonful of a brownish glutinous liquid passed the canula. This operation did not give more pain than was occasioned by the increased sensibility of the integuments. The remedies were continued, with the external use of aq. litharg. acet. comp.

11th. This lotion had procured much more ease than the poppy fomentation, by removing the local inflammation. In consultation with Mr. Bartlett, it was now agreed that castration was the only remedy. This was performed by placing the patient on a table, and including in the incision a large portion of integuments on the anterior and inferior part of the tumour. The external pudendal artery was the only vessel which required to be tied till the whole was removed. The spermatic process was tied by separating the vas differens, and passing very firmly round the remaining part a ligature, which did not produce much pain, nor was any felt on dividing it. About eight vessels required to be taken up, and these principally from the septum scroti. The operation occupied much time, on account of the number of vessels taken up, and also from the great danger of wounding the skin and septum scroti in so extensive a dissection. A great quantity of blood was lost during the operation, but the pulse remained strong and regular, not exceeding 80 in the minute. The wound was dressed with four sutures, lint, and adhesive plaster. The patient bore the operation well.

At 3 h. P. M. four hours after the operation, the pulse was 120, weak, and irregular; the countenance fallen; he complained of sickness, and smarting pains in the part. Much blood had been lost, but the hæmorrhage was apparently stopped. He could not turn on the side; and lying on his back distressed him much. From the great debility

bility I did not think proper to change the position of his body, but ordered cloths, wet with the aqua litharg. acet. comp. to be applied over the dressing to the scrotum.

At 7 P. M. pulse 130; face and lips pale from the loss of blood; complained much of sickness; the lotion had eased the pain. On removing the cloths and coagulum, it appeared there had been a trifling hæmorrhage since the last visit, but which was now completely stopped. — R. Aq. menth. sat. aq. ammon. acet. aa. cochl. duo sextis horis sumenda. Lotion repeated.

June 12. At 5 h. A. M. the countenance was much improved; pulse 100, and stronger; he complained of having had but little rest during the night, and that the medicine produced sickness. He now took an infusion of cascarilla with nitrous acid, and the lotion repeated.

4 P. M. Much better; pulse 94; free from pain, making water easily, but no alvine evacuation. The wound looked well at the upper part, where the lint was removed; the lotion contributed greatly to his ease; he had obtained some sleep; was in a gentle perspiration; and the medicine agreed with the stomach.

The tumour weighed upwards of three pounds; there was contained in the tunica vaginalis, at the upper part, about six ounces of a straw-coloured fluid, which coagulated on the application of heat; the bulk of the tumour was formed by an enlargement of the body of the testicle, which was composed of a reddish brown substance of a soft pulp-like structure, much resembling the fungus hematoides of Hay. The centre of the testicle was most pulpy, but nothing appeared like hydatids or separate cysts; neither was it produced by an effusion of blood, but evidently a morbid growth of the part. In this case, the water contained in the tunica vaginalis, at the upper part, gave an elastic feel and an undulating motion to every part of the tumour.

June 13. Some smarting pain had been experienced in the wound, in consequence of the lotion being omitted from the inattention of the patient or those about him; but the wound looked well; pulse 90, which, on rising up in bed, increased suddenly to 120, rather irregular, but moderately full. He had two evacuations by stool on the preceding evening; the medicine agreed with the stomach, and he was in every respect going on well.

14. Felt somewhat depressed, but easy with the application of the lotion to the part; pulse 80, but on rising up

up in bed increased to about 96. The wound looked well, and the appetite began to return. Medicine repeated.

June 15 and 16. Pulse 72; free from pain; one of the ligatures was removed, and the wound dressed with the ung. hydr. nitrico-oxydi. Medicine repeated.

17, 18, 19. Another ligature was removed; suppuration had taken place to a small extent upon the chord at the part where it was tied. The patient much stronger, and occasionally sat up in bed. Medicine repeated.

20 and 21. Rather low; removed all the ligatures except the one on the chord. Medicine repeated.

22, 23. Removed the ligature on the chord, and carried a strap of adhesive plaster around the scrotum to keep the parts in contact. The dressings were applied over the whole.

29. The dressings continued, and the patient walked out daily.

He is at this time in a perfect state of health, and follows his accustomed employment.

On the first examination of this patient, the integuments had a livid appearance, similar to that which precedes gangrene; so much so, that one professional gentleman, to whom he applied the day before, considered it a lost case, and would not attend him. This local inflammation was relieved more by cold than by warm applications, which were first used. The subsequent pain and inflammation of the wound were invariably mitigated to an extent I have rarely seen by the solution of lead.

The extreme debility of this patient at the time I first visited him, rendered the issue of the operation doubtful; but as the only mode of affording him even a chance of life, it was preferred with his full approbation. Altho' I should certainly prefer operating at an early period of the disease, in those cases where an operation is absolutely necessary, yet I think the patient ought not to be deserted even at a very late period, from the apprehension of failure and bringing the operation into disrepute. The above conclusion is fully warranted by the result of some cases formerly published.

Greville Street, Hatton Garden, Nov. 22, 1809.

ON

ON MEDICAL REFORM.

I HAVE been an attentive, and not an unconcerned Observer, of what had been written and attempted on Medical Reform, long before the question was first agitated by the Lincolnshire Benevolent Medical Society. Not that I should have now taken up my pen, had I not perceived that the object of the Reformers, and proceedings adopted, have been completely mistaken in several instances by one Writer, in the preceding Number of the Journal, who calls himself quaintly, and to me I confess unintelligibly, "An Enemy to the Quackery of Corporate Bodies."

In Dr. Harrison's last circular Letter, he remarks, that "Quacks, aware of their ignorance and misdeeds, artfully conceal them, by compounding and dipensing their own drugs." Now, because Apothecaries happen to dispense medicine, this Writer infers, that an useful and highly meritorious class of Practitioners are intended to be confounded, and of course stigmatised, in common with empirical Pretenders. Had he taken the trouble to read the whole Letter, and compare it with the other circular Addresses, he would have seen that nothing of the kind was ever meant. The regular establishment, viz. Physicians, Surgeons, Apothecaries, and Men-Midwives, are every-where carefully distinguished from Quacks, or uneducated Pretenders. I may further observe, that during Dr. Harrison's late visit to London, I had an opportunity of examining the Bill; and I can venture to assure the Profession, that no *practical* restraints are laid upon Apothecaries, or other Members of the Faculty. The Bill requires a suitable education for the different orders of the Profession, but does not attempt to limit their exertions. In small towns, and among the poor, Apothecaries must continue to undertake every branch of the healing-art; or the sick will, in many cases, be wholly deprived of medical aid. Any reform, which professes to confine the practice of the different orders of the Profession by legal enactments, would, in my opinion, be highly injurious to the community. I am happy, therefore, in being able to assert, of my own knowledge, that nothing of the kind is attempted in the Bill; and I think the ingenious and learned Editors of the Medical and Physical Journal can confirm my statement; since, unless I am misinformed, the Bill has been submitted to their consideration, in common

mon with many others. The same Writer does not hesitate to assert, that the attainments of the Regular Faculty are much greater, and the number of empirical pretenders much less, than formerly. I am ready to admit that Medical Men, of great learning and superior professional endowments, are to be met with in all parts of the empire; but I am far from believing that the great body of the Faculty are as well instructed in classical or medical learning, as their immediate predecessors. Nor do I think that their emoluments enable them to maintain their former style of living, or that they are now placed by others in their proper rank. The remark of Viator is, I believe, strictly true; that Physicians are now placed on the list of precedence below Naval Lieutenants. Formerly Doctors, in all the Faculties, held a distinguished and an equal situation. In Divinity and Law, the old rank is carefully preserved. Why has a change, so degrading to the medical character, been suffered by the Fraternity; for as one class sinks, the others must proportionally descend? It is owing, as I conceive, to the disorganised state of the Profession; which, by suffering half-educated and illiterate Practisers to exercise the healing-art, has forfeited the pretensions of Medical Men to the first rank in human estimation.

Not a century ago Physicians, and Surgeon-Apothecaries, stood on an equality with Barristers and Attornies. But while Lawyers, in consequence of judicious regulations, have elevated their Members into Prime-Ministers, Chancellors of Universities, Senators, and Personages, of importance every-where—Medical Men, for want of union, have sunk in an equal degree. I have lived long enough in the world to mix with two generations; and such is the opinion I have formed from personal observation. With respect to Quacks, he asserts, that few of them are to be found out of London. Where this Gentleman has gained his information, is unknown to me. We are certainly completely at variance on this point. It has been my lot to visit many parts of the empire; and I have been led to believe, that this mischievous class is not only very abundant in country towns and villages, but that they are increasing in numbers and audacity. It has been stated on calculation, by the Lincolnshire Benevolent Medical Society, that Quacks exceed the regular Faculty, in the proportion of nine to one *. Whether the same inequality obtains

* See Dr. Harrison's Essay on the Ineffective State of Medical Practice.

obtains in other counties, may be doubtful. The question for consideration is simply, Whether it be for the interest of mankind, that Quacks should be tolerated or suppressed? And, 2dly, Whether the regular establishment ought to be subjected to rule, or left, as formerly, to the caprice of individuals.

The British is, I believe, the only Government in Europe, where Medical Men are suffered to enter upon their functions, without being previously licensed. It may be answered, that since the British are greatly superior to the continental Faculty, it will be to the interest of society to leave them to themselves. Admitting this boasted superiority, which is, however, very questionable, does it follow that they would not become more excellent, by obliging them to be suitably educated and examined.

The advantages obtained in the other learned Faculties, by regulations lately imposed, are to me a convincing proof, that, by similar means, the curative art would be greatly improved to the Profession and their employers. Under this impression, I am desirous to see the Bill carried into effect; and hope, before the winter business commences, that the pecuniary subscriptions will be sufficiently liberal, to meet the heavy expenses in Parliament.

Dr. Harrison is, I perceive, called upon by the same Writer, to publish the whole Bill for general information. This Gentleman is not perhaps aware, that such proceeding is unparliamentary, and would not be approved in that August Assembly.

After the second reading in the House of Commons, all Bills are ordered to be printed for distribution; and, at a future period, are taken into consideration by a Committee. In this interval, the Faculty will have time to examine the different parts, and to propose alterations by means of their representatives. I trust a copy of the Bill will be published in the Medical and Physical Journal, for general information.

The charge of Sir James Mansfield, and the legal opinion of Mr. Sergeant Williams, are most important documents, deserving the particular attention of Medical Corporations, and of all Country Practisers.

We are informed by the Chief Justice, contrary to a received opinion, that Diplomas, in themselves, confer no title to exercise Medicine; and, by the learned Serjeant, that the London College of Physicians possess no

authority to controul Medical Practice, beyond seven miles from London.

In this dilemma, what is to be done? It is abundantly evident, that the great body of Doctors will never voluntarily apply for licenses to the College of Physicians; and it is equally clear, that so long as some Universities continue to sell their honors for money, regardless of other considerations, a large majority of provincial Physicians will be unequal to their important duties.

The obvious inference to be drawn from the above premises, as it strikes my mind, is, that a legal enactment is much wanted, to secure Invalids from the most dangerous Pretenders; from men, who, under the sanction of a purchased Diploma, can usurp the first rank and greatest responsibility in the Profession, however ignorant and undeserving. The College of Surgeons being founded on Charter, can only examine such as come voluntarily before them; hence few country Practisers think of applying to them for admission.

No Country Apothecaries enter into the Apothecaries' Company; consequently, a very numerous and highly meritorious part of the Profession, engage in all its branches, without exhibiting any proof of competence. No thinking person can approve of this laxity, which, by placing the able and the ignorant upon an equality, weakens the stimulus to meritorious exertion.

Of all descriptions in the commonwealth, Apothecaries give up the most time gratuitously; and are most unseasonably disturbed by their inconsiderate and selfish employers. When the Act is obtained, they will, of course, charge something for attendance and for consultations, in addition to the drugs had and used; by which means they will materially increase their emoluments, and be less intruded upon by the Public.

As soon as the influx of empirical, and other incompetent Persons, is prevented, by suitable restraints, the benefits will be immediately and strongly felt by all the Disciples of Æsculapius; and by none more than the Surgeon-Apothecary. He will daily rise in respectability. From being an inmate of the steward's-room, or the squire's humble companion, in the absence of other guests, he may look forward to become the familiar associate of his most fashionable patients.

Before concluding, it will be proper to notice the intended provisions in the Bill concerning Graduates; because it was observed by a Correspondent, in the last Journal,

nal, that all persons possessed of a Diploma will be at liberty, according to the provisions of the new Bill, to practise as Physicians; but he forgot that the Diploma is, in future, to be coupled "in all cases with strict examinations;" and what is still more important, "the names, with the titles of the Faculty, and the University where the Diploma was obtained, are to be annually published in a register."

Under these several checks, I think few would venture hereafter to practise with an inferior Diploma; nor will any Medical Candidate be suffered to present himself before the examining boards, until he has passed through a suitable course of professional study.

It is by these mild and simple means that a Reform, useful to the people and honorable to the Faculty, is proposed to be established; and to its speedy accomplishment I sincerely say, Amen.

Dec. 14, 1809.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

AS there are many respectable practitioners who deal extensively in retail articles of Pharmacy, I request, through the medium of your useful and widely circulated Publication, to give this public caution to the profession, that several druggists, and other vendors of medicines, have been served, at the suit of the attorney-general and Stamp-Office, with exchequer writs, for selling soda-water without stamps.

It will also be prudent for those who retail lozenges, to be very cautious how they sell lozenges of any description, whether named, or not named, in the schedule of the Medicine Act of 1803, without stamps.

I am, &c.

W. CHAMBERLAINE.

29, *Aylesbury-street, Clerkenwell,*
Nov. 27, 1809.

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

A Treatise on Champignons. By M. PAULET, M. D.

[NOT having been able to procure this invaluable work, we offer the following Report, presented by Desfontaines to the National Institute.]

The work in question is divided into two parts. In the first, the author gives a methodical analysis of every thing that has been published on the subject of champignons, from the time of Theophrastus to the present day: nor do we recollect any writer that has escaped his notice. To this part are added critical observations on the nomenclature, synonomy and the salutary or deleterious qualities ascribed to certain species of champignons.

Among those whose writings stand in the highest estimation in this branch of science, M. Paulet distinguishes L'Ecluse, Jean Bauhin, Ray, Michel, Tournefort, Vaillant, Linnæus, Haller, Schœffer, Bulliard, Batsch, and M. Persoon; the last of whom published a new classification of champignons a few years ago.

The second part of the work is divided into two chapters. The first containing general observations, and the second the description of the species; classed and arranged in an appropriate manner.

Champignons are described as pulpy, fleshy, coriaceous; sometimes resembling cotton, sometimes woody, or like cork, without leaves, petals, stamina, or pistils. On chemical analysis, their principles are analogous to those of animal substances; but they seem to be vegetables by their manner of growing, their reproduction, the places where they vegetate; and, finally, by their internal organisation. According to M. Paulet, they have a great affinity to the algæ; and, in his opinion, they form the last link which joins the animal to the vegetable kingdom.

Champignons grow in most abundance in temperate climates, and in woody countries. It appears that Europe produces them in greater plenty, than any other quarter of the globe. The most numerous species have their stalks terminated by an horizontal top, resembling a parasol; others are surmounted with a skin, plaited in different directions. Several have a bare stalk, and some have a globular form; such as the lycoperdons, or furze balls (*vesses de coup*).

In taste, smell, and colour, they differ considerably from each other.

other. A great number decay very soon; others continue longer on their stalks. Several are saturated with water, or filled with sap of various colours, and of different properties.

Champignons, when transplanted, never succeed. They perish in an instant; and great numbers are reduced to a black liquor, or rather into a fluid, resembling a *bouillie* of a fetid smell.

The soils and foreign bodies on which they grow, have a considerable influence on their consistence; but M. Paulet asserts very positively, in opposition to an opinion generally adopted, that the soil and climate do not, in the least, affect their poisonous or salutary effects.

The reproduction of champignons has long been a problem. Modern authors have discovered seeds in them resembling dust, and which are placed either on laminæ or appendices in particular boxes, or rather in the interior of the champignon itself; the skin of which is torn, in order to let them pass out. Their form is round or oval, and they are frequently projected out, as if by a spring. These seeds are connected together in a little net, as in the lycoperdons; or by a glutinous substance, as in what is called the white of the mushroom. They fall on the grass, or on the ground; and the author thinks that they are not altered when taken into the stomachs of animals, but are voided with the excrements in a round state.

We may easily see these seeds by suspending a champignon, in autumn, close to a mirror. The surface of the glass is soon tarnished and covered with a dust, which is the seed. We must here take the liberty to remark, that this opinion respecting the seed of champignons, does not seem completely unobjectionable.

M. Paulet assures us, that the white of the champignon, before germinating, is heated and swelled, and undergoes a perceptible fermentation.

The two chief causes of the developement of champignons, are heat and humidity combined: spring and autumn are the two seasons in which these requisites are prevalent in France. If summer and winter happen to be soft and rainy, they grow in these seasons also.

The most proper substances for favoring their developement, are vegetable matters in a state of decomposition; and animal matters combined with them, such as dung. When champignons grow on the trunks of trees, they indicate a decay in the wood.

The author afterwards treats of the signs, by which we may distinguish salutary from poisonous champignons; and points out the best method of counteracting the effects of those which are deleterious, when they have been taken into the stomach.

Almost all those of good quality are of a white, dry, firm texture, and grow in open places exposed to the sun. Those which are deleterious, grow under the shade of woods; they are less compact, most of them indeed are of a soft consistence; their surface is humid, and often viscous. Worms, snails, and other

animals, scarcely ever attack any champignons, but those which are salutary to human beings. Those may be regarded as suspicious that are heavy, and of a variegated colour externally; as also those which change colour when cut or broken. The same may be said of the species with bulbous stalks, proceeding from an envelope; and of those which grow at the foot of certain trees, particularly the olive, elder, yew, elm, or fig-trees. The autumnal months produce more poisonous champignons than the spring.

Champignons may be injurious in several different ways; in some cases, on account of their coriaceous texture; in others, on account of their cottony or spongy texture, which imbibe the juices of the stomach, and swells like a spunge; and in others, from their having undergone some alteration, as the common champignon, for instance, when it becomes black. The other kinds used, the lycoperdons, or furze-balls, when they have attained their state of maturity; i. e. when the pulp assumes a greyish colour, are equally prejudicial. Lastly, there are great numbers which contain a very deleterious resinous principle; such as the false orange, the green orange, &c. as they are called in France.

Several among the poisonous champignons do not produce their effects until ten or twelve hours after having been introduced into the stomach. These are the most dangerous of all; and the remedies which we may employ with success in other circumstances, are in these fruitless, and even frequently injurious.

From a great number of experiments made on animals and men, poisoned by champignons, M. Paulet asserts, that vitriolic ether sensibly diminishes the activity of the poison, and prolongs life a little; but that the most certain remedies are evacuants, particularly emetics, if given soon after the champignons have been received into the stomach. Oil, theriaca, milk, spirits, vinegar, and salt water, according to M. Paulet, have no effect. Oil and milk, however, may be employed as emollients, when the emetic has emptied the stomach.

After these general considerations, the author gives, in a second chapter, a new classification of champignons, according to their natural resemblance. He divides them into four Classes: the first comprehends those which have a hat or parasol, becoming thinner towards the edges. The second, those with a membranous skin, and of equal thickness throughout their whole extent; folded and plaited in different directions, like morels. In the third class are comprehended the fingered (digités) champignons, and those without hats. The fourth contains the globular champignons, the seeds of which are contained in the interior, such as the lycoperdons.

These classes are divided into orders, the orders into genera, and the genera into families, which comprehend the species. To these M. Paulet has given French names, and described them with great precision. To each of the descriptions are added numerous experiments made on animals, with a view to ascertain the deleterious effects

effects of various kinds of champignons; and to discover the best means of destroying or diminishing their influence. This part of the work is particularly interesting.

The author recounts a number of accidents from poisoned champignons in different countries. These species are much more numerous than is generally supposed. It would be very desirable to disseminate, as widely as possible, all the information we possess, with respect to the distinctive characters of good or bad champignons. In this respect the work is invaluable; particularly as it is accompanied by coloured engravings, extremely well executed. M. Paulet has been, from his infancy, attached to the study of this particular department in botany; and we trust that he will continue his inquiries on the subject.

Facts establishing the Efficacy of the Opiate Friction in Spasmodic and Febrile Diseases. Also, Outlines of an Attempt to investigate the Nature, Causes, and Method of Cure, of Hydrophobia and Tetanus. Republished from the London Medical and Physical, and the Edinburgh Medical and Surgical, Journals. To which are added, Cases and Remarks, not before published. By MICHAEL WARD, late Surgeon to the Manchester Infirmary, Dispensary, &c. 8vo. pp. 208.

THE candid Author of this valuable Production informs us, that he was first directed to try the effect of opiate frictions, by the account of a letter on the external use of opium, from Dr. Chiarugi, of Florence, contained in Duncan's Annals of Medicine for 1798; of which the following is a transcript:—

"In this letter the observations contained in the preceding article*, are partly contradicted and partly confirmed. The author, who is well known, from his very elaborate work on mental derangement, is chief Physician to the great Hospital of St. Boniface, which is appropriated entirely to maniacs. In treating their diseases, Dr. Chiarenti's discovery promised to be of great importance; and our author immediately resolved to carry it into practice. He was not, however, ignorant of the effects already observed by many practitioners from the external exhibition of this drug; and was persuaded that its action on the nervous system might be obtained, though not introduced into the stomach, without being dissolved in the gastric fluid, from the mere emanation of its volatile aroma. He, therefore, resolved to try it in the form of a simple ointment, made by incorporating a drachm of finely powdered opium with a pound of axunge. An ounce of

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* "A Discourse on the Mode of acting on the Human Body, by means of Frictions made with Saliva and other Animal Fluids, and the various Substances commonly given internally. Recited in the University of Pavia. By Cit. V. L. Brera, M. D. Professor of Medicine, Clinical Lecturer and Surgeon to the National Legion of Pavia." 3d Edit. 1796.

this ointment, containing six grains of opium, procured sleep to a restless boy, who had been an ideot from his birth. Its effects were still more surprising on a peasant, in the heighth of a paroxysm of the most furious mania. *These frictions always rendered him calm, and sometimes threw him into a state of lethargic stupor. In this case a complete cure was at last effected.* It was exhibited, in the same manner, to twelve other persons, affected with mental or re-active madness; and from his observations on them he concludes, that although the sleep produced was not always proportionate, either in intensity or duration, to the dose of the opium; *yet a state of calmness constantly succeeded, sooner or later; and five of them have been cured, without the use of any other remedy.* Certain of the efficacy of the opiate ointment, he tried frictions of laudanum, diluted with a little alcohol; and found them equally successful.

"These experiments being all made on patients who were tied, there could not be any suspicion that the opium was swallowed. Dr. Chiarugi thinks that they fully establish the fact, that opium, however applied to the skin, penetrates it; and exerts its action diffusively on the nervous system, without any necessity for its being mixed with gastric juice, provided it be sufficiently divided or diluted. Although, therefore, our author does not agree with Dr. Chiarenti in all his opinions, he confesses the utmost obligations to him, for having led him to a practice, from which he has derived much benefit in a disease, in which it is so difficult to exhibit medicines internally."

A considerable number of papers follow, extracted from our Journal, being communications from the Author concerning the efficacy of opiate frictions in nervous head-ach, chronic rheumatism, maniacal delirium, a delirium occurring under a fractured leg, chronic dysury, and calculus; typhus fever, cases of gangrene, symptomatic hiccough, case of vomiting and diarrhœa accompanied with hiccough; cholera morbus, hooping-cough, trismus traumaticus, &c.

After this, the Author enters on the subject of hydrophobia and tetanus. Some introductory remarks are premised, the leading articles of which have already also appeared in our Journal. The observations relative to the necessity of theory, and the authorities produced in its favor, are very judicious and unexceptionable. We trust, no one will dispute the absolute necessity of being somewhat prepared for an event so sudden, and hitherto so uncontrolable, as rabies canina. We transcribe the following passage, on account of the long note appended to it; which has not, we believe, hitherto appeared, but shows, at a single glance, the style, manner, and object of the Author: —

"*In hydrophobia, the spasmodic and retrograde motions are principally confined to the pharynx, the œsophagus, the larynx, the epiglottis, the tongue, and the muscles employed in deglutition;* (the stomach, though an involuntary muscle, is often affected in the same

same manner); *hence the characteristic symptom of the disease, horror at the approach of liquids or food; hence also the inefficacy and fatal consequences of administering medicines internally, and the cruelty of urging the patient to swallow liquids. There are also convulsive motions of the heart and arteries, evinced by the violent palpitations which often take place. At the same time the voluntary muscles belonging to the chest and extremities are variously and violently agitated and convulsed* (the nervous power in them being abundant, and its action retrograde, but less so than in spasm; the energy of the brain seems also, in some cases, to be increased). *In some instances, there is merely an increased action of the voluntary muscles; in others, the latter are affected, partially or generally, with spasmodic or retrograde action, as in tetanus; all these circumstances contributing to produce that wonderful and horrible variety observable in the disease* *."

On

* " If the delineation which is here given of the nature, causes, and phenomena, of hydrophobia, be in any tolerable degree correct, and I have taken great pains to render it so, we need look no farther for a solution of the long agitated question respecting *the uniform failure* of the treatment it has undergone, and the consequent mortality of the disease. The reason is, (as I have long since observed) " the plan which has been adopted is altogether improper." It is not to any particular medicine that I object, but to medicines generally, *given by the mouth*. The fact is, we have had recourse to means, or, what amounts to the same thing, *to methods of administering those means*, which it is impossible in the nature of things should ever succeed, *on account of the sensibility, irritability, and mobility of the pharynx und æsophagus, and the spasmodic and retrograde motions with which they are, in ninety-nine cases out of a hundred, affected*. Hence the necessity which I have long ago and repeatedly insisted upon, " Of an entire change in our manner of proceeding, before any progress can be made in the methodus medendi;" and the propriety " Of avoiding every thing which can tend to agitate and alarm, excite uneasy sensations, or bring on a return of the spasms." In conformity to this intention, instead of importuning the unfortunate sufferer to swallow medicines, or liquids, of which he has so great a dread, clysters should be given every four or five hours to support the strength, consisting of good broth, milk, &c. with from 30 to 40 drops of laudanum in each. And however long the present *irritating* plans of treatment may be continued, *to these, and others of a corresponding nature, we must, sooner or later, resort*. This, however, will, in all probability, be a work of time. Opinions of a contrary kind, which have been so long in use, do not immediately lose their influence. Besides, to propose to relinquish the *internal* use of medicines, and to substitute *external* remedies in their stead *(for it will be useless to compromise the matter by uniting the two plans, which seems to be the prevailing mode at present)*; and to call in question the propriety of the very common, but injudicious practice of inviting, *and even soliciting*, this pitiable class of patients to take medicines, drink water, &c. (which is infinitely more tantalising, and not more humane, than to propose a walk to a bed-ridden paralytic); or what is equally shocking to the feelings, of pouring water from one vessel to another in the same or an adjoining room, (when the *surprize* of the spectators is always in proportion to the

horror

On the supposition that diabetes is a spasmodic disease, the Author republishes his paper contained in our 7th volume, p. 503, to which we refer our Readers. Some other papers follow, extracted also from our Journal, containing further remarks on hydrophobia, tetanus, diabetes, and a case of opisthotonus successfully treated by Mr. Naylor of Gloucester. A case of trismus, cured by cold affusion, is also extracted from the Edinburgh Journal, some others from our own, and likewise from the publications of individuals.

A very interesting case of epilepsy is subjoined, in which the opiate frictions on the arms seem to have induced a temporary paralysis of those limbs. The patient continued to have slighter paroxysms for three succeeding years; "whether (says Mr. Ward) owing to the timely use of the proper means, or to a change in the habits of the patient, I cannot say certainly; probably to both of these causes." That the last is the most probable is to us confirmed by a subsequent Note, from which it appears that a change of diet, joined to a copious bleeding, had produced effects still more important.

"In an epileptic patient (says our Author) who was under my care so long ago as the year 1792, a permanent cure was effected by one copious bleeding during the paroxysm, followed after a short interval (which was employed in exhibiting an emetic, aperients,

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horror expressed by the patient) are regulations so directly contrary to those which custom has established, that instead of being surprized at their not having produced all the effects I wish, the wonder is, all things considered, that they should have had any effect at all.

"But what renders the prospect still more discouraging is, that a formidable list of *internal* and other *remedies* (as they are called) still remains untried, each of which, it is to be feared, will be allowed its share of victims.

"Among others which have been proposed (exclusive of a multiplicity of *nostrums* which still retain their influence) are wine, either alone or mixed with some of the mineral acids or vinegar; thieves vinegar; wine and vinegar injected per anum; capsicum and other aromatics; some of the concrete acids, such as the essential salt of tartar, of lemons, or the flores benzoes, joined with capsicum or other aromatics, formed into bolusses with flour and water; ipecacuanha joined with acids and aromatics; tartarized antimony; copious bleeding, joined with an antiphlogistic regimen and medicines; nitrous and other mineral acids; olive oil in large quantities; strong purgatives; *cob-web;* &c. &c. And, as if to show how far, in this particular instance, credulity may be carried, *bronchotomy* has been advised by Dr. Rush! I am told too, that the experiment has been tried. Need I add, but without success.

"Besides these, there are others, such as cicuta, belladonna, and others of the narcotic tribe; pure caustic alkali; the arsenical solution; cantharides internally, and externally in liniments; the *mercurial* friction; electricity; galvanism; warm and cold *bathing*, &c. are strongly recommended as being deserving of a farther trial; but which should, I think, be banished from practice in the treatment of Hydrophobia, as being totally inadequate to the production of the effects expected from them, and therefore unworthy of the confidence which has been reposed in them.

rients, &c.) by a moderate use of cold bathing, and a complete change in the accustomed habits with regard to diet, exercise, &c."

The following case is scarcely less interesting. "M. J. H——, æt. 22, addicted to hard drinking, has had repeated attacks of maniacal delirium; the last and most severe of which was in August 1808. After several very turbulent and sleepless nights, I was called in on the evening of the 30th. A considerable degree of fever prevailed; the circulation was hurried; *he talked incessantly*, and every movement was expressive of the greatest possible degree of terror and alarm; to escape from the imaginary causes of which, he was constantly endeavouring to get away from his attendants, especially during the night.

"Bleeding, refrigerants, purgatives, antispasmodics, and the opiate friction, were prescribed; a strait waistcoat was also procured, to be in readiness: a precaution which happily proved unnecessary.

"The opiate friction was applied soon after he had been bled, (both of which were performed with difficulty, owing to the extreme restlessness) and ordered to be repeated every two or three hours, till he became more composed; the good effects of which were very soon evident, so much so, that it was used only twice in the course of the night: and at my next visit, the day following, I found him in a state of comparative ease and composure both of body and mind.

"Without continuing the narrative it will be sufficient to observe, that he was so completely recovered by the 5th of September, as to require no farther assistance, either medical or otherwise."

Another similar case is related by Dr. Bardsley. This success induced the author to make trial of the remedy in many other cases of spasm or convulsion, and often with advantage; among others, in convulsions during the eruptive fever in small-pox. The mention of this disease produces a Note on cow-pox, and a wish for parliamentary interference relative to the variolous infection. We heartily join in the wish, that the question should be subjected to such an inquiry as may lead to a just knowledge of its whole bearing. We shall here conclude our remarks with thanking the Author for the evidence he has collected on the mode of exhibiting an important remedy, which seems likely to alleviate diseases hitherto considered as desperate.

The Physician's Vade-Mecum: containing the Symptoms, Causes, Diagnosis, Prognosis, and Treatment of Diseases; accompanied by a Select Collection of Formulæ, and a Glossary of Terms. By Robert Hooper, M. D. &c. pp. 270. 8vo. London, 1809.

A considerable number of works have appeared very analogous to the present, under the titles of "*Outlines; Synopses; Text Books; Medical Pocket Books; Vade Mecums, and London Practices of Physic*;

sie; the leading object of all being professedly, to exhibit a concise view of the state of the practice at the time they were published.

The general *theory* of diseases has long become pretty steady, or perhaps, a general indifference to it has discouraged speculative writers; but the *practice* is perpetually varying, on account of the introduction of new remedies, or new modes of exhibiting the old ones. A new disease occasionally presents itself also, which requires some time and experience to ascertain the best manner of treating it. Of this kind are the Yellow Fever, Cow pox, Tic Douloureux, &c. Several diseases also which have been long known, but the treatment of which is generally ambiguous or unsuccessful, will never fail to exercise the industry and ingenuity of practitioners. To this class belong, Hydrophobia; Hydrothorax; Gout; Chronic Rheumatism; Mania; Cancer, &c.

These causes are sufficient to stimulate experienced, or experimental practitioners, to communicate every improvement of importance to the public as soon as possible; and we rejoice in being able to say, that this Journal has been the vehicle of many such improvements.

The present publication, agreeably to the object of such works, exhibits an outline of the state of the *practice of medicine* at this time, according to the author's ideas on the subject. We must, however, inform our readers, that the names employed in the New London Pharmacopœia could not be introduced into this publication, as it was probably printed some time antecedent to the publication of that work. This defect may easily be supplied at present, by means of the lists, containing the new and old names, sold by all the medical booksellers; doubtless, the next edition will contain the new names.

In the execution of this work the author has followed the arrangement and names of Dr. Cullen's Nosology, which is now generally followed in these islands, and is, certainly, the best calculated for teaching. But in distinguishing some of the species, he has suffered himself to be too implicitly guided by that great authority, for the general purposes of practice.

As a Text-book for lectures, such specific distinctions may be very proper, but as a guide to young practitioners, we think them liable to mislead.

The distinction, for instance, between typhus mitior and gravior; scarlatina cynanchica, and cynanche maligna; sanguineous and serous apoplexy; with several others of this kind, must be considered only as land marks to the lecturers, not as guides to practice.

In the preface, the author says, "he has discarded all theory, and retained only those leading facts which it is absolutely necessary for a practitioner to be acquainted with, when he approaches the bed-side of a patient."

The order in which each disease is treated we think unexceptionable,

able, and commences generally with the nosology. An enumeration of the symptoms and signs is next given, which very properly introduces an account of the causes both predisposing and exciting. The author has purposely, and we think very judiciously, avoided those useless theoretical disquisitions about proximate causes, which tend more to embarrass than promote the science of medicine.

The accurate distinction of diseases being a point of the greatest importance in practice. Dr. H. has given all the diagnostic signs and symptoms with particular care. The *prognosis* is often involved in considerable difficulty, and yet the relations and friends of the patient always expect the medical attendant to give an early opinion on that subject. The proper directions on this head are always given.

The *treatment*, or manner of conducting the cure, concludes each disease; and after the proper indications have been laid down, and the means of fulfilling them pointed out, we have a very copious list of remedies, both simple and compound.

Though the above exhibits the general plan of treating each malady, there must necessarily be many deviations from it. Several morbid affections have a *specific* exciting cause which requires no predisposition: some few have no known remedy, as hydrophobia and cancer; in which the prognosis also, is sufficiently obvious without written instructions.

As this work is designed solely for the use of those who are intended to practice as physicians, no mention is made of local or surgical complaints. We think it compiled with attention and judgment, well calculated to answer the purposes for which it was intended.

Remarks on the Purulent Ophthalmy which has lately been Epidemical in this Country. By James Ware, Surgeon, F. R. S.

By some accident this little tract was so long overlooked, that we should have left it unnoticed here, had it not been that the disease alluded to, still continues most seriously to pervade several regiments. However, Mr. Ware's object is to show that a purulent ophthalmy has been epidemical in England before the Egyptian expedition. Of the progress and symptoms of this disease, with a most accurate and correct account of the cause, we shall offer Mr. Ware's opinion in his own words.

"It is difficult to discover in what way this disorder was first occasioned. The resemblance which it bears to that species of ophthalmy, which in many instances, has either accompanied or followed the common gonorrhœa, strongly impresses my mind with an idea, that the two disorders bear a close reference one to the other. I believe it is admitted by the most experienced surgeons, that the gonorrhœa, in by far the greater number of instances, is perfectly distinct from the lues venerea; and that the remedies which are indispensibly required for the cure of the latter, are wholly unnecessary for the cure of the former. The first cause of

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the gonorrhœa we do not know; but it is communicated by the application of a peculiar poison to the urethra, which inflames and excites a considerable purulent discharge from it. It is rarely productive, however, of any ulceration in the inflamed part, or any affection of the general constitution. In like manner, the purulent ophthalmy, (without inquiring at present into its first cause) appears to me to be in general communicated by the application of a peculiar poison to the tunica conjunctiva, which inflames and produces a considerable discharge from it, but rarely occasions any ulceration in this tunic,* or any affection of the general system. Infants, as well as adults, are subject to the purulent ophthalmy: and it is a fact, well deserving notice, that some of the worst cases of this disorder that have occurred in infants, have happened in those whose mothers were subject to an acrimonious discharge from the vagina at the time the infants were born. Some of the worst cases also, that have occurred in adults, have happened in those, who either shortly before the attack of the ophthalmy, or at that very time, laboured under either a gonorrhœa, or gleet.† I do not mean to attribute every opthalmy of this kind to such a cause. I am aware that it has sometimes occurred, and in the most violent degree, when no such circumstance could be suspected; but in the far greater number of adults whom I have seen affected by it, if the disorder had not been produced by the application of morbid matter from a diseased eye, I have been able to trace a connection between the ophthalmy and some degree of morbid affection in the urinary canal."

Mr. Ware proceeds further to remark, that this purulent ophthalmia, even when arising from the contact of gonorrhœal matter, is not to be confounded with the true venereal ophthalmia occuring among the secondary symptoms of that disease, and which he describes thus.

"In cases of this latter description there is generally a great exacerbation of pain during the night, and the internal parts of the eye are particularly affected. The pupil is usually contracted, and loses the power of altering its size in different degrees of light. The iris

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* Strictures in the urethra, not unfrequently follow a gonorrhœa; and ulcers of the cornea, as well as a rupture of this tunic, not unfrequently follow a purulent ophthalmy. But the former does not afford a proof of the previous existence of an ulcer in the urethra; nor does the latter, that an ulceration had previously taken place in the tunica conjunctiva.

† "Dr. Vetch observes in his account of "the Ophthalmia which appeared in England since the return of the British army from Egypt," p. 3, that in the 2d battalion of the 52d regiment, in which the disorder occurred, with a severity then unprecedented in this country, that "*excepting a great proportion of venereal cases,*" no particular distemper seemed to prevail; and the number of patients in the hospital were rapidly decreasing, when the first case of ophthalmia made its appearance. Among these venereal cases is it not highly probable that not a few had the gonorrhœa?

iris assumes a greenish colour, and pustules not unfrequently form upon it."

We cannot help suspecting some ambiguity in this account, though we are ready with the author to admit that the purulent ophthalmia, if venereal, must in all probability arise from the immediate cause to which he ascribes it, because we have no instance in which secondary symptoms of lues venera affected mucous membranes, excepting by ulceration.

Abstracted from the practical remarks, the above are the principal objects of this useful little pamphlet. The practical remarks, though highly valuable, as might be expected from the long experience of the author, are so compressed, that we must refer those who feel particularly interested in this branch of the profession to the work itself.

Identities Ascertained; or an Illustration of Mr. Ware's Opinion respecting the Sameness of Infection in Venereal Gonorrhœa, and the Ophthalmy of Egypt; with an Examination of Affinity between ancient Leprosy and Lues.

In commenting on Mr. Ware's opinion, the lively author of this little production seems alternately in joke and in earnest. We find it extremely difficult to conceive him in earnest, when he admits, with so much ease, a position of Mr. Jesse Foot, and drawing an inference from it, which, even if the position were just, would be neither necessary nor even consequent.

"If, says he, the purulent opthalmia does aries from the contact of gonorrhœal matter, how are we to explain the reason why the two diseases so rarely appear together?" As if it were necessary, or even common for men with gonorrhœa, to bring any of the discharge into contact with their eyes. If they were likely, by such mean, to infect any mucous membrane, distant from the urethra, we should think it much more probable to be the nostril. To us, therefore, there appears no difficulty in assigning a reason why the two diseases should not more generally appear together; least of all, can we admit the explanation from the unfounded assertions alluded to.

"The principle to which allusion," says our author, is now made, was disclosed by Mr. Foot, in a short publication, under the title of his *newly discovered Fact*, some years ago; and consisted in this position, that the matters of gonorrhœa or chancre are not capable of producing any effect on any other part of the body *of that individual from whom they are derived.* The animal body cannot contract, in a new situation, these poisons, from matter yielded by itself. When there are profuse discharges from virulent gonorrhœa or corroding chancres, the application of matter must be made, in almost every instance, to various parts of the body, and even to surfaces as susceptible of being acted upon as those of the *pudenda* of either sex. The *tunica conjunctiva* of the

eyes

eyes is equally susceptible—the lips are susceptible—the nipples of a woman are susceptible—the anus is susceptible. But these diseases are never communicated to these parts from any person's own body. A chancre in the glans penis is never communicated to the præpuce, where there is a perpetual point of contact. It was supposed that contiguity of situation rendered parts unsusceptible. This was endeavouring to account, in a very superficial way, for what could not be comprehended: for it had never been presumed, that every part of the identical body was equally unsusceptible as parts in the neighbourhood. It was a limited assent to that principle, which is general over the body—an acknowledgment extorted from observation of matter being in constant application to the neighbouring parts without any effect being produced upon them. The inability, however, of receiving impression from the poison, does not depend on contiguity or remoteness, but is universal over the surface. When this is admitted, there will be no difficulty in conceiving the matters of gonorrhœa and of purulent ophthalmy to be the same, although they are so seldom known to have occurred together in the same subject."

Is it not well known, that Mr. Hunter inoculated two subjects with their own venereal matter, and produced chancres? That the Suttons and Dr. Woodville inoculated subjects from their own primary variolous pustules, and thus contrived to satisfy their minds by the appearance of a general eruption? Need we mention the number of instances recorded in our Journal, of young subjects who have infected themselves by their own vaccine virus?

We agree with the author, in considering the idea of metastasis, by some called the retrocedent gonorrhœa, as a wild hypothesis, and that if a purulent ophthalmia ever arises from such a cause, it must be by actual contact; but again, we see no reason why that matter should not be from the same individual. It is further urged, that if such were the cause, we should sometimes find ulcers in the eye, as gonorrhœal matter may produce chancres. It should however be recollected, that the eye is a secreting surface as well as the urethra, and therefore less likely to be ulcerated; but it is not less certain, that ulceration does sometimes occur, probably quite as often at the comparative ratio between the gonorrhœa and ulcers at the mouth of the urethra. This part of the argument is concluded by a reference to the controversy which has so often come before us, concerning the identity of the venereal and chancrous virus. As the author refers to no experiments, it is not to be wondered if he leaves the matter undecided, though he seems to lean to the opinion that the virus of each is different.

This leads to another suggestion, concerning the existence of the venereal disease, under the name of leprosy, anterior to the siege of Naples. In this, the old controversy of Becket, Astruc, and others, is renewed; and at last, the author, not content with the identities before remarked, seems determined to confound all distinctions.

"In

"In recent times, the primary affections of the venereal disease were in possession of the mouth in some parts of the world, and the communication of infection the same as in leprosy of old. An ingenious pamphlet was published about thirty years ago, respecting sunch a condition of the disease in Paul's Head Bay, on the Northern coast of America. The name of the author does not now recur to the mind. A disease, under similar shape, has been long known in Scotland, among people of the lowest condition, under the denomination of Sibbens. Mr. Benjamin Bell has made particular mention of it in his Treatise on the Venereal Disease. There is not a doubt that these diseases were, in both instances, the true venereal malady, with all that acrimony of contagion which distinguishes a primary venereal ulcer wherever it may be found. They were genuine leprosy, of which the circulation did not take place by venereal intercourse, but from other opportunities of contact in the common concerns of life; and if the aid of mercury was not cultivated, would have proceeded to as dreadful extremity as leprosy in any age. They have been considered a different kind of the venereal disease. The only difference is in the primary symptoms, which alone can convey infection, being in a different situation. Upon the surface of a spoon, or the edge of a drinking cup, their matter would communicate the most malignant venom to the lips or fauces of another person, while perfectly innocent to every other part of the surface of the body by which it was produced."

To say no more, it is at least bold in this anonymous Writer, to offer so decided an opinion on three diseases, two of which he does not pretend ever to have seen, yet modestly sets to rights those who have taken pains to mark all the distinctions.

The remainder of the pamphlet again refers to the strange notion, that matter from the same individual, applied to a different part, will produce no infection. On this subject, we wish the Author to study Mr. Hunter, instead of skimming over the pages of Mr. Foot.

Report of the Diseases of Edinburgh for November, 1809.

By JOHN ROBERTON, M. D.

THE weather, about the beginning of the month, was soft, and the air moist and disagreeable. Cold unpleasant fogs too prevailed, especially after sun-set, rendering the evenings very unhealthy, particularly to those subject to chronic diseases. This state of the weather was succeeded by smart frost, which continued a week or two, accompanied by cold sharp winds. The surrounding mountains were all covered with snow, which is almost al-

ways the case immediately previous to this state of weather at Edinburgh. This, however, in the present instance, has not been the case, as hitherto we have had no snow this season. About the last third of the month, we had frequent heavy falls of rain, accompanied by gales of wind. The mornings again became frosty, and the days soft, but, upon the whole, pleasant till the termination of the month.

The barometer, which stood high about the end of last month, sunk considerably during the thick and foggy days, and even during the frost it was rather low; indeed, throughout the whole month it was low.

The thermometer, except during the frost, when it was very low, stood in general about 40 of Fahrenheit's scale.

The prevailing diseases have been various chronic affections, and, in addition to the acute complaints, such as catarrh, rheumatism, &c. which formerly prevailed, there has, as is very common about this season, been added different inflammatory affections. Fevers and smallpox, I may also remark, have been very malignant and very destructive, especially fevers.

The chronic diseases, which most generally prevailed, were rheumatism, catarrh, and asthma. The too generally unsuccessful treatment adopted in these diseases I had formerly an opportunity of detailing, and it is therefore now unnecessary to repeat it. The acute diseases are, in some measure, similar to those of last month, such as catarrh; the rheumatism too has been frequently met with in practice. The diarrhœa, however, of last month seems to have become less common, nor has it been so severe. Ophthalmia also has not been so frequently met with as might have been expected; indeed, it has almost disappeared. The most commonly to be met with inflammatory complaints are pneumonia, enteritis, and, among chilrden, that inflammatory affection of the brain which generally, unless actively treated, terminates in effusion of water into the ventricles. The cases of pneumonia have not been very general, but they have appeared in some instances with great violence; although they have not in general terminated fatally, they have only been prevented from doing so by the most active treatment. The bes proof of this is, that the patients who, from neglect either of themselves or their medical attendants, were not subjected to the active means alluded to, either died or escaped with the greatest difficulty. I have had occasion to order repeated venesection in a very few days, and

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that, at each time, the patient should be allowed to bleed till he became faint. The application too of large blisters over the whole forepart of the thorax, with the frequent administration of brisk saline cathartics, were found absolutely necessary to prevent fatal consequences.

The only application which seemed decidedly advantageous, in the cases of enteritis, was the frequent application of large blisters over the whole abdomen. Bleeding did not seem nearly so advantageous. I confess, the application of such large blisters as I have alluded to, are very inconvenient and disagreeable; but their speedy efficacy in the removal of the disease is wonderful, inducing a patient to submit to almost any application, however severe.

The cases of inflammatory action of the brain, I have frequently remarked, are most advantageously treated by repeated blistering all over the head, with the frequent administration of brisk purgatives. In short, there seems to be no other method of overcoming that affection but by these means. In severe cases, the application of leeches to the temples, and even opening the temporal artery, is of very great benefit. It is, however, unnecessary for me again to dwell upon this subject.

I have given, I believe, a new view of this universally prevailing and fatal disease, and a very effectual mode of subduing it.

The small-pox seems rather to have increased in severity since last Report. The disease, indeed, is not very general, but some cases of the worst kind occur in practice. Considering the means we possess, of obviating this disease, it is shameful that it should any where exist.

The fevers which prove most troublesome at present are of a slow kind. The symptoms are not violent, but the course of the complaint seems to be of an indefinite length. Thus it wears out those who are its victims, and in many instances, after nearly a month's continuance, it has proved fatal. Those who recover from it are very much reduced in strength, so much so, indeed, as scarcely to give us room to expect a complete restoration of health for several months.

Princes Street.

INTELLIGENCE.

A very curious fœtus has lately been brought into the world; all the parts of which, from the head to the upper part of the abdominal viscera were double; what is still more remarkable, the organs of generation were double, complete, and exhibited separately the parts of each sex, external and internal. The vast and inconvenient volume of the two heads, rendered it impossible to bring them alive into the world.

Common spirits of turpentine have been recently administered by several medical gentlemen of the metropolis, with good effect, in the cure of tape worm. The doses given were in some cases so large as two ounces, but those of half an ounce at a time, repeated twice a day, were generally found to answer the purpose. The vehicle in which the turpentine was administered, was generally honey.

Doctor VAN MARUM has discovered a very simple method, proved by repeated experiments, of preserving the air pure in large halls, theatres, hospitals, &c. The apparatus for this purpose is nothing but a common lamp, made according to Argand's construction, suspended from the roof of the hall, and kept burning under a funnel, the tube of which rises above the roof without, and it is furnished with a ventilator. For his first experiment, he filled his large laboratory with the smoke of shavings. A few minutes after he lighted his lamp, the whole of the smoke had disappeared, and the air was perfectly purified.

M. CHAPTAL has recently made experiments so as to ascertain the nature of seven specimens of colours, found in a colour-shop at Pompeji. No. 1, the only one which has not received any preparation from the hand of man is a greenish and saponaceous argil, in the state in which Nature presents it in various parts of the globe, and resembling that known by the name of the Terra di Verona. No. 2, is an arch of a beautiful yellow, all the impurities of which have been removed by washing. As this substance turns red by calcination with a gentle fire, the yellow colour, which it has preserved without alteration, affords a new proof, that the ashes which covered Pompeji retained but a slight degree of heat. No. 3, is a brown red, like that employed at present for coarse work, and is produced by the calcination of the preceding. No. 4, is a pumice stone, extremely light and white; the texture is very fine and close; the three others are compound colours, which M. Chaptal was obliged to analyse, in order to ascertain the constituent principles. From his experiments on No. 5, which is of a deep blue, and in small pieces of the same form, it appears to be composed of oxyd of copper, lime, and alumine. It resembles ash blue in the nature of its principles, but differs from them in its chemical properties. It seems to be the result, not of precipitation, but of the commencement of vitrification; and the process, by which

which it was obtained by the ancients, is lost. No. 6, is a sand of a light blue, mixed with some small whitish grains. On analysing it, M. Chaptal discovered in it the same principles as in the preceding; indeed, it may be considered as a composition of the same nature, in which there is a greater proportion of lime and alumine. No. 7, is of a beautiful roseate hue; it is soft to the touch; is reduced between the fingers to an impalpable powder; and leaves upon the skin a pleasing carnation colour. From M. Chaptal's experiments, he looks upon it as a real lake, in which the colouring principle is united with alumine. In its properties, its hue, and the nature of its colouring principle, it has nearly a complete analogy with madder lake. The preservation of this lake for nineteen centuries, without perceptible alteration, is a phenomenon which cannot fail to excite the astonishment of chemists.

For some time, the curiosity of the Parisians has been gratified, by Messrs. FRANCONI, with a spectacle truly extraordinary, that of the most shy and timid animal, a stag, tamed and trained to the same performances as the most docile and courageous horse. Led by his instructor, the docile animal advances into the arena, looking round on every side, with an air equally expressive of gentleness and intelligence. At the command of his master he bends his knees, and respectfully bows his head. M. Franconi mounts his back, cracks his whip, and fires pistols, at which the animal shews neither fear nor alarm. After this first experiment he is left to himself, and made to perform the exercises of the manége, like the best-trained horse. He sets off at full gallop; turns and stops at the word of command. He leaps over rails with wonderful agility, and even clears two horses at once. After every performance he stands still, fixes his eyes on his master, and endeavours to discover from his looks whether he is satisfied. Mr. Franconi then goes up to him, pats him, and bestows other caresses, for which the gentle animal testifies the highest gratitude. In the last place, a triumphal arch, charged with fire-works, is erected in the middle of the air; it is set on fire, and the stag, impatient for the signal, starts off, as soon as it is given, and passes twice under the blazing arch, amidst the shouts and applauses of the spectators.

We are disappointed in our expectations of the account of the man bitten by the rattle-snake. A very ingenious paper on the case, by Mr. Home, has, however, been read before the Royal Society, giving an account also of other snakes in America, and of the cobre de cabello in Asia. We shall, in a future number, offer the substance of this communication.

We have received from Dr. Andrews, and the other physicians of Madeira, English and Portuguese, an accurate account of the success of vaccination in that island. This account is chiefly intended to answer the unfavourable representations of Dr. Carneiro. As it contains also some valuable information relative to the epidemic measles, hooping-cough, and dysentery, introduced by the military, we shall give the whole in our next.

Dr.

Dr. BUXTON'S Spring Course of Lectures, on the Theory and Practice of Medicine, will be commenced about the middle of January, 1810, at the Medical Theatre, London Hospital.

Dr. CLARKE and Mr. CLARKE will begin their Spring Course of Lectures on Midwifery and the Diseases of Women and Children, on Monday January the 29th, 1810. The Lectures are read every day, at the house of Mr. Clarke, No. 10, Upper John Street, Golden Square, from a quarter past Ten o'clock in the morning till a quarter past Eleven, for the convenience of Students attending the Hospitals. For particulars, apply to Dr. Clarke, No. 1, New Burlington Street; or to Mr. Clarke, No. 10, Upper John Street, Golden Square.

Dr. CLUTTERBUCK will begin his Spring Courses of Lectures on the Theory and Practice of Physic, Materia Medica, and Chemistry, on Monday, January the 22d, at a Quarter before Ten in the Morning, at his House, No. 1, Crescent, New Bridge Street, Blackfriars; where further Particulars may be had.

Dr. RAMSBOTHAM will read the Introductory Lecture to his next general Course on the Science and Practice of Midwifery, on Wednesday January the 3d, 1810, at Seven o'clock in the Evening, at his house, No. 9, Old Jewry.

Dr. REID'S next Course of Lectures on the Theory and Practice of Medicine, will commence on Wednesday, the 3d of January. The Introductory Lecture will be delivered on that day, at six o'clock in the evening; and the subsequent Lectures will be given at the same hours, on Mondays, Wednesdays, and Fridays, until the conclusion of the Course on Friday, the 23d of March.

Dr. SQUIRE will begin a Course of Lectures on Midwifery, and the Diseases of Women and Children, on Tuesday January 16.—For particulars apply to Dr. SQUIRE, 30, Ely Place, Holborn.

Mr. TAUNTON'S Spring Course of Lectures on Anatomy, Physiology, Pathology, and Surgery, will commence on Saturday January the 27th, 1810, at Eight o'clock in the Evening *precisely*, and be continued every Tuesday, Thursday, and Saturday, at the same hour. Particulars may be had on applying to Mr. Taunton, Greville-Street, Hatton Garden.

Dr. ADAMS has published his new edition of Mr. Hunter on the Venereal Disease. The Text is unaltered; the Introduction and Commentaries are very copious. The whole is included in a single 8vo volume.

Dr. TROTTER will shortly publish "An Appeal to the Officers of the Royal Navy, on the Measures which have been resorted to, to deprive him of the increased Pay lately granted to Naval Physicians. With official Documents, Certificates of Officers, and Reflections on the present Medical Establishment."

Dr. UWINS, of Aylesbury, has in the Press, just ready for Publication, a small Tract, entitled, Cursory Remarks on the Causes,

Causes, Prevention, and Treatment of Fever, occasioned by the recent occurrence of an Epidemic Disorder in Aylesbury and its Neighbourhood.

Diseases and Casualties in London in the Year 1809.

Abortive and Stillborn	51	Grief	5	Water in the Cheſt	11
Abſcefs	49	Jaundice	26	Water in the Head	252
Aged	1251	Jaw Locked	4	Worms	5
Ague	4	Inflammation	511		
Apoplexy & Suddenly	203	Influenza	3		
Aſthma and Phthiſic	488	Livergrown	21		
Bile	2	Lunatick	166	Bit by a Rattleſnake	1
Bleeding	24	Meaſles	106	Bit by a Mad Dog	1
Burſten and Rupture	15	Miſcarriage	2	Bruiſed	5
Cancer	55	Mortification	167	Burnt	30
Childbed	123	Palſy	123	Drowned	124
Colds	15	Palpitation of the Heart	1	Exceſſive Drinking	7
Colic, Gripes, &c.	15	Pleuriſy	19	Executed	6
Conſumption	4570	Quinſy	3	Found Dead	8
Convulſions	3463	Rheumatiſm	2	Fractured	2
Cough, and Hooping Cough	591	Scarlatina	1	Frighted	1
Cramp	2	Scurvy	4	Frozen	1
Croup	81	Small Pox	1163	Killed by Falls and ſeveral other Accidents	68
Diabetes	1	Sore Throat	7	Killed themſelves	52
Dropſy	736	Sores and Ulcers	5	Murdered	1
Evil	2	Spaſm	24	Overjoy	1
Fevers of all kinds	1066	St. Anthony's Fire	2	Poiſoned	4
Fiſtula	3	St. Vitus's Dance	1	Scalded	5
Flux	9	Stoppage in the Stom.	20	Smothered	1
French Pox	29	Strangury	1	Starved	1
Gout	30	Teeth	308	Suffocated	7
Gravel, Stone, and Strangury	10	Thruſh	39		
		Tumour	1	Total	326

Chriſtened	Males - 9981 Females - 9631	In all 19612	
Buried	Males - 8636 Females - 8044	In all 16680	

Whereof have died,

Under Two Years of Age	4937	Fifty and Sixty	1419
Between Two and Five	1916	Sixty and Seventy	1235
Five and Ten	754	Seventy and Eighty	1063
Ten and Twenty	506	Eighty and Ninety	369
Twenty and Thirty	1145	Ninety and a Hundred	54
Thirty and Forty	1472	A Hundred	2
Forty and Fifty	1748		

Decreaſed in the Burials this Year 3274.

This year appears to have been particularly healthy, the decrease of deaths being 3274, compared with the preceding, which had not exceeded the year 1807 more than 1620. This decrease cannot be imputed to a diminished population of that part of the town which is included within the bills, because the number of christenings come within three hundred of the last year. Small-pox remains nearly the same as last year, which shows the disease has been mild, as it is notorious that it has been more general.

The

The mortality among young Children, taking them to the age of five, is less this year than the last by 1688. As usual, the greatest mortality of adults has been between 40 and 50, a space which comprehends the most dangerous climacteric among the labouring part of the community. The succeeding decade is next in fatality, comprehending a similar critical period with those in easier circumstances.

Though scarlet fever is known to have been prevalent and fatal, yet the article of fevers of all kinds is less by nearly a hundred than last year. How much is it to be regretted, that these records should be so imperfect in articles of such importance. The same may be said of hooping-cough, which has been so prevalent this year, but being included in coughs in general, we cannot ascertain its increase with any certainty. The whole number who have died of coughs is greater than last year by 173. Probably, the comparative increase of hooping cough has been much greater if we may estimate the other coughs by the general healthiness of the season, which last would have less effect on a contagious disease. The proportion of male births beyond female is about the usual average. The average excess of deaths in the males is somewhat more than usual. The only increase is in the articles of croup and cough.

Among the casualties, only one is reported as bitten by a mad dog. The others, whom recollection informs us are not few, we suppose were buried without the bills.

How strange that two parishes so well regulated as Mary-le-bone and St. Pancras, should furnish no registers! How interesting would an account of the gradual increase of each have proved from year to year!

NEW MEDICAL PUBLICATIONS.

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CORREPONDENCE.

We are truly concerned that our ingenious and witty Correspondent from Nottinghamshire, should have supposed any of our Remarks on Reviewing could refer to him.

Mr. Earle's valuable communication was received too late to complete the engraving for the present month. It shall appear in our next.